

INTERVIEW WITH PATRICIA BROWN, APRIL 16, 2003

LAUREN KATA: It's Wednesday, April 16th, 2003, and this is an interview with Patricia Brown, for the Society of Women Engineers Oral History Project. The interviewer is Lauren Kata. And, we are in Las Vegas, Nevada. And, Pat could we start with you giving us your birth date?

PATRICIA BROWN: October the 1st, 1928.

LK: And, can you describe your family background?

PB: Well, I'm the youngest of four children. My brother is the closest to me, and he was fourteen years older than I. And, two sisters, older. I really grew up as an only child, since my brother was so much older than I was.

LK: And where were you born?

PB: Lafayette, Louisiana. I lived my first eighteen years in Louisiana.

LK: And what was your childhood like?

PB: Tomboy. My father was what they call a stationary engineer. He was involved with diesel engines. We often lived in areas where the plant he worked for provided the housing. He would bring home pieces of the machinery to work on, and enlisted me to help with whatever he was doing. In fact, if he had to repair anything in the house, I was the chief gopher and Meddlesome Mattie, (Laughs) or whatever you want to call it. But

my brother started studying to be an engineer, but he couldn't pass English, so he joined the Marine Corps, and never did get an engineering degree, so my father was very disappointed that he didn't go ahead. But I knew everything, you know.

(Laughter)

LK: What were your parents' names?

PB: My father was William Madison Brown, and my mother was Maude Juanita Thomas Brown.

LK: And were they both born in the United States?

PB: Yes, yes. My father was born in Tennessee, my mother was born in Indiana. And somehow or another they ended up in Louisiana. We were not exactly typical of the Cajun area where I grew up. It was a reasonably close family.

LK: Did you have any extended family in the area?

PB: My grandparents -- my paternal grandparents lived in the area, although my grandfather died when I was quite young. My maternal grandparents, my mother's mother, died before they left Indiana, and my grandfather married again. So they lived in -- not far, in Jennings, Louisiana, which was not far from where we lived. We weren't really close to them, though.

LK: What was the name of the school that you attended?

PB: College?

LK: I'm sorry, elementary school, when you were growing up

in Louisiana.

PB: Well, I attended several elementary schools. I went to a school in Lafayette until we moved from Lafayette to Abbeville. And I went to school in Abbeville until we moved from Abbeville to north Louisiana, which was -- I went to school in Many. Many is where I graduated from high school. So we moved around.

LK: Were you able to have -- Were there any teachers, especially, in these different schools that ever influenced you at all?

PB: Well, not particularly, in terms of -- I was always a good student, and some of the teachers I liked more than others, but nothing particular. None of them had any idea of encouraging me to be an engineer, and things like that. I was the one who decided I was going to be an engineer. (Laughs)

LK: And how did that happen?

PB: I'm not sure.

(Laughter)

PB: I liked chemistry, but thought, well, I really would rather do something else than just chemistry, so I decided I was going to take chemical engineering. I didn't really do any research, I just decided.

LK: Did you know any other engineers--

PB: Nope.

LK: -- besides your dad?

PB: Nope. I didn't meet any others until after I already had a degree.

LK: Did you ever take any kind of a vocational guidance test in school?

PB: Yes, yes. I took the one for women, and then I took the one for men, because they decided they didn't know what they were doing, so they gave me the one for men and decided I should be an engineer. (Laughs)

LK: Really?

PB: Yes.

LK: And this was the high school guidance?

PB: No, this was in college after I was already enrolled, that they decided they needed to check out this strange gal. Of course, I was very young. Louisiana doesn't have -- didn't, at least at that time, have twelve grades in school. And I started school when I was four years old, because I had had a foot injury.

So I finished high school at fifteen and went into the engineering curriculum at fifteen, into the college program where the V-12, the Navy people from the war, were taking the accelerated program. So I got my engineering degree in three years, so I was eighteen years old when I came out with a degree in engineering.

LK: Wow. And were you the only female as well?

PB: No. I was not the only - I was the only one who graduated that year, but I was not the only female engineering student. There were, I think, two of us in chemical engineering and one in civil [engineering]. The other chemical engineer dropped out of school to get married, and she did come back and finish later. But I was not only the only woman engineer to graduate that year in chemical engineering, I was the only chemical engineering graduate that year, because all the fellows had gone to war.

LK: And you were the first female graduate in engineering from -- well, at the time, was it Southwestern Louisiana?

PB: Southwestern Louisiana Institute. Yes, I was the first one. And the head of the chemical engineering department laughs and says that, "Of all the graduating classes in chemical engineering, one always has a hundred percent contribution to the alumni fund," (Laughs) because I'm the only one.

LK: Oh, that's right. That's very funny.

PB: A hundred percent. But then, finishing school at eighteen, I knew that was a little young, so I went into graduate school. And I got a scholarship to the University of Texas. Of course, I had to have scholarships to finish my engineering degree even in Louisiana, because my father died when I was a sophomore

in college. So I earned probably eighty percent of my college expenses working in the registrar's office and what-have-you. I also taught chemistry laboratory the last year of my undergraduate degree, because I had already finished all the requirements for chemistry, it was just to finish the chemical engineering requirement.

So I got this scholarship to the University of Texas, and I went in with the idea of getting a masters degree in chemical engineering. The professors had no projects that I was the least bit interested in.

LK: Really?

PB: One guy was working on some sort of submerged combustion, and I forget what the other projects were, but I just didn't like them, so I decided to go on with chemistry.

LK: Can I stop this for a second?

PB: Sure.

LK: I'm sorry.

(INTERRUPTION IN RECORDING)

LK: Okay, we're back.

PB: A slight pause while she puts on sun block.

LK: (Laughs) Okay, thanks.

PB: So I went into graduate school there at the University of Texas, minoring in chemical engineering, with my major being in

organic chemistry. And as a teaching fellow, I taught the organic chemistry laboratory for home ec[economics] students. That was an interesting experience.

LK: It was an interesting experience?

PB: Yes, it was interesting.

LK: Why?

PB: The home ec students had a very uninterested approach to chemistry. And one of the things we taught in the chemistry lab was analysis of unknowns. And I can still remember this cute little blond comes waltzing up to me -- one day we were testing unknowns by determining the melting point of the compound. And, "Miss Brown?" She has one piece of her thermometer in this hand and one piece in this hand. "Miss Brown, can I continue to use this? I can still see all the numbers I need." (Laughter) But teaching was okay. But then I finished there in two years.

LK: With a masters in organic chemistry?

PB: Yes. And I was all of twenty years old.

LK: So you were almost the same age as the students that you were teaching?

PB: That's right. And it got even worse, because the first job that I took -- well, it was difficult to find a job in those years.

LK: Can you talk about that experience?

PB: Well, the interviewing for some of the jobs -- I remember I interviewed for one job with a petroleum company. I think it was Phillips Petroleum.

LK: This was in Louisiana?

PB: No, this was in Texas, when I was interviewing, you know, as I was finishing graduate school. It was very interesting, except the man interviewing me wasn't concerned about discrimination against women, but he was very adamant about the fact that they didn't hire blacks and they didn't hire Jews, which, well, I'm not about to work for a company that acts like that about anyone. But I really couldn't find anything in the engineering field. But I got an offer from Smith College in Northampton, Massachusetts, to teach chemistry, because I had been a teaching fellow. And I turned the offer down because it wasn't enough money. So they counter offered and gave me another offer, said that they would pay me -- it was \$300 a month, it was at that time -- and I would be what they called a faculty resident in the dormitory, which meant that I had my room and board paid for. All I had to do was to sleep in the room at night, as, quote, the adult on the premises.

(Laughter)

PB: And I get to Smith [College] and they find out how young I am. Fortunately, I looked older, so it wasn't too bad. But I

left Smith because I wanted to make more money. But it took me three years before I could get the equivalent of what I was being paid at Smith, because remember, I said that I was getting \$300 a month. I had a two-bedroom - a two-room apartment with maid service. And I mean, they came in and made my bed in the morning, laundry and food, and I was paid 300 bucks. So it took a long time before I could get something that was comparable to that.

But I've always been interested -- when I was in -- even in undergraduate school -- in library work. And my idea was that I would be going into some literature and patent work. The university in Lafayette had a very progressive librarian, and I had one of the better courses in how to use libraries. Then when I got into graduate school, one of the professors in chemical engineering was very adamant about report writing and the use of the libraries for research in your field before you started doing anything in the lab. So I had a good grounding in technical information activities.

And my first real job that I was interested in, really interested in, was with the Ethyl Corporation, where I worked on an information system for fuel and lubricant additives. Ethyl was about, at that time, to lose the patent coverage on Tetraethyl Lead, and it was scrambling to find something else that would be as lucrative as that had been. It didn't succeed, but it gave

them the impetus to set up this very elaborate information storage and retrieval system, which was a pioneer in its way, because they were using the Remington Rand system that the plant in Baton Rouge used for their financial records and stuff, which used round-holed punch cards. They were like the old IBM cards, but they had round holes. And we had our whole information system set up on these.

LK: Can I take a step back for a second? How did you hear about the job at Ethyl Corporation? This was, you were at Smith College teaching, and you were actively looking for a job?

PB: Well, I taught at Smith, and then I moved from Smith to Albany Medical College. And I worked there as a chemist in the medical school, and I was actively looking for a job. I don't remember exactly how it came about - Ethyl -- I think it was at an ACS [American Chemical Society] meeting or something like that, because that's often been one of the ways that I identified positions.

LK: Did you join the American Chemical Society when you were a student?

PB: Yes. I joined, and I'm an Emeritus member, now, of the chemical society. I joined when I was an undergraduate in Louisiana. So I've been a member of that longer than I've been a member of SWE [Society of Women Engineers] (Laughter) -- considerably longer.

Actually, I guess I skipped a job in there. I went from Smith College -- and that, I guess, would get back to SWE. I went from Smith -- I liked being in the north. That was my first experience in the north. So rather than leave the north, I got a job in Peabody, Massachusetts, with a leather chemist, where I was the only chemist in the lab other than the boss, and lived at what was called -- we called it the Friendly Women's House. It was the Lydia Pinkham Foundation -- and one of Isabelle French's cohorts at the laboratories where she worked lived at this house. They got me interested in going climbing in the White Mountains. And Isabelle French lugged the application blank for SWE up to the top of Mount Washington and gave it to me and said, "Fill it out."

LK: This was right after SWE had been founded?

PB: Right.

LK: In 1951?

PB: 1950, when she gave me the application, and I filled it out and sent my check in, and almost two years later before it finally got squared away, because by that time I had left the area and my bank account had moved. So Hilda Edgecomb, the treasurer, had also moved from the East Coast to the West Coast, and it took a while for my funds to get connected to SWE. But that was my introduction to the society.

LK: At the time, do you remember why you thought it was

important to join SWE?

PB: No. I really hadn't -- you know, I'd met some other -- this was my first time I'd ever met any other women engineers, and it sounded like a good idea, you know -- I thought, well, this is a good place to meet other people. And Isabelle was very persuasive.

(Laughter)

PB: So I filled it out and joined. And then when I got to the Ethyl Corporation, then, in Detroit, Ann Lawrence, I think was her name, had been in contact with some of the people in the East Coast, and was interested in forming a section of SWE.

LK: Did you know Ann through work?

PB: No. I didn't know her at all. But she called the people and got some of the names of people who were in the area, and we set up the Detroit section.

LK: This was in 1952?

PB: Don't ask me the number!

(Laughter)

LK: Well, I know that's when they were founded, so it must have been.

PB: I'm a charter member of the Detroit section, so I'll take your word for it that it was 1952.

(Laughter)

PB: And we -- a whole group of us went to the Western Centennial of Engineering in Chicago and met some of the other women engineers there.

LK: Do you remember some of those women?

PB: Well, this is where I met Lois Graham and Mary Murphy, and Catherine Eiden, and Georgiana Peeney, and a lot of--

LK: Dot Merrill?

PB: Dot Merrill, of course.

LK: What was the atmosphere like at that centennial?

PB: Well, I don't know what I would call it. It was -- we were accepted and yet not quite accepted. But we were off in our own little group most of the time.

LK: Do you remember, as a young professional, understanding or -- or what was your take on a hundred years of engineering being celebrated, or was it more just the excitement of just being together with another group of engineers?

PB: I think it was just the excitement of being together with another group of engineers, meeting these people who had totally different backgrounds from mine, and most of them were in totally different -- you know, all different fields of engineering. That has been one of the real interests to me in Society of Women Engineers is the women who have totally different disciplines in engineering.

LK: Because you didn't get that in the ACS or--

PB: No.

LK: So -- But what was your common denominator, then, just being an engineer?--

PB: Yeah.

LK: -- and being women?

PB: Being women, and not being afraid to speak our piece about women in engineering.

Then I'm not sure whether Katharine Stinson was at that meeting or not. She might have been.

LK: We have photos of her there.

PB: She's the one who got me involved in National SWE.

LK: How so?

PB: She decided that -- you know I was working in literature area -- they needed a publications director, so I became publications director of SWE, which was a glorified title for not much of anything. But at that time, we had so little money. And I remember the first issue of Women in Engineering, which was this -- you've probably seen this gold covered book that I typed, I pasted together, using the information that Bea Hicks had for her paper. She had this graph showing stuff about women with absolutely no references to where she got the information. So I had to go find the stuff and annotate it, and then check with her

to be sure that she didn't object to my changing her paper to be sure her facts were right.

LK: And in your experience doing literature searches and gathering technical information, what types of information was out there on women in engineering? That was 1955, or the 1950s.

PB: Very little. The Women's Bureau of the Department of Labor was about it.

LK: And did they get a lot of their information from SWE?

PB: No, no. They got a lot of their information through their sources in the labor department. I don't know how they came to -- some of it came strictly from schools, the colleges giving the information. And a lot of it was kind of circumspect, but you used what was available.

Then from that, I did not handle the newsletter. We had a newsletter editor.

LK: The SWE newsletter?

PB: Uh-huh. I guess the last one I remember was Susan Shur in New York who was doing the newsletter.

LK: Was Emma Barth working on it too?

PB: Emma worked on one of the versions. We had, you know --

LK: Turnovers.

PB: -- turnover, a lot of turnover. After I left Ethyl, then--

LK: Why did you leave?

PB: Well, four years at Ethyl was enough. I didn't like the guy who ended up being my boss. I liked the man who hired me and whom I did most of my work for. But the man who ended up being my boss was a clean desk fanatic. And I didn't like to have to put everything on my desk away (Laughs) every night. I liked to have my stuff organized. I knew where this was and that was, didn't want to have to put it all together. But you know, minor details. Four years was enough.

LK: Were you the only chemical engineer in the Detroit section?

PB: I don't remember.

LK: I mean, I was thinking--

PB: No. I couldn't have been. Virginia Sink.

LK: That's right.

PB: Yeah, Virginia Sink was a chemical engineer.

LK: Working in the automotive industry?

PB: Right.

LK: Did you have a sense that the automotive industry dominated the engineering field in Detroit at that time, or is that not correct?

PB: Well, they dominated the engineers, but a number of the women in the group were not associated with the automotive

industry. Now, Ann Lawrence was in construction. And Fletcher, of course, was with automotive, I think. And there were some drafting people. And Virginia Sink was -- but there were a couple of others who were in other areas than the -- not nearly as heavily automotive as I think the section now is.

LK: Right, right. That was sort of why I asked the question. Were these women in Detroit, did they serve as role models to you?

PB: No.

(Laughter)

LK: Were they more peers than role models?

PB: Well, I don't -- yes, I'm sure "peers" is probably the appropriate word. They were just friends. And that really has been my big association with SWE, it's a bunch of my friends. That's why I keep coming back year after year, to see my friends.

(Laughter)

LK: So you left Ethyl.

PB: And let's see, where did I go? It must have been Westinghouse.

LK: Right, in Pittsburgh.

PB: Went to Pittsburgh, and found out that the Pittsburgh climate simply did not agree with me.

LK: The climate as in the weather?

PB: Yeah. I had to get out. I stayed there only a year, a very short stint in Pittsburgh.

LK: Did you join the SWE section when you were there?

PB: Yeah. In fact, I was chairman of the -- or whatever, president, they call them now, but it was chairman at that time, for a partial term. Somebody had resigned, so I got drafted into that. And that was at the time when I was in Pittsburgh, when Isabelle French turned over the Addressograph Multigraph plates that were used for addressing the newsletter and all of those things. Isabelle had the set, and she turned them over to me. I had them in the basement of the house that I was renting in Pittsburgh. I had to print the labels for the newsletter and send them off. A lot of do-it-yourself in those days.

LK: And how many women, approximately, were members of SWE at that time?

PB: Couple hundred.

LK: So it really was an all volunteer--

PB: All volunteer.

LK: There was no quote, unquote, headquarters, or--

PB: Nope, nope. Didn't get anything in headquarters until the year that I was president. Well, we had, the two years before that -- when Catherine Eiden was president, we contracted with one of these mailing firms that did some of the work for us, but it

was strictly an outsourcing type thing. And when Betty Yost and I came -- Betty Yost was the treasurer the year that I was president -- we pulled all of that stuff away from this firm because they were just messing up all the records, and we figured we could mess them up ourselves better than that, even doing volunteer work. So it wasn't until we moved into the United Engineering Center and hired SWE -- hired Winnie [Winnifred Gifford White] as the secretary, general factotum.

LK: That you had a headquarters?

PB: Yes. And that was, I think, my most significant contribution to the society, was bringing Winnie on board. With Ruth Shafer's assistance, we hired Winnie, because Winnie was the kind of PR person we needed in the United Engineering Center. We were so small. And we got in by a fluke. And the big boys just really weren't sure what to do with us. But with Winnie there championing us, we were accepted. And from acorns we grew.

LK: Well, let's take a step back and talk about Pittsburgh. So you were working as chairman of Pittsburgh section, working for Westinghouse. What were you doing at Westinghouse?

PB: Well, I was what they called a staff engineer at Westinghouse, which meant I did a lot of report writing, things like that... I also was in charge of -- well, I was staff engineer for the latter -- just before I left them. And before

that, I had a group that was responsible for the reports that were written to the AEC people about the nuclear reactor stuff. So I had a group of typists and report writers, all that kind... I'd been -- Ethyl got me started in information systems and report writing, and then I continued it at Westinghouse.

And then when I moved from Westinghouse to Texas Instruments, it was as the head of the library and information activities.

LK: Were you the only -- how many women were at Westinghouse when you were there?

PB: Women engineers? I have no idea, because Bettis Plant, the atomic energy plant, we didn't really associate with any of the women in the engineering there. Emma, of course, was with Westinghouse.

LK: But not at your--

PB: Not in that area. And how many other women were -- Emma is the only one I really remember as being Westinghouse. I'm sure there were others.

LK: Oh, right, right. How did you transfer from Westinghouse? How did that come about from you moving from Westinghouse in Pennsylvania to Texas Instruments in Texas?

PB: Again, looking for another job, when I found out I had to get out of the area. And at that time, Texas Instruments was just building its semiconductor facility down in Dallas, and they

wanted to set up a library. It looked like a good opportunity for me, and it ended up being a very good opportunity.

LK: How so?

PB: Well, they're the ones who supported me going ahead in national SWE. Indicated -- they paid all of my expenses to national meetings, supported me with secretarial help. And most of the members of SWE who were active had to foot their own bills. I was lucky, or I would not have been able to be president of SWE at the time because I simply couldn't have afforded it. You know, I was making a good salary, but it wasn't the kind that you could command today.

LK: Right. Would you mind if I turned this light on?

PB: Go right ahead.

LK: Okay. So as head of the information services for TI [Texas Instruments], was your title "engineer"?

PB: No.

LK: Was that ever an issue for you?

PB: No. In fact, I think the only time I was ever called an engineer was at Westinghouse for a short time when I was called a staff engineer. It wasn't an issue for me, because quite frankly, I really -- today, most of the women who are graduating in engineering recognize that their engineering background may put them in a totally different area than actual hands-on engineering.

LK: Okay, right.

PB: At the time that I got my degree, that wasn't considered to be what you did. If you got an engineering degree, you were supposed to engineer. Well, I considered my engineering degree was a very good background for what I was doing, and I made the most of it. And it was very successful for me.

LK: Well, in some ways, it was ahead of -- I mean, it seems like it was ahead of the game in terms of systems analysis and information analysis.

PB: Well, it's what I've always said, that I got into information storage and retrieval when it was still on Highway 66.

LK: (Laughs) The Information Super Highway.

PB: Right. It was still Route 66. I got a vast amount of experience in that, and would have wished devoutly to have had the computers that we have today when I was working in the field. It wasn't until my last job that I was really able to make use of computers, to where they could be used.

LK: So what were your responsibilities managing that area of Texas Instruments? And this was 1960s?

PB: Yes. Late '50s and early '60s. Well, I had, as I said, the library as part of my operation. And it was a big library. We did literature work for the engineers -- mostly that and some report writing, just primarily making sure that the library staff

-- it was a management function more than anything else, very little hands-on searching or anything like that.

LK: Was this your first management experience?

PB: Yes -- well, no. I did manage a group at Westinghouse, but the first one of a large number of -- a big staff.

LK: At that time, was there any kind of management professional development available to women engineers -- I mean, engineers in general?

PB: No. It just wasn't there, and particularly in the South.

LK: Yeah. How many people were on your staff at TI?

PB: Don't remember. (Laughs)

LK: Approximately? Less than fifty?

PB: Oh, yeah.

LK: Less than twenty?

PB: About twenty, in that area. A couple of professional librarians, and then all of the support staff for that.

LK: How did you interact with other scientists and engineers there? I mean, what was the dynamic?

PB: I haven't really thought about it. They were all so busy doing their thing, that we didn't really have too much interaction.

LK: Was there a Texas section of SWE at this time?

PB: No. That's why I became first president elected from the Members-at-Large, because I was a Member-at-Large at that time. The light went out. I guess it decided it had enough.

(Laughs)

LK: On autopilot.

(Laughter)

LK: So you were really mostly involved with SWE while you were in Dallas in the 1960s, at the national level?

PB: Right.

LK: And you were working on the executive committee, you know, from the late '50s until you were elected president in 1961.

PB: Right.

LK: What was SWE's main issue at that time?

PB: Money.

LK: Money?

PB: Money, money, money, and membership, which without one it was very difficult to get the other. I remember an endless round of speeches, speeches, speeches. I said I hope I never had to beg for money again. (Laughs) But we had to spend our time keeping the infrastructure together and operational so that the society didn't fold. Which we were in dire straits and possibly not going to be able to continue the operation with all volunteer labor.

And then moving into the United Engineering Center just compounded the problem in terms of keeping us afloat. One of the things that I did was to appoint myself as a representative of SWE to the Engineering Society's library. And they met eight times a year in New York. Because Texas Instrument was supporting me, I went to New York eight times a year--

LK: Wow.

PB: -- to sit in the -- I'd go to the Engineering Society's library meeting, but then I'd sit in the SWE offices and help Winnie with the work. It's the only way we could get a lot of it done. She was just overwhelmed.

LK: With the United Engineering Center not being in existence today, can you talk a little bit about, if you can remember -- I mean, how it led -- the United Engineering Center's development and it's relevance at that time for the profession, but also for SWE?

PB: Well, the United Engineering Center was an idea to bring the major engineering groups into one area.

LK: Engineering groups being national technical professional societies?

PB: Yes, the societies. The civils, the mechanicals, the chemicals, the electricals, to bring them into the one area where they could be seen by the public. And it was very important to

SWE if we could be part of that, because they were -- they dwarfed us in size, but to be included in that group was of tremendous importance to us, because you'd come into the United Engineering Center, and you could see the logos on the wall of all of the societies that are represented. And here's this -- our logo was just as big as the rest, even though we were maybe a dot on the map, and our offices were not as big as one of my bathrooms today.

(Laughs)

LK: Sure. What was SWE's relationship to the other engineering societies?

PB: That was the thing that Winnie really brought a great deal to us, because she had worked for one of the other major engineering societies. And she still did part-time work for one of the men there, and they all knew her. So this was a group of girl's -- ladies that they were very happy to have in the area. And she fostered this very much.

LK: How did you meet Winnie?

PB: Well, Ruth Shafer heard about this woman who worked for this engineer who was a writer. And Winnie had been doing editorial work for him. And he was, I think, going blind, and not working very much. So she was looking for other work. So Ruth arranged for me, in one of my trips into New York, to meet with Winnie.

That's one of the things that I can still remember, is meeting her at this restaurant in New York. Winnie comes in with her white hair and her blue glasses, and she drinks Gibsons. Here's this naive southerner, who -- you know, what's a Gibson? (Laughs) But she was very, very impressive.

LK: Had she heard of SWE?

PB: Not really. It was her first -- she really hadn't heard much about us. And even after we decided that we were hiring her, she wasn't even sure she applied for the job.

(Laughter)

PB: But she took it. And for a long, long time, she was a great influence on the growth of the society, because she did stay longer than she should have, in terms of getting work done. But we miss her, because we haven't had anybody with quite that personality since.

LK: She kind of was five different professionals in one.

PB: Right. And of course, her husband was a big supporter of SWE.

LK: In those early years of SWE, do you remember discussions about SWE's larger purpose? I mean, it was founded in 1950, and then ten years later, it was inching along, and you were in the United Engineering Center. And at the national level, were there discussions about branching out that you can recall?

PB: Well, there was a lot of discussion about why we keep on trying to do this, sort of thing -- is it really necessary? And there were a lot of people who had totally different ideas about what SWE should be doing. There was a group that felt that you shouldn't belong to the society unless you had a graduate -- or a degree in engineering, and that this business of taking in others-

-

LK: How did you feel about that?

PB: As far as I was concerned, certainly the experience in my family had been, that if you worked hard enough and learned what needed to be done on a job you didn't need to have a degree to do it.

The growth of the society was something that I never really was sure it was going to get beyond the couple of thousand people, and that we would have to struggle very hard to do that. And it has been particularly gratifying, for those of us who stayed around to see what was happening, to see how much it has grown over the years, and how well accepted the group is in the engineering profession. A lot of the young people coming up don't realize how hard it was for us old-timers. They don't know how good they have it.

(Laughter)

PB: And yet some of them who realize, "Oh, that happened to

you, too?" There's still a lot of discrimination.

LK: Right.

PB: It's certainly nothing like it was in the early years. Although I often said when I was president that you know, I've never really have felt that I've had any discrimination against me because I was a woman engineer, but because I was a woman with a bad disposition. I brought a lot of it on myself.

LK: Can you expand on that a little bit?

PB: Oh, you know, you're young, you know everything, and you don't really see that other people can teach you much. I had one of my professors who told me many years later that one of the letters of recommendation that she had written for me -- she said they had asked her some questions for her to respond, and she said, "I told them that you were one of the most brilliant students I've ever had, but she's only recently learned to tolerate those of us who are less brilliant than she is." What can you say to that? I did learn a lot later.

LK: The Engineering Society's library, how did SWE use that resource? I mean, what was your role?

PB: SWE didn't use that resource, but certainly at Texas Instruments I used it a lot, because the engineering index was one of the major hard copy versions of what today we use computers for.

PB: And we also used the library as a source for material that we couldn't get from other libraries, you know, the inter-library loan type of thing. We were, of course, interested in what the Engineering Society's library was going to do in terms of automation and that type of thing. As it ended up, it was totally out of the picture as far as the engineering societies are concerned since they moved out there. I haven't followed it at all.

LK: Yes. I mean, offline we can talk about where it is now.

PB: Yes.

LK: But it's interesting, because it is all computerized now and it's related to your work at TI, which is the aggregation of engineering information. We have about five more minutes on this tape. But can you talk a little bit about the type of work you did in that field? I mean, it's changed so much.

PB: Well, I really didn't get into much in information storage and retrieval, as such, at Texas Instruments. It wasn't until later in my career that I got into more of the storage systems and retrieval. When I went to Battelle [Laboratories] I was there in contract research in information storage and retrieval and the design of information systems. And we did that on a contract basis all over the country. A lot of my work was related to the military, though, and classified, for storage and

retrieval systems for them. I did very little in terms of schools and--

LK: Right. That was through Battelle?

PB: Yeah, through Battelle.

LK: And do you know what some of the other engineers who were working in that area, what their backgrounds were? I mean, you had a chemical engineering and a chemical background, but also your experience doing information.

PB: Yeah. We had chemists, very few engineers. Most of them were either -- gee, there were a couple of engineers, but primarily chemists, and there were some mathematicians. A lot of people in the chemical field got involved in information storage and retrieval, because with Beilstein and other things that were so heavily going back into the literature oriented, you had to know something about information systems in order to get by.

LK: So you were working on contracts to improve storage and retrieval, mostly for the military?

PB: Yes. Contract research, ninety-percent of your work is writing a proposal to try to get somebody to fund you to do something. And in the years that I was with Battelle, a lot of that involved responding to requests for a proposal that the military put out. I got very good at writing proposals and what we could do to make the world wonderful for not more money than

you planned to pay.

(Laughter)

PB: But very -- not so much of the time was spent in actually doing the work as the time that was spent writing proposals to do it.

LK: Do you think that's true for engineering work today?

PB: No, probably not. But it certainly seemed true of contract research. It got awfully boring, in fact.

LK: And how long did you work on contract research?

PB: Ten years.

LK: This was in the Chicago area?

PB: No, this was in Columbus, Ohio.

LK: Columbus. So you went from TI in Dallas to Columbus.

PB: Uh-huh. And then from Columbus I went to Chicago. And that's where I really got into information work, I mean, heavy into the information work.

LK: Well, let's stop there. The tape is almost about to end. (INTERRUPTION IN RECORDING)

LK: -- tape two for our interview with Pat Brown, April 16th, 2003. We ended tape one talking about how you really started getting into information work when you relocated to Chicago after working at TI and then Battelle in Columbus.

PB: Well, actually, I had been in information work, but it

was more hands-on when I got into Chicago. First of all, in Chicago I was the manager of information services for Baxter, which is where Lois Bey, who you interviewed earlier today, worked. And there I managed their whole library operation, which included libraries in a number of facilities in the Chicago area.

LK: This was Baxter Laboratories?

PB: Baxter Laboratories. And again, we had some automated systems for accessing the national databases that were able to be searched at that time, and did an awful lot of literature research for writing, and so forth. I was with Baxter for ten -- almost ten years -- seems like. Anyhow--

LK: Was this the 1970s, correct?

PB: Yeah. I got caught in the buy-out when Baxter bought out American Hospital, and I was part of the middle management that got liberated. And at that time, you know, this is when you first started losing jobs due to the corporate mergers. We never had that sort of thing happen to anybody that I knew before. It was a very big blow.

But Baxter was very good about allowing us training for getting another job -- type of thing. They sent us to -- they spent a lot of money on those of us who were at a certain level, to get this, you know. And did all the things that they told us to do, and some of the things that they told us that would never

work. And one of the things that they told me that would never work got me my last job.

(Laughter)

PB: I wrote a cold call letter to seven companies, and got called in for an interview, and ended up getting the job. And that was the job where I really did hands-on with computer systems. I ended up being in charge of the computer network at the company, which was all IBM, PCs, Windows based. And at that time, there weren't very many companies that were doing that sort of thing.

But in addition to that, they had a separate computer system that was the star system. It was for information storage and retrieval. It allowed you to set up your own databases all throughout the company and link to that, plus allowing you to search from very sophisticated systems. And I ended up doing not only the software, but the hardware. I had a ball.

But I got too old for them. I reached the retirement age, so they suggested that maybe I should consider retiring, so I did. I've been delighted ever since. I should have done it earlier. But I had so much fun there.

LK: This was in Chicago, still, at Stepan [Company]?

PB: Right.

LK: Were there other young women engineers who had been

maybe trained in computer backgrounds working on these projects at the time?

PB: No, not really. I took over from a young man who'd been handling the system - he was an engineer. And I ended up hiring Lois away from Baxter to come do the patent searching, because that was one of the things that we were big on, was doing patent searching through the equipment. But there weren't any other women engineers in the area.

I have always worked in a field where there weren't very many people with comparable backgrounds. That's why I was delighted to meet Lois, to find someone who had a comparable background. Most of the other women engineers that I knew were in totally different areas.

LK: Right. But when you came to Baxter Laboratories, Lois was there.

PB: Lois was there.

LK: And she had a chemical engineering background and a chemical background.

PB: And she'd been a member of SWE, and I didn't know her before I went there.

LK: So you worked together for over ten years at Baxter?

PB: Yeah, I think that's how long I was there.

LK: And then you brought her to Stepan?

PB: Well, she stayed on at Baxter for several years after I left. But I brought her into Stepan, then, when we needed somebody to handle the patent work, because she'd been doing the patent work at Baxter. And I was having more fun with toys.

(Laughter)

PB: I didn't want to do patent searches. I'd rather wire the hardware.

LK: So you enjoyed computers.

PB: Oh, yes. And I still do. Of course, I forget more of what I learned three weeks ago than I -- short-term memory, gone. But at least with the computer, I can manage to figure it out again. It's sort of funny that some of the things that I do for the MAL [Member-at-Large] News, I do only once -- an issue, it's six times a year. So I've done something for the January/February issue in January, and then I come to the March/April issue, I have to do something in March. Now, what -- how did I do that in January? (Laughs) I have to go back and reinvent the wheel a couple of times. That's what happens when don't have a memory. (Laughter)

LK: Well, at least you can create an information retrieval system on your computer desktop.

PB: Right. That's exactly what I have to do, and make the little, in effect, Post-It notes as to how this was done.

(Laughter)

LK: Did you expect the information/science/computer field to be where it is today? That's kind of a loaded question, but--

PB: Yes.

LK: And how do you feel about it?

PB: Yes, I did. I just thought it took too long to get there. Well, I feel that it would be very exciting to be starting out in that field today. I think that I would have gone into computer science rather than chemical engineering if I had the choice at the time that I was in school. But of course, that didn't exist. I've always had the interest in the literature and in patents, too, but--

LK: Do you have any of your own patents?

PB: No. I didn't have any idea that I would be doing hands-on work with the insides of a computer.

LK: Do you think that computer software and hardware design, that type of work makes it easier for engineering to be like a neutral -- a unisex profession? Do you understand what I'm asking?

PB: Well, I guess so. But I don't think there's anything, really, or practically nothing a woman can't do.

LK: But there have been stereotypes--

PB: Yes.

LK: -- that have been hard to overcome--

PB: That's true.

LK: -- based on physical--

PB: But engineering, very little of it necessarily depends on brawn. Brains, and if you don't have the brains -- and I think that most of us were told that we had to be twice as smart and work twice as hard, or we weren't going to get anywhere. And unfortunately, that was basically true. I think that's no longer necessarily an issue, but some of the younger ones have contradicted me on that, and they claim that's still an issue.

LK: So how often do you interact with young engineers?

PB: Well, we've been quite -- had more activity since we've been here in Las Vegas in the Region B area, because we've been -- for some reason, some of the young people here in this region are interested in what the old-timers have to say to them. I know we've been invited to speak to some of the student groups and to meet with some of the students.

LK: This is "we" being you and Lois Bey?

PB: Right.

LK: You both retired in Las Vegas.

PB: Right. We have been fairly active in the Region B meetings. And the Region B director, the previous year, Virginia Connelly, got us involved in doing things. Of course, Fran Stuart

has continued to get us involved. And we're happy to go. There are a few things that we can talk about. And at the last Region B meeting in San Luis Obispo, Fran Stuart asked us to run what she called a mini Over-the Hill Suite. And I don't know whether she had some of the people that you've interviewed talk about the Over-the-Hill Suite.

LK: No one has talked about it yet.

PB: Well, the Over-the-Hill Suite is a fixture now at national conferences. It was started a good many years ago by Margaret Pritchard and Minta Harness. And some of us older members have also gotten involved in it. We had always rented a suite at the conference. And then those of us who were associated with the suite stocked it with booze and soft drinks and munchies, and had open house every evening.

The reason we got into this was that in the early years of SWE, the convention committee had to provide a hospitality suite for convention attendees. As the society got older and larger and started attracting more industry to come in to try to hire people, the industry started having their own suites. Well, those of us who were, as we are fond to say, were "over-the-hill," needed a place where we could get together. And the SWE National Convention Committee no longer sponsored a hospitality suite. Why should they when they have somebody else foot the bill? So we

started setting up these hospitality suites.

And last year, for the first time, National SWE decided that the Over-the-Hill Suite was such an important function in the society that National is paying for the cost of the parlor of the suite. And all we do is be the hostesses, pay for our bedrooms and stock the room. And it's a place where anybody can come. It doesn't mean you have to be over-the-hill. It just means you can come in and you can talk.

LK: To women who are over-the-hill, and who have been through--

PB: Right. And it's a place where absolute necessity that the award recipient must be brought to the Over-the-Hill Suite after she receives her award. So you can come in and find an award recipient sitting on the floor with her shoes off, talking to the rest of the -- you know, the students, or anyone who happens to be there.

LK: Do you think it's important for students to stop by the Over-the-Hill Suite?

PB: Oh, yes. It's very important, very important. And it's a chance for them to meet some of the people who've gone through a lot to get the society to where it is. And I think that's one of the very important things to remember about us ancient ones, that we did have to do an awful lot to be sure that this society stayed

and grew and remained an organization. And a lot of people, I think, that, well, SWE, it may have outgrown its usefulness, and can be disbanded. Well, I don't really care if they do it after I'm dead, but don't do it until after that, because I'll miss all of my friends.

(Laughter)

That's the one place where I can get together with these women I've met over the years, some wonderful women. I've had some very, very long lasting friendships. It's been worth it.

LK: What has it been like being a member of SWE as a Member-at-Large, rather than as someone who is active in their local section and then attends national meetings?

PB: Well, I have been an active member of -- let's see, a charter member of the Detroit Section. I was a member of the Pittsburgh Section. I was a charter member of the South Ohio Section. So I've been all of those. I've also been a MAL for more years than I've been a section member.

LK: MAL is Member-at-Large.

PB: Member-at-Large. If you're a member of a section, you kind of feel that -- you should feel a responsibility to help the section operate, attend meetings and maybe participate. If you're a Member-at-Large, you can do your own thing. And for me, particularly, as a retiree, I'm not interested in attending

meetings of a group where the interests don't really coincide with mine. We go to the regional meetings, but we certainly don't go to the Dress For Success, or the--

LK: Right.

PB: -- How To Get a New Job sessions, those sorts of things. But I recognize that those are important things for the younger people in the group. But as a Member-at-Large, if I want to participate in a local science fair, something like that, I can do it. I don't have to wait for somebody in a section to push me to do it.

My contribution now is primarily one of doing production of the Member-at-Large Newsletter, because I can do that sitting in front of my computer. I don't have to get out and meet people, or it doesn't interfere with any of my gambling activities (Laughter) or my life in Vegas. And it's something that I feel is very important, because Members-at-Large, it's the biggest section in SWE. And it's their primary contact with the society. They get the magazine, but the magazine is not really so much news-y, either. It's gotten more so, but it didn't used to give us much in the way of information about other people.

LK: Oh, okay. So the newsletter kind of provides information on events and people and what has happened to them.

PB: Yeah.

LK: Whereas the magazine is more of a higher level.

PB: Right. And it also provides the Members-at-Large with some things that they can do for career guidance or professional development. They're very active in terms of what can you do locally as a one person help for women in engineering.

LK: Do you have any examples of what you would say that a person could do?

PB: Well, I can't think of anything. I can think more of the stuff they talk about what you can do with the kids type of thing, the fun activities that you can get into for kids to introduce them to engineering. These things are handled in our career guidance corner of the newsletter. And professional development, there -- I don't even read it. I don't... (Laughs)

LK: You've paid your dues.

PB: Yeah, I've paid my dues. Well, a long time ago, that was also one of the best things that I ever did was taking out a life membership. Think how many years I would have been paying and paying and paying. Of course, I've been paying and paying and paying, but that's--

(Laughter)

LK: That's funny. How do you think advancements and communications has changed SWE?

PB: Oh, it's so much easier to get in touch with everybody

now, and to be able -- one of the things, just keeping addresses current has made a big difference. E-mail is a tremendous way to communicate with everybody and get changes. Used to be that we had maybe twenty-percent of the mailing addresses were wrong, and wrong for a long time before we could find a way to get in contact with them.

LK: Because women moved around a lot if they were doing engineering and consulting, and all that.

PB: Right. And there wasn't an easy way to quick send off an e-mail to let people know that you've changed address. Now you can sign directly on to the new membership directory and update your profile.

LK: That must have been a tough job for Winnie.

PB: Oh! That was one of the reasons I went into the office the eight times a year, because at that time, things were being done totally manually. The service that was making up the mailing labels, you get a change of address, and they'd print -- I forget how many cards they'd print for us. But one card had to go into Winnie's file by name of the individual, one card had to go into the file by section, one card had to go to the section, one card had to go to the treasurer. And then we'd sort them into all these piles, a manual database activity.

LK: How did the other engineering societies handle that type

of work?

PB: Oh, they had computers.

LK: They had computers.

PB: And for a while, we finally got on to the AICHE [American Institute of Chemical Engineers] computer system and were using it.

LK: But then you left the United Engineering Center.

PB: Well, United -- yep. That was after my time, though.

LK: So someone else had to worry about it.

PB: Someone else had to worry about that. That was BJ's worry. (Laughs)

LK: And we were talking about being a MAL and how that experience would be different from being in a section.

PB: Well, obviously, I consider, now, I prefer to be a MAL. And in the Chicago area, I was a member of the section for a while, didn't care for the activities of the section, so I became a Member-at-Large by choice. I'm a Member-at-Large by choice here, because there is a Los Angeles section. It's not active, and I believe it is going to be disbanded.

LK: Las Vegas section?

PB: Las Vegas section. I'm sorry.

LK: That's okay.

PB: I misspoke.

LK: I was just thinking, wow, you have to go all the way to Los Angeles, no wonder you're a MAL.

PB: Right. No, no. The Las Vegas Section has been inactive for some time. And they have only a handful of members. And a handful is just not enough to keep a section active. You can't have the same person holding office year after year after year. It just doesn't work. And I felt when I moved here that I really didn't expect to support a section, and so I wanted to retain the Member-at-Large status. Again, I do my thing with the MAL News.

LK: And you still attend national meetings?

PB: Oh, yes. I've missed about three or four since 1951.

LK: How have the national meetings changed since the early years of SWE?

PB: Well, they've gotten a lot more impersonal, a lot more impersonal. That's why I particularly like the Over-the-Hill Suite. They've gotten big, and concentrating on career fair type things, which has always been a big thing in our conferences, but it's gotten even bigger now that the society is so much larger with the exhibits. There are better technical presentations. But again, I don't go to SWE for technical presentations, so I can't tell you how different they are from earlier ones, since it's been years since I've attended a technical presentation. In fact, when I was president, you never had time to go to anything anyhow. You

only went to the things you had to officiate at, then you spent the time in meetings.

LK: Did you ever go to any other women in engineering conferences other than the ones that SWE hosted, in like the '60s and the '70s and the '80s?

PB: Only the Henniker conferences, but that was SWE related.

LK: The Henniker conferences were with the Engineering Foundation?

PB: I think that's right. I don't really remember.

LK: And those were more professional development for women engineers, current women engineers?

PB: I'm not sure what they were really classed as. I think that probably is what the idea was.

LK: How were those meetings different from SWE meetings?

PB: Well, you didn't really have the organization that you have in a SWE meeting. It was a get-together of people with some speakers, but not as regimented. And of course, it was only half days of doing anything constructive. The other half of the day was sports or, you know, golf, or swimming, or something like that. It was kind of a combination social event and conference. I think I only went to one of those. Minta went to a lot of Henniker conferences.

LK: And they were called Henniker because they were held in-

-

PB: Henniker, New Hampshire. Yeah, there are lots of stories about the Henniker conferences. You'll have to ask Arminta Harness, when you interview her, about Dr. Hopper (Laughs) at the Henniker conferences. (Laughs)

LK: Okay. Those are Olive stories?

PB: Well, yes, there are also Olive stories about Henniker. But a Dr. Hopper story is a Dr. Hopper story. (Laughs)

LK: Okay. That's Grace Murray Hopper.

PB: Grace Murray Hopper. Admiral Grace Murray Hopper. (Laughs)

LK: Did the fact that Grace Murray Hopper and Lillian Moller Gilbreth, and some of the bigger names, so to speak, of female engineers, that they were peripherally involved with SWE, did that have an impact on you when you were a member in the early years?

PB: Well, Grace Hopper is a law unto herself, and had no impact on me. Dr. Gilbreth was extremely interesting, and I enjoyed meeting and talking with her. In fact, my only real personal contact with her was when I was president and in New York at one of the Engineering Society's library board meetings. I happened to be in the hotel at the time that Dr. Gilbreth was there. She was speaking to some group. And she was looking for a way to get to another floor without having to use the escalator,

because her family would no longer let her use escalators because she'd fallen on one of them. And I happened to recognize her and introduced myself, and found one of the maintenance men who showed us where there was an elevator that she could use. So I spent quite a bit of time talking with her there then. She was a very interesting woman.

And you've probably heard the famous story about her and the train in--

LK: No. What's that story?

PB: Well, her family was very concerned, because she would go into the city from where she lived in Jersey on the train, but she was always running for the train. And they told her, "You've simply got to get up earlier in the morning so you can catch the train." "Okay, that's reasonable." So she said, "I would get up early, get dressed, have my breakfast, read the newspaper, and suddenly realize I had to run for the train."

(Laughter)

PB: It didn't help a bit. And I mean, you could just see her.

LK: Was she a presence within SWE very much? I mean, I know there was the Gilbreth Scholarship that was established.

PB: She talked to us a number of times, gave a number of speeches for us. She was very, very generous with her time when

it was available. We could always count on her if she was going to be in the area, we could have her come talk to the group. Dr. Hopper was not so gracious. She did speak several times for SWE, but she wasn't particularly impressed with--

LK: A separate women's group?

PB: Yes.

LK: Were there other women in the engineering profession that you encountered through your career that had similar perspectives about a separate women's engineering society?

PB: Yes. I can't think of any names of them offhand, but there were a number of that type, who felt that really this was nonsense, it wasn't of any real value. And I'd countered, "Well, maybe it isn't of value to you, but is of value to a lot of other young women." And I think it's important to be able to provide this value, which is why I've continued to work to be sure the society stays sound. You can't be everything to everybody, but the fact that some women didn't need us didn't mean that there weren't an awful lot more women who did. I've run out of memory.

My chip is fading. (Laughs)

LK: Do you have any final thoughts about SWE or your career?

PB: Well, as far as final thoughts, I think that to me, one of our crowning achievements was the Petticoats and Slide Rules exhibit.

LK: (Laughs) Well, that's nice.

PB: I thought that was great, to be able to look to see what we lived through. You know, especially with my memory. I can look at the pictures and say, "Oh, yeah, I remember that. Oh, yeah, I remember that." It's kind of like when we talked about Pittsburgh and some of the things that -- one of the things we didn't mention was that sometimes some of the women in SWE decided that certain things should be done a certain way without checking with National. One of them was Emma Barth's decision that we give some sort of an award to the German woman engineer who was Miss America or--

LK: Oh, Marlene Schmidt?

PB: Yes. And I got called to Pittsburgh to make this presentation to Marlene Schmidt. And I never will forget, they were taking pictures of the two of us, me giving her -- and I had to be moved because Marlene Schmidt said, "That's not my good side."

(Laughter)

LK: That's funny.

PB: We, of course, never heard from Marlene Schmidt again, after she was given an honorary membership in SWE, and this type of thing.

LK: Why do you think Emma Barth thought that was important?

I mean, Marlene Schmidt had an engineering background from Germany, and then she was crowned Ms. Universe. Why do you think she thought that was important?

PB: I have no idea. I have no idea. And I know that I had a terrible time with the board members. "Why did you agree to that?" I said, "I didn't agree to it. It was already done! I had nothing -- I couldn't undo it. There was no gracious way to get out of it."

LK: In other engineering organizations do you think that there's a kind of a dichotomy between what happens at the national level and what happens at the local level?

PB: Yes. But I think it's worse in SWE, because we're a group of women, very independent minded women, and we do decide certain things should be done certain ways. And why should we ask National? But I know simple things have happened, like the use of the logo, and when somebody showed up with the logo as earrings. (Laughter)

PB: I kind of tweaked the new -- the webmaster at Bostrom who's -- looking at the new website design. I said, "I think it's very nice, I just wish you could use the official colors."

LK: Yeah.

PB: (Laughs) But I think that probably the only people who know what the official colors are are Claire Shortall and me.

LK: Well, when I saw that new front page, I wondered how they got away with that. (Laughs)

PB: Well, they didn't get away with it in terms of not being told. (Laughs) But I think they're doing a good job setting up something, but I would prefer -- what they're asking, you know, about the MAL page, and taking over that, because unfortunately what he thinks is the MAL page is the part of the MAL pages that National took to use for the "About SWE." They linked to the About -- I think they ought to redesign that, that's fine.

LK: Yeah.

PB: Make it the About SWE so it looks like the rest of it. But that's not the MAL page, as such.

LK: Yeah, it's interesting. I mean, how do you feel about continuity within SWE? I mean, it went from an all-volunteer to Winnie Gifford at United Engineering Center, to maybe a larger staff at Wall Street, and now it's run by an association management firm. And as someone who's been involved this long, how do you -- do you feel that there is continuity, or is that the Over-the Hill Suite?

PB: Well, I think it's primarily the Over-the-Hill Suite. Continuity--

LK: The Archives Committee, maybe.

PB: And even that, there's sort of a difference in terms of

who remembers it this way and who remembers it that way.

(Laughter)

PB: I approve of the idea of having the work done outside -- you know, non-volunteer. I like the idea of it being, in effect, outsourced to the one group. But I don't like the idea of having it spread too thin. And I think that I'm hoping with the new executive director that things will get to be a little more consistent.

But one of the problems with having gone from a volunteer to a office, and then having the office moved, is that the tendency is to forget that some people do know the answers. Instead of the headquarters having to go out and reinvent the wheel again, they should do a little asking before they jump into certain changes in things. And I think that Betty is attempting to correct that tendency. But Gina did not.

LK: Do you think that in order to advance SWE's mission you really have to be a SWE member?

PB: No, but I think it helps. I would say what you need is a commitment to SWE as such, and not to yourself.

LK: Do you think that that's true for women who join SWE today, they need to know that, or--

PB: Well, I was more concerned with the executive director should be more interested--

LK: Okay. It triggered in my mind that sometimes a lot of PR is created for any professional organization talking about how you should join to build your resume and join to receive the leadership skills that you need to succeed. Do you think that SWE is that type of organization?

PB: Well, I think that SWE can be that type of organization for some people, if that's what you need. But I don't think that's its primary purpose.

LK: What is its primary purpose?

PB: Encourage other women to come into engineering. But, yes, it can be done. And if along the way you learn to do certain things and to meet a lot of people and to increase your skills, fine. But that's not the primary reason for SWE, as far as I'm concerned.

LK: What do you think about other women science or technical organizations that have been formed in the last couple of decades?

PB: Well, I haven't paid much attention to them. I've been too busy with SWE. One is about all I can handle at a time. That, and of course, I was a member of the Chemical Society, because that was the organization of my particular specialty. But then I was more active in the American Society for Information Science. And you need something for your particular discipline. But SWE is, of course, completely multi-disciplinary, if you will.

LK: And focuses more on social issues?

PB: Well, let's be careful about what you mean by social issues. (Laughs)

LK: That's right, non-profit status.

(Laughter)

PB: It focuses on increasing the numbers of women in engineering, its primary, number one purpose, as far as I'm concerned.

LK: Well, what about organizations like the Association of Women in Science, or -- I'm trying to think of -- I think there's a Women's Chemical Society -- I mean, these other gender-specific groups within science and technology?

PB: I've never really investigated any of them. It seems to be that more of them were academic oriented than industry oriented. But that was a personal impression.

LK: Do you remember being aware that those new groups started forming? Well, some of them were around when SWE was around, but--

PB: Right.

LK: -- like AWIS, specifically, actually, was formed in 1971. Do you remember being aware of that?

PB: Aware, but not interested. I'm really fairly narrowly focused.

LK: SWE.

PB: SWE.

(Laughter)

LK: Do you have any advice for young women today, or young men?

PB: Far be it from me to give advice to anyone.

(Laughter)

PB: I didn't take any when I was growing up, so why should I give any now? (Laughs) You know, do your own thing! If you're smart enough to get away with it, fine, if you're not, forget it!

(Laughter)

LK: Do you think that the public image of what an engineer is or who an engineer is has changed since you became an engineer?

PB: I never did really understand what the public image of an engineer was, except they thought they drove trains. And now since there are not so many trains to drive, it's got to be different, but I don't know whether it's better.

(Laughter)

LK: Okay, that's fair. What about a woman engineer?

PB: Oh, again, I don't know that they knew too much about -- had any impression of women engineers. Except, oh, well, I should tell you about the story of my taking the MAL Newsletter to the post office for the mailing of the -- the ones that go to the

foreign countries.

LK: Oh, okay. So you had to hand deliver.

PB: They'd have to get stamps put on them because the cost is a lot more. So I'm up at this section of the post office. And the woman postal clerk looks at the address and says, "Oh, are you a woman engineer?" And I said, "Yes." And she said, "You don't look like a woman engineer." And I didn't exactly know what to say. And then she's doing a few more pieces of mail and she says, "I knew a woman engineer once, but she looked like a woman engineer." I didn't touch that line with--

LK: (Laughter)

PB: And then Lois walked up, and I said, "She's a woman engineer." "She doesn't look like a woman engineer, either." I still don't know what a woman engineer is supposed to look like in the eyes of the public. There was one member of the Chicago Section in the early years who dressed like her father. And that might have been the stereotype image of a woman engineer at the time. But I only knew one like that. And what other people thought never did really make much difference to me.

LK: Well, I won't take up anymore of your time.

PB: You ought to have enough tape that you can cut out about three-quarters of it.

(Laughter)

LK: Well, thank you very much.

PB: Thank you, Lauren for hearing all this stuff -- having
to listen to all of this stuff.

(Laughter)

LK: Okay.

END OF INTERVIEW