# **PROFILES OF SWE PIONEERS**

## **ORAL HISTORY PROJECT**

**Evelyn Fowler Interview** 

May 15, 2003

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## **Evelyn Fowler**

Evelyn Fowler graduated from the Art School of Pratt Institute in 1942 and later returned to study chemical engineering after marrying an engineer. Upon gaining her bachelor's degree she went to work for her husband's company, the American Actuator Corporation of New York as a drafter and later secretary-treasurer. She was a charter member of the independent Society of Women Engineers New York District in 1949, and a founding member of the unified, national Society of Women Engineers a year later.

In her 2003 Profiles of SWE Pioneers Oral History Project Interview, Fowler briefly discussed her education and work experience and detailed her involvement in SWE, including at its founding meeting, at the national level, and in the Connecticut Section.

#### INTERVIEW WITH EVELYN FOWLER, MAY 15, 2003

LAUREN KATA: It's Thursday, May 15th, 2003. This is an interview with Evelyn Fowler, founding member of the National Society of Women Engineers. The interviewer is Lauren Kata, for the SWE Oral History Project. I want to think you for participating in this.

EVELYN FOWLER: My pleasure.

LK: Can we begin by establishing your date of birth?

EF: Yeah. I was born August 7th, 1921, in Hartford,

Connecticut. I am the second of two daughters. And what else? I

lived there for -- until -- for about two or three years. And

then my parents moved down to New Jersey. And we lived there for

about three years, down in Bayonne and Jersey City, the Garden

Spot of the East, I will tell you.

And you know, the funny thing is, I remember something that happened to me when we lived in Jersey City, and I was told that I was not yet three years old, but I do remember it. Not that that proves anything, except that I sometimes wonder why things stick in your memory.

LK: Well, sure.

EF: And then after we -- when I was -- just before I turned five, we moved up to West Hartford. My mother's one sister and -- her older sister and her older brother lived there, and had businesses there, so my father and mother decided they would start a business. We lived in a little corner of West Hartford, which

is called Elmwood. At that time it was a main street, which was a route, or a main drag, and there were only two streets that went into that part of town. And we lived there for about six years, I guess. Then we moved down into Hartford, which is a few miles away.

And my father died a couple years later, at the age of thirty-eight. That was -- he had a kidney thing. And we often think that nowadays they remove and repair and replace kidneys. In those days they did nothing, they just waited.

And we stayed in Hartford until I wanted to go to school. My sister had gone to Temple University in Philadelphia. And we waited until she graduated. And then I wanted to go to Pratt Institute. I wanted to study art. And my mother offered to buy me a car if I would stay in Hartford and go to what was then New Britain State Teacher's College and learn how to be an art teacher, which was -- New Britain is just the next town over. That is now part of the University of Connecticut's system. I think it's called Central Connecticut State. And I said I didn't want to be a teacher, I just didn't. I couldn't see myself as a teacher. So I was allowed to go. I went to Pratt, and my mother picked up everything and moved down to New York. She had a trade. She manufactured -- she was a hat -- a milliner. She made straw hats.

LK: Oh, wow.

EF: And she got back with her people that she knew years and

years before, and I went to Pratt. I lived at home. We lived fairly close. And I went to Pratt and went through the art school, and graduated. And I found — and realized, as I was telling someone else a little while ago, that even though I was an able artist — I still am, I can draw, I can do lots of things, I had plenty of self confidence, but I didn't have the right attitude about the whole thing. These people that I went to art school with took themselves very, very seriously. They really felt that if they — that anything that they did with their hands was amazing. And I could never get to feel that way.

So I went into the industrial art department and learned to do what we were doing in that department, presumably. The boys used to go into -- become automobile designers. I always thought that was sort of a fun thing to do, although I can't -- I'm not interested in automobiles. Anyhow, I graduated, and then there was a question of finding a job.

At this stage, we were in World War II. It was, I guess, 1942. So I started -- I didn't know what sort of a job to look for, but I got something in one of the companies, you know, filing paper or something like that. Meanwhile, the government was offering courses -- the initials of which I've forgotten -- but at Stevens Institute in Hoboken, which I guess is now Stevens University. All these institutes have since become universities. It was a very good school, very good engineering school and technical school.

It was in Hoboken, New Jersey. I lived in Brooklyn. I worked in New Jersey at that time as a draftsman. And it meant getting up and getting a subway at 6:00 or 6:15 in the morning, and then that took me to the Hudson River. And from there I took a subway that went through the Tubes, they called it, and went under the river, and got off in Journal Square in Jersey City, and took a bus. I was twenty-one or twenty, so I guess I was young enough to be able to did that sort of thing.

LK: How many years did you do that?

EF: I was with that company about a year. And in the meantime, several times a week I went -- well, it was no big trick, because Hoboken was where the Tube took me. So I would get off the bus and take a walk down to Steven's Institute and take their course in -- also in drafting or something like that.

LK: Mechanical drawing?

EF: It was mechanical drawing. In fact, they wanted me to get junior engineering, because they'd given me an exam -- everybody took this exam -- and I did very well on it. And then they called me up on the telephone and said, "But you made a mistake on your application." I said, "What did I say?" "Well, you said you didn't take geometry." I said I hadn't taken geometry in high school. "Oh, well then you can't do this."

LK: Wow.

EF: So I was given -- I was allowed to be a draftsman, and that's what I was. And after about -- I don't remember exactly

the time -- after I left that, I went back to Brooklyn and started looking for a job closer to home. And I answered -- I applied for a job in a small company in Brooklyn that was just -- I took an elevated not too far from my house and got there.

And that was a drafting job. And it turned out to be a small electrical manufacturing company. And the owner of the company — there were three principals. One of them was a Frenchman, who I found out was brought here during the war. He was — what they did is, when England was under attack, as it was, they took — they had a submarine set aside for people of — considered of great value to the war — to the war effort, our war effort. And this man was an associate of one of those guys who was in the submarine, so to speak. And he and his associates had bought an interest in this company. The other — the president was a young man, and he had a partner who was a lawyer, so the three of them were my bosses. And I worked there for a while. I always thought they were — the partner was eventually drafted and went into the Navy. The president kept being deferred because he was considered too valuable to send to draft.

LK: Wow.

EF: And he was the one I eventually married, which was very nice. (laughs) I'll never forget when my mother told my aunt in Hartford that I was engaged -- my aunt (laughs) -- "to her boss." And my aunt said, "How old a man is he?" (laughter)

EF: Actually, he was about six and a half years older than I. Anyhow, that's -- after we were married after a very short courtship we were married. And then the question said, well, what am I going to do with myself? In those days -- I mean, I wasn't about to go back to work for him. It was too -- it was a little peculiar, because the other women in the office -- you know, it looked strange. So we decided, okay, I couldn't go to work for Hercules Electric and Manufacturing Company. So he said, "Why don't you go to school?" I said, "Huh?"

His first cousin, my husband's first cousin, was married to [Miriam] Mickey Gerla. Mickey Gerla was an early president of SWE. At that time they lived in Washington DC. Mort was working for the government in one of their big -- they have an armament factory. I think it's still there. And Mickey had gone -- who had never been to college, but when she got married and they were down there in Washington, she went to the University of Maryland, which is not far, and studied mechanical engineering, and graduated with, I think, the second highest grades of anybody.

So Alex, my husband, always thought that was so great. And it sounded great to me, too. And he said, "Why don't you go to school?" So I said, "Okay." I was always a good student, and I liked school. It didn't bother me. I would go. So I had to take some remedial courses -- not remedial because I needed the remedy, I'd never taken the courses -- in a private high school in Brooklyn, where they had the kids who were mostly thrown out of

schools, (laughs) and had to go to high school. They'd send them there. They were a very peculiar bunch of people.

LK: Wow.

EF: And I took geometry, and I took physics. I think I got a hundred in the geometry regents. And I did very well in the physics -- even the physics. So I then applied to various schools. And first I applied to -- I thought maybe Columbia [University] would be nice. And they said, "No, no women. Why don't you go to" -- and they had me go to another type of thing. And they said eventually I might be able to take some courses. And said, "Yeah, that's not for me." And oh, the other place I applied to was what's now Polytechnic University. I think it used to be Brooklyn Polytech. And they were very nice and very apologetic and said, "We can't take you. We haven't got any bathrooms for women."

LK: Oh, my goodness.

EF: So that was that. And then I said, "You know, I can go to Pratt." We lived very close to where Pratt was. And there was no question, I went to Pratt, and that's where I stayed.

LK: And that was where you received your degree?

EF: Right. That's where I went. We had decided that I should study chemical engineering, because my husband was an electrical engineer, and chemical engineering has a sort of -- some part of electrical -- some part of mechanical in it. And that's what I did. I stayed and I studied mechanical engineering

-- I mean, chemical engineering.

And there I met a number of people. Lillian Murad was there. Lois Gildersleeve, who now lives here -- lives in Westport -- but I don't think she stayed with SWE -- a very bright woman. She became involved politically in Westport. And she's still around, I think.

And while I was there at Pratt, -- oh, they were a small group of women. Oh, another one that came in after me was Sophie Vauskerchin (phonetic). I don't know what these people's last name is. She lives down in Texas, I think, Sophie something.

And we were told about a meeting -- I can't -- it's sort of dim. But we were told about a meeting at City College. So we went over to City College to see what was going on there. And it was a group of women who had decided -- they had a much larger group of women. We only had -- I think at the time I was there there were only five of us. And they were talking about starting an organization. At that time they were trying to get help from the college. There was a woman professor who was not at all cooperative, for some reason. Eventually she did, she became -- you know, she did work with us.

But we got together, and we got -- you know, a lot of women got to know each other. And we decided that we would go ahead and do this. And that's actually how we started with SWE.

LK: And you just started meeting regularly?

EF: No, we didn't meet regularly. We used to get together

from time to time. We also had gotten together with people from Cooper Union. And there was a woman there, Mary something or other, whose grandfather had invented Brillo.

LK: Oh, you're kidding.

EF: That's what I remember about her. (laughs) It was, I guess, steel wool, I suppose. I don't know why we all knew that. She was a very pretty blonde girl, and all we knew about her is that her grandfather had invented steel wool. She was an engineer and she was from Cooper Union. Anyhow, well, that's how we all got together.

Then -- and I don't know who was saying, "Let's do that, and let's do this." And I had told Mickey Gerla about this when this was happening, actually, because she -- I don't know if she was in New York yet or not. But I was telling her that we had been meeting and that these things were going on.

And then they finally called a meeting in New York, to meet in New York. We met at a restaurant. I think it was around twenty-something street. And this was at least -- oh, it must have been a couple years -- several years later, because -- yeah, it must have been, because I already had one child. What helped with me was that I had a child and stayed out of school for a year and then went back, and picked up where -- what I could.

LK: Was it easy to do that?

EF: No, it wasn't, because there were changes. The war had finally -- was over, and they had made changes in a lot of things.

It was very difficult, as a matter of fact, but I did. By the time they got together and decided, you know, to have this regular meeting, I was pregnant with my second child. In fact, I was almost -- I think I was going to -- the meeting was around Thanksgiving, and he was born on the 4th of December, so it was pretty close.

But I drove. We always had a car, and I always drove. So I picked up a number of the women that I was friends with that, you know, we could do this with, and drove down to New York. And it was a nasty, rainy night.

LK: Oh, no.

EF: And we, in this downstairs part of a restaurant, it was really pretty dinky, and that's when this whole thing sort of jelled. What's her name -- oh, that -- what do you know, I've forgotten -- she was a first president.

LK: Beatrice Hicks.

EF: Beatrice Hicks was there, and she was from the Newark College of Engineering. And we decided that she would be the president, and she was willing to do this. It was kind of -- it wasn't very -- you know, it wasn't done in a very orderly fashion, but it was done. But she was going to be the president, and they wanted a volunteer to be the treasurer, so Mickey offered to be the treasurer. And that's how it all started.

LK: Let me ask a question. Can you remember or identify one person that really organized this New York group? I mean, it

sounds like it was really word of mouth. I mean, was there -could you pinpoint it back to one person in that area who was
really -- you know, who decided which restaurant, that type of I
thing?

EF: That's exactly what I can't do, unfortunately. I don't even know. And I think it was somebody from City College. But the funny -- the one woman that I can remember from the City College quit early on. I don't know if she ever was part of the organization. Her name was Rita Kudruff (phonetic), I think.

Some of the other people -- there was Marilyn Medwin (phonetic). I can't remember some of the others. But I honestly don't know who did that.

LK: That's okay.

EF: I just don't recall. There must have been somebody who was doing it, but it wasn't I, I'll tell you that. And then meanwhile, they had been making arrangements — this was in November. I think it was the following — this was November of 1949. And the following May, I guess it was, we had that meeting in New Jersey. And by this time we heard that out in Drexel Institute — now Drexel University — had a group that wanted to start — that was doing something of the same order. And they got together the two people, whoever was running this thing got together and arranged for the meeting in New Jersey. We also had a very nice lady, a teacher from — you know, who was able to let us use that property, and she came with us. What's her name?

LK: Was she from Cooper Union?

EF: Yeah. What was her name?

LK: Louise--

EF: No. It'll come to me eventually--

LK: Okay.

EF: -- two days from now.

LK: Sure.

### (laughter)

LK: That's okay. We can show up --

EF: And she was very, very nice and very, very helpful to the women. Anyhow, so that's how the whole thing sort of started. And I think at one time we went down to Cooper Union. I remember being there. As a matter of fact, it must have been very early —I don't think we had really done much when we wanted to design an emblem, a logo. And I was the one who made most of the suggestion, as it happened, believe it or not. I was the one who came up with the cog. I didn't have it in a circle. I had it in a triangle, if I recall. So it was generally discussed, and the final one that came out was the cog.

LK: Wow.

EF: That was out at Drexel that we were discussing that. I remember that.

LK: Can we step back for a second?

EF: Sure.

LK: When you were first taking those drafting courses during

the war, were you aware of any type of organization that promoted engineering?

EF: No. No, nothing.

LK: And a second question: Were those courses that you took specifically for women?

EF: No. But there weren't any men around.

LK: So it wasn't a wartime recruitment specifically for women, it was just--

EF: It was a wartime recruitment for anybody they could get to take these things. There were a number of them that the government did. That was the only one that I was involved in.

But anyhow, so that's -- what else can I tell you?

LK: Well, what were the early years of SWE -- what were the activities, and just if you can talk about your experience with that.

EF: Well, we ran a regular -- it was a regular organization. We'd have meetings. And at the meetings, I can't remember whether we had speakers. I don't exactly recall. But there was business done, and apparently we were in touch with enough people so that it was a -- this was the New York group. And most of the people at that time were from New York, or from the areas around New York. And much later, New Jersey formed a section, and then I -- the people from New Jersey formed their own section, I guess. But at that time, we were still all New York. And we were all around the same age.

We had some very -- Elsie Eaves was one of our group, and she, of course, was very helpful. So many of these people were wonderful, very anxious to help and very helpful.

LK: Helpful to you personally, or to the organization?

EF: No, to the group, to the group. Well, we didn't -- you know, it wasn't a personal thing, but they did what they could to make the group legitimate, in a sense.

LK: Can you expand on that a little bit?

EF: Well, let me think.

LK: Well, first of all, legitimate because it was new or legitimate because it was a woman's organization?

EF: Because it was a woman's organization in a peculiar area. You know, there weren't any -- there were so few women in that whole field, that they would use their --

LK: Contacts?

EF: Yeah. I'm just trying to think how -- what else they did. She knew people, and if we had a meeting it would be publicized, and we would get people -- I guess we did have speakers who would come and talk.

LK: She would spread the word among the professions?

EF: Yes, I'm sure she did. But you know, I really and truly can't be any more specific because I don't recall. It was a very active -- it was an active organization. It was a growing organization. And our own, you know, members that we had would go back to the schools and find more people, that was one thing. We

had a lot of outreach. We tried to do outreach. I remember here in Stamford, in Connecticut, when we -- oh, by 1952, I moved up here in 1952, so I didn't go down to the New York group, although we always kept in touch. We were always very good friends.

I used to have a picnic here, and I had a backyard of -actually, it was a front yard that was like this, you know, a big
wide area. And they used to come up from New York and New Jersey
with all the children. By that time we were all married and had
children. And that was a nice -- a fun thing to do. One of my
very good friends was Evelyn Jetter, who was -- and I still am in
touch with one of her kids.

LK: She was an engineer and a member of SWE, right?

EF: Oh, yeah. She was a very talented, very talented engineer. Anyhow, this whole group, and I had to -- well, no point in even thinking about these people. I'm the only one left. I guess they didn't live right, I guess, because they were all younger than I am. (laughs)

Anyhow, I used to see them. They were still very close friends. But we started a group in Connecticut, a section in Connecticut, in I think it was August of--

LK: \55?

EF: It must have been -- was it '55 or '54? I don't remember. I remember that my little girl, my youngest child was about two and a half. And when she was born -- I had three sons and a daughter. And after the -- when she was born, my friends

gave me as gifts, enough clothes, girl clothes to keep this kid dressed until she was about four.

And one of the dresses that I had gotten was from my friend Ros Gitlen (phonetic), who had been a member of SWE for years. It was a very -- made by a manufacturer named Yolanda, which are very costly beautiful clothes, stuff that I would never have bought myself. And it was a yellow diaphanous thing. She had black curly hair, and she looked absolutely sensational, this little nothing kid. And that's how I remember we had the first meeting at my house. So I had Mary all dressed up pretty. That's how I knew it was there.

#### (laughter)

EF: But when we started the group in Connecticut, I really lost touch of what was actually happening in New York, which had become quite big. And at one point -- when was this? At one point, I was on a -- oh, I guess I was already living here, and I was asked to serve on the committee that gets money from organizations, from big companies.

LK: The fundraising?

EF: Yeah, fundraising thing. But we wouldn't call it anything as vulgar as fundraising. That's what it was.

LK: Was it like a membership drive or the headquarters drive, or--

EF: No. It was -- we hadn't had a committee doing this, trying to get industry interested, getting money from industry.

It was a long, long, long time ago. And they asked me if I would be chair of that committee. This was a national committee.

National -- well, as much of a national organization that we had.

And I started writing letters. I went to the library and got the names of a lot of big companies, and wrote them letters, and said, "Give us money."

And they started sending money in. And I never could -- I mean, I was flabbergasted! Until then, the only money we had had was \$1,000 that had been given to us by a big company that is in White Plains. It's still there. One of the big companies had given us \$1,000 for some reason or other. And that was the only money that we had. So we really weren't able to do any -- much expansion.

LK: Do you remember that company?

EF: It may have been IBM. It might have been -- I think it was IBM.

LK: So around the founding?

EF: Yeah, it was not too long after that. I mean, it was an organization. You know, we were able to say that we are an official organization. But we had that \$1,000 -- and no, we'd never gotten any other money from any industry. So I started writing these people letters, and we started getting money. At that time I think it was \$300. And I was -- you know, I didn't know people gave money away like that. And I did that for a while, and we got some money in. Then it became a real -- you

know, then it became a big thing. We started getting money, real money.

Another thing that I did with National, I was once on the committee that chose the -- to get the people to choose the award winners. And that was another thing. I was able to do these things because I was working for my husband -- well, I was -- I was (Inaudible) (laughs). So I was home, and we had an office in the house. We had a whole set of offices downstairs. And so I could write letters, which in those days, we did -- not e-mail, nor nothing like it, and getting people to be our judges for the award winners.

And that was fun, just writing to -- I remember I wrote to one guy who was a very well-known scientist. And I was so excited. At that time he was working in Washington, and I got a thing from the White House, and envelope back from the White House saying, "Thank you, but sorry, I can't do it." (laughs) But I hung onto that envelope for a long time.

LK: (laughs) Why was it important to start an awards program?

EF: I guess all of this is mostly public relations. We had to have something, you know, to show that people -- women, also, were wanted -- for women to be known for doing something. And we had some wonderful people, really. And that did give us a lot of press, so to speak, and money. You can't run an organization without money.

Anyhow, what had happened with me is after -- when we moved to Stamford, before Mary was born, I was -- as a matter of fact, when we first came up here, I had only two kids. But we sort of designed and had built our own house, and the builder went broke on something. At that time we were in the Korean War. And we had to arrange -- it was a whole mess. But anyhow, we didn't get here -- we didn't actually move in until 1952, I think it was.

And my husband had an office in New York. He'd closed the business -- this Hercules Electric had been -- it was bought. Someone bought it after the war. So he opened -- started running a smaller business, and he had an office in New York. And occasionally I would go down. He wanted me to go into New York with him several times a week to help out. And I was very uneasy because I had little kids, and I didn't like the whole idea. And he said, "You know what? I'm coming up -- I'm going to move it up to Stamford." So we moved the whole business up here.

And we had -- our house was built on the side of a hill, so the whole lower part of the house had high ceilings, was above grade, and we made that a whole office setup. And that's where we were for many, many years until after he died. I had a secretary. I used to have someone else in the office to help with the office work, and then we had a secretary for seventeen years, a very nice English woman. And I used to get a lot of work done there.

(laughs) I used to do a lot of work for SWE, which was -- anyhow, that's where I was able to write letters and ask them for money,

and ask them to serve as judges for our annual award people.

And I also once served in the -- you know, I'm thinking of these -- I haven't thought of these in years. I once served on the committee where they handled the funds. What's that called?

LK: The finance committee or--

EF: No. It isn't finance. It's --

LK: The board of trustees?

EF: Ivy --

LK: Ivy Parker?

EF: -- Parker was --

LK: The board of trustees?

EF: Yeah, that's what it was. I was on the board -- what did I do that for? I never knew anything about money. I still don't know anything about money. But I served on the board of -- yeah, I always showed up at places. You know, I went to the meetings, and I probably didn't do anything stupid. I just don't feel I was very helpful. Then once we went -- there was a board meeting in Chicago one year, and I went and we got stuck in a storm in an airplane over Chicago. This is pre-jet planes.

Anyhow, they put us -- they had us all in a hotel. And Mickey may have been president at that time. I don't recall.

And they sent a reporter to interview us. So they interviewed me. And I think the reason at that time is because I wasn't older than the rest, but I had children, and there weren't too many of them at that time who were there at the... which was

fine, except that most of those interviews are so insipid, especially if you have kids.

LK: Why did they need to profile a female engineer that had kids?

EF: That's because she had kids. I mean, they wouldn't take a female engineer who didn't have kids. That wasn't very interesting, because then you'd -- it has to be -- you have to be able to show that there are two sides, (laughs) that there's -- and oh, I guess they probably had -- I don't know whether they did or not -- who else they interviewed. But I remember that, with a picture.

And our business, we manufactured machinery, and we had reps who sold it for us all over. And we had one guy in Chicago, and he calls up and he says, "What's this?" (laughs) And I said, "What's going on, Bill? What" -- he saw this thing in the paper. And I was embarrassed. I'll tell, you know, I really did nothing, I did--

LK: Yeah.

EF: -- but I don't think -- I'm not -- I've never been particularly happy about being displayed, I guess. Anyhow, so that's -- have I covered everything?

LK: Well, I have a couple more questions.

EF: Go right ahead.

LK: We have about twenty more minutes. You were active doing these activities at the national level, but then

participated at the local.

EF: Oh, yes, yeah.

LK: And so in terms of SWE, I mean there is -- that continues today, where there are national activities, and then a lot of activity happens at the--

EF: Local level.

LK: -- local level. So I was just wondering if you could kind of talk about the differences in just your experience with local organizations?

EF: Well, after we started the group in Connecticut, which at that time cause called the Connecticut -- it's still called the Connecticut Section, even though it's the lower part of Connecticut, all of my activities were here. I really wasn't involved, that I can recall, nationally. Or if I was, it was in a minor -- I mean, I did a very limited thing. But locally I was president a few times, you know, and did anything that had to be done.

The difference, mainly, was that we were very local, and there were not too many people -- we had a section representative. But we had to -- most of the activity and most of the interest was local. When we had a convention that was fairly, you know, within reasonable distance, we always had a few people who went. We used to have a Northeastern -- do we still have that down in -- once a year or so they would have a--

LK: A regional?

EF: -- a regional, and some of the people would go here. In this particular group, I remember early on we used to get a lot of -- the people would want to be active, or at least be called active in the organization so that they would have it for their resumes, and then as soon as they got what they wanted, they stopped having anything more to do with it, which was very difficult for us. We had a couple of women who wanted to be president, because that's always a tough job to fill. You can't find a lot of people who want to take over the job.

LK: Right.

EF: And they did, they became president, and promptly, you know, lost interest, to a very great extent. Fortunately, we've always had some people who are sufficiently interested in maintaining the organization to keep it going. You always have to have somebody who's going to continue to work. And I've noticed in this Connecticut group now, there's one woman there who is a holdover from when I was active, so it's a long time. She's not a very old lady, she's a youngish -- well, she's got a grownup -- like a daughter who's about eighteen now. And she's staying with it, which is nice. And then these people who you've mentioned, who've been in touch with you, are very eager. It's Jeanne Mc-something. I've forgotten her last name.

LK: I think it's MacIlvain.

EF: MacIlvain, probably, yeah. And they have been -- you know, they've kept this alive in Connecticut for all these -- you

know, for a long, long time, because we have long since stopped doing anything. So I don't know how or what I can say in terms of how the local group -- you know, the connections between the local and the national. I think there are only -- I guess there really isn't that much. It's -- well, what can I say?

LK: I think I know what you mean.

EF: It's hard. It--

LK: It shares the same name, but it has different functions.

EF: Exactly. You know what, the only thing it reminds me of is the local governing people in a city or a town, the local governing people, and what they have to do with Washington -- not a lot, really. You know, it's a big difference. And that's sort of the way it is with this, in a much smaller way, of course.

LK: Was it like that in the early years? I mean, obviously there were less women involved, but you know, you kind of started off with the New York Section--

EF: Yes.

LK: -- and then a National SWE was founded, but then it just kind of stayed -- you always stayed in the same area.

EF: That's right.

LK: SWE kind of changed.

EF: That's right. That's exactly what it is. And with the exception of a few people who were interested enough to want to go into the national organization, to work in the national organization, mostly it is people stay within their own bailiwick,

shall we say.

LK: Yeah, yeah. Was it difficult at any time from that perspective as SWE evolved? And then there started becoming issues such as policies about certain things when it came to women in engineering, and then even later when it was, you know, the women's movement and equal rights. Was it difficult to keep up with what the National was dealing with, or how did you do that from a local perspective?

EF: I don't think we ever had any particular problems. I don't recall any particular -- I mean, what was happening nationally I think was happening all over. You know, it wasn't something that National had decided that from now on we're going to do it this way. It didn't work that way. It never really worked that way. It just got bigger and bigger and bigger. And you know, if there were people who were not happy about the way things were done, I was not aware of it.

Recently, they were going over -- we had changes in the bylaws, I think. And the SWE women here -- as I said, I haven't been closely involved with them -- but they were doing this very carefully, and reading everything very carefully. And there were a number of things that they objected to and that we had to have meetings, mostly by e-mail, which was good. And presumably, they are interested and they keep in touch, they keep tabs on what's happening. But I don't recall this happening many years ago.

This is something that's newer. Maybe we didn't have these things

to worry about many years ago, I don't know.

The biggest things we had in those days were whether we should -- whether they should become part of our group or whether we should become a different sized group or something like that. I remember up here in Connecticut we had a bit of a problem at one time because we were the Connecticut Section, and then the Northeastern Section of Connecticut decided they wanted to have a separate group. And I think they did for a while. But then they wanted -- there was a question about the name. And we said we were adamant we would not give up the name the "Connecticut Section." We were chartered under that name. We were the Connecticut Section. So I forgot what they were. But I don't think it lasted. They had people in Hartford and New London, and that upper part of the state. But I never -- I never really worried too much about it.

Anything else?

LK: Well, going back to your engineering work, what did you enjoy most about working as an engineer?

EF: Well, I'll tell you something about my working as an engineer, it was very peculiar. And this, I think, even today is the same story. Working with my husband in the office, I won't -- I eventually became less of an engineer and more of an office manager. And in all the time -- in fact, I have often mentioned this -- my husband -- we have a number of inventions, and he used to invent things that were -- they were not kooky things, they

were, you know, part of machinery. And my name is on a couple of those inventions, but that isn't what I was going to say.

Oh, he, at one time -- this was still during the war -- one of the things that he had to make, that he had the contract for was some sort of a heating system for -- I don't remember what the reason was, but for some military application. And he didn't have any background at all in this. And I had lots of studies of heat exchanges in chemical engineering. So that was the only thing that actually used material that I had learned that I knew that he didn't know. And I can't remember anything else of that nature.

Other than I just -- you know, I did whatever I could, which was -- you know, you learn a lot, and engineering is a very good education. You do really learn a lot of things. Of course, I left my lights on in the car the other day, and I couldn't remember which -- where to put the-- (laughter)

EF: But there are always men around, especially with white hair you get a lot of help.

LK: Oh, that's funny.

EF: Not that the men always know very much, I'll tell you that.

LK: Yeah, so that's a stereotype, huh?

EF: (laughs) So anyhow, that was my big thing, I was able to give him -- help fashion something. We used to do some interesting stuff. There was something in the paper the other day

about -- a big thing about Steinway put out their something-nth piano. During the war we were down there in their plant, developing a heating system so that they could put -- laminate wood together. They made skis. That was in the olden days when they had wooden skis. They used to make skis for our -- we had a lot of soldiers in the area where they apparently used skis.

LK: Yeah, you wouldn't think about that part. So what was it like for your children to grow up around Mom and Dad being engineers and inventing air ducts and--

the office. We were downstairs, as I said, usually. Oh, we used to do a lot of things. I remember once my husband started building something in the basement. The office area was all above grade, but then the back of the house -- actually, it's the front of the house is under -- you know, it's basement. And he had a welding machine down there. And he was welding something, and every time -- you know, the very, very bright light would arc welding -- when the kids would head down the stairs, he'd yell, "Lance!" Now, why lance, I don't know. That meant the kids keep away, because they didn't have any shields. And they were little. And everything was a big joke to them. They would run down and yell, "Lance!"

(laughter)

EF: And of course, what's happened, is look, my three sons are all engineers. (laughs)

LK: Really?

EF: All of them studied engineering. My daughter is an architect. So we must have something to--

LK: Yeah, some to do with that.

EF: Yeah. My oldest son is actually a lawyer, he's a patent lawyer, patent attorney. And my middle son is a chemist, has a business where he -- a chemical kind of business. He lives down in Florida. And he makes stuff for animals, you know, all very healthful things, like nothing bad for anybody.

LK: Organic, or--

EF: Organic, and none of the harmful chemicals. They're all natural. I don't know what he does -- I mean, how he does it, but that's what he's -- he's got a regular business. He sells -- that's what he does. It's mostly mail order. He puts -- sends out catalogs and gets -- apparently he's doing okay.

And my youngest son is a mechanical -- no, he's an electrical engineer, too. And the two -- number one and number three both work together in the same building. They both use the same industrial building, and they build what they're building -- or they have it built. They use the same employees sometimes.

And then Mary lives down in Washington. As I said, she's an architect and her husband's an architect. So I guess there's something must -- (laughs)

LK: When you were young did you ever know any engineers?

EF: No. I don't think I knew a single engineer. No, I'm

sure I didn't. I used to know doctors and lawyers and dentists.

LK: So really, when you started taking courses and then working for your husband's firm, that was when you first--

EF: Really, that's true. Even when I went to art school, even when I started those mechanical drawing things, I really didn't know -- well, I did know -- I got to know a couple of engineers then, because I think they were teaching. And I think the one that got me a job was an engineer.

LK: When you started taking the courses, did it surprise you what engineering actually was or did you --?

EF: Oh, you mean when I was in engineering school?

LK: Or did you have any perception at all before you started about what engineering was?

EF: Well, when I was in engineering school, I don't think I gave it too much thought in general. You know, you had each separate course. And the interesting thing in those days -- those days the boys -- you know, I was -- they used to -- that we had an English teacher. We had one course in English. In those days we didn't have to learn English at all. And he was in his glory because I was the only one who could speak the language, practically, you know, in Brooklyn.

LK: Are you talking about because of accents?

EF: Because the boys never had had -- they never had any teaching. I mean, in colleges, you know, you have to take English courses. Now everybody has to -- I think you have to take courses

in English. In those days--

LK: Oh, okay. It was just their educational background.

EF: Right, exactly. Did you see the deer running across the lawn just then?

LK: Oh, wow.

(laughter)

EF: But anyhow, it was the individual courses themselves that used to concern me. And I never thought in terms of engineering, really. As a matter of fact, somebody asked me just recently about this, something about engineering. And I said, "Well, what do you think an engineer does? Seriously, what do you" -- I mean, you know, you go into the -- now I see what they do. (laughs) And you have a certain background of knowledge.

But what they do -- I think most people have a romantic idea of an engineer with all kinds of T-squares and tools and things like that. And we don't use slide rules anymore. But it was a little difficult to try to explain that just being an engineer -- I mean, working as an engineer is not necessarily a particularly glamorous or even difficult kind of thing to do. It depends on you. Anyhow, so what else?

LK: Do you have any final thoughts?

EF: Final thoughts? I'm not dying, yet, kid.

(laughter)

LK: I meant about SWE.

EF: No, no. I still think of it fondly.

LK: Do you think there's still a need for SWE today?

EF: Oh, yes. I really think there is a need for SWE. Not the way it used to be when we went to school. I remember I had one professor, an old gruff guy who couldn't understand why women were there in the first place. He was a tough old bird. I think it's a good idea for women to have an organization that looks after them, really.

I don't know, I mean, as I said, I remember some years ago when they changed the aim, or whatever they call it -- they have other names for these things now -- that's one thing that drives me absolutely bonkers is the language that is used that has been used, I would say in the last twenty or twenty-five years, has become very different from--

LK: Strategic?

EF: I wouldn't even call it strategic, but they call -- but everything is organizational in a sense. It's no longer -- you don't -- you know, it could be expressed simply, but it's not. They use what is Argot? They use lingo that's... But other than -- how did I manage to think of that?

LK: Well, we were talking about the need for a SWE today, and you were saying that you believe there is.

EF: Yeah. When they changed, I remember they changed the aim -- I mean, originally, our aim was just so that women would be treated properly and could be given the same opportunity as men, as engineers, be permitted to become engineers and be given the

same types of things.

LK: Do you think we've succeeded?

EF: You mean the organization, or in general?

LK: Well, both, yeah.

EF: Well, not without a lot of kicking and screaming. I don't think we're yet -- I mean, we aren't automatically in the same position as men. But here again, it's not something I'm going to worry too much about. I think that the young people now are very well able to take care of themselves.

LK: Well, I want to thank you--

EF: My pleasure.

LK: -- for this interview. It was very good.

EF: Why, thank you.

END OF INTERVIEW