

Interview Subject: Diane DiFrancesco
Interviewer: Laura Ettinger
Date of interview: July 28, 2008

So, today is the July 28, 2008. I'm Laura Ettinger, and I'm conducting a telephone interview with Diane DiFrancesco, who graduated from Clarkson in 1977 with a degree in Chemical Engineering. DD, what I'm planning to do is, basically, go chronologically, but I'll assume we'll go all over the place from that. So why don't we start with growing up in North Tonawanda, New York. I've been to North Tonawanda, but tell me what was growing up in North Tonawanda like?

It's a great place to be from. NT [North Tonawanda] was my father's home. This is where my grandparents emigrated from Italy to. So, I have a lot of family that still exists there. It was a northern suburb of Buffalo, southern suburb of Niagara Falls. The house I grew up in, that I remember, my father built. It's a beautiful 2300 square foot split level, on a nice piece of property, right in the middle of town. It used to be my grandfather's cornfield. I am the oldest of seven; that's important. (laughter) There's nine years between myself and my youngest sibling. We all went through public school system which was fantastic. And, that got me to the summer of '73 before I decided to go to Clarkson.

And tell me a little bit about your family. I know from the pre-interview questionnaire that you filled out that your father was an engineer, and I didn't know that you had six siblings; tell me a little bit about your family life.

My father's name is Angelo DiFrancesco [he died in October 2014]; son of Tony and Lucy DiFrancesco. My father was the project manager for the Agena Rocket Engine for Bell Aerospace in Niagara Falls, New York. Which meant he was in charge of interfacing with NASA and the Air Force to use that specific rocket engine. My Dad has a degree from the University of Buffalo – mechanical engineering. He is very old school, old time (laughter), just a throwback, not a throwback, he's 75 years old. He was born in '32 in NT. My mother was a stay-at-home Mom most of my life. She went to work at the high school's library after I was at Clarkson. She never worked when we were little; at home all the time. My mother's a saint. (laughter)

(laughter)

For many reasons. Not the least is which she's been married to my father for 54 years. She also was pregnant ten times. I mean, I just cannot fathom that. So, if I refer to Saint Marie, that's who I'm talking about.

(laughter)

My mother taught me the finer things in life. My mother was the daughter of Lucy and Joseph Sciandra. She was born and raised in Buffalo. Public school educated. And she was raised to be married and have kids which she succeeded in. But she taught me music; she taught me an appreciation for music. She taught me how to cook. She taught me how to decorate. I mean, my

mother, I don't know how the heck she managed the house. But she did. I have six siblings. Do you want me to go in order? (laughter)

(laughter) You can if you would like. I'm interested.

Okay. Number two is Paula Lynn. Nursing degree from Niagara University. Married to John Lynn, mechanical engineer from Worcester Poly. They live in Bedford, Texas. They have two daughters; Bethany Thomas who is currently a student at North Texas State. Jessica Lynn who is a rising senior at TCU, Texas Christian. Jessica's living with us this summer. She's got a theater internship three blocks from here. But let me continue.

Jeannie, number three daughter is a math teacher. Bachelors and masters in math education from Buff[alo] State. She's married to Bobby Wiech, an electrician. They have three kids; Geryllyn who's a nurse; expecting her second child this fall. Matthew who lives up in the Adirondacks, not far from Potsdam. They live in Saranac Lake. Partnered with a little son. Teresa who has a masters of social work from Buff State. She's a social worker for Roswell Hospital.

Number four is my sister Ann; married to Don Barber. Annie is a portfolio manager for Charles Schwab. She and Don live in Phoenix, Arizona. Don is a mechanical engineer for the Naval Academy, class of '79. They have a son and a daughter. Don Jr. is an Academy grad class of '04; electrical engineer. Currently studying for his masters; he's a lieutenant in the Navy; due to be married next spring. And, their daughter Elizabeth who got married last fall. She is a master's accountant with a tax firm in Phoenix.

Very accomplished family. And I realize you're only on number four.

I'm only half way through.

(laughter)

I'm not done yet. My brother, my one and only brother, Daniel is a mechanical engineer. He got his degree from Laterno College in Texas; married Kathy Lovick who has math and comp-sci degree from Laterno. They have the youngest grandkids. They have a daughter Eva, son John who are 12; who are being homeschooled in North Tonawanda. They live a block from where we grew up. Danny is a project manager at Lockheed Martin. He holds two patents and a reapplication of a gyroscopic sensing system from a Navy sub nose. My brother's really smart but all my siblings are really smart. So Danny works where my father used to work; Bell Aerospace was bought by Textron and then bought by Lockheed Martin. So, he works in the same building my Dad worked at when we were kids. And, they live in NT.

Mary, my number six sister, married Pat Grimaldi who's a Potsdam State grad.

Ah!

Keep it in the family. Pat has a degree in physics. Pat is a city assessor for Geneva, New York. They have three children: Sara, Tony, and Jacob. Sara is an '04 grad from Clarkson, mechanical

engineer, currently working at Boeing due to get her JD degree next spring. Tony, her brother, graduated Clarkson mechanical and aeronautical engineering; also works for Boeing. Got married last summer to his high school honey. Sara and Tony both work for Boeing in Philadelphia. Jake is 12. Jake will be Clarkson class of 2019 whether he likes it or not because,

(laughter)

because he tells me he's going to Arizona. And I said, "No. You're not. You can get your undergrad at Clarkson and then you can do whatever the hell you want."

If Aunt DD has anything to do with it.

There you go. I'm not done.

Right.

Yeah. Because I assumed John and Eva will go to Clarkson too. But, that's a big leap. So, they live in Geneva, New York.

My baby sister, Teresa, has a business degree and is married to Tony Martin who has a business degree with a masters in math education. They live in St. Louis. Tony has a patent in a rack and pinion steering assembly. They have two daughters, Nicole and Christine. Nicole is a sophomore at Columbia High School in Illinois. Christine is in seventh grade at a private Christian college. Did you get all that?

I got all that. What an accomplished family. (laughter)

Oh, it is. Seven points on a star and I'm not joking. I mean, my sisters all married engineers or somebody with technical background. My brother married a math and comp-sci major. I mean, the grandkids are brilliant because they have very, very good genes. But we're the first to cross the country from North Tonawanda, Niagara Falls, to Buff[alo], to Geneva, and New York. I live in Chicago, Teresa lives in St. Louis, Paula lives in Dallas, and Annie lives in Phoenix. So, we don't get together too much anymore because the grandkids range in age from 26-12.

Right.

Right. And the older ones are reproducing more. So. That's my family. (laughter) Enough of that.

That was interesting, and I have so many different places I could go with that.

Wherever you want.

I'm wondering, you're talking about all these engineers and technical people in the family. When did you first get interested in engineering? Or, do you remember when you first got interested in it?

Well, I always wanted to build things. I mean, when my sisters were playing with dolls, I was building little things in Dad's shop. I used to build a lot of boats; little boats that would float on the river, and the pool, and stuff like that. I built model rockets when I was in grade school and junior high because. There was an awful lot of stuff in the house about rockets.

Uh huh.

Uh huh. Yeah. I remember when I was in junior high I helped a friend of the family, senior in high school, do a project on rocketry. I mean, this was the '60s and '70s. So, man to the moon, all this kind of stuff.

Right.

And it was kind of cool.

And I know obviously your father was an engineer so you,

I was exposed to it.

right. You must have known something about the profession. But do you remember, was there a certain point where you decided, "Well, this is what I'm going to pursue"? At some point in high school? Or earlier?

It was earlier. 1963 – *Life* Magazine had a picture of Dr. DeBakey's artificial heart on the cover. We got two magazines in my parents' home: *Life* and *Machine Design*.

(laughter)

Well, I knew I wasn't going to grow up and be a photographer because they don't make enough money. But I saw this artificial heart, and it fascinated me. And I said to myself, "Well, I'm smart enough to be an engineer. But I want to marry medicine with technology. And I want to be," now I'm 12 years old now when I saw this. "I'm going to be a biomedical engineer." (laughter) And my father patted me on the head and said, "Sure." You know, we didn't discuss it for another five years. So, I pursued in middle school and high school sciences. I took four years of science in high school. I took four years of math. I took advanced, honors history and honors English. I graduated with a Regents Honor Diploma which outside of New York doesn't mean anything, but it got me into seven engineering schools. So, in 1972, I applied to all these places including Clarkson. Well, go back, when I was a junior, so I was going to go to an engineering school. I mean, they just kept patting me on the head and saying, "Yeah. Sure." Because I was only about 4 and a half feet tall at the time.

Uh huh. (laughter)

I'm only 5'1" now. So, that's another part of the gene; nobody's really, really tall except the grandkids. But they got it from their in-laws.

Uh huh.

So I went to my counselor in high school. I'm an honors student and getting good grades. I graduated 31st in my class of 736. And I said to this counselor, "I want the list of the top 100 engineering schools," and he said, "What for?" And I said, "I'm going to go to one of them." And he laughed in my face. And I was a short, little junior, and I was ready to slug them. I was just irately mad. But I didn't. So I said, "Just give me the list please, sir." And I proceeded to go through the entire wall of college catalogues because nothing was computerized back then.

Right.

And picked eight schools to apply to. Clarkson, RPI, University of Buffalo, University of Ohio, Georgia Tech, two others and the Naval Academy.

How did you pick these eight?

I knew I wanted to do something with biomedical engineering. Oh, Carnegie-Mellon because they had a major in biomedical engineering. And one more. And I'm blanking on the last one. But they had solid engineering programs, good bio programs, oh! SUNY Albany. Because SUNY Albany and RPI had a joint six year MD biomedical engineering degree. I was accepted to all of these except the Naval Academy because they didn't accept women applications in 1973. So, I made a matrix chart; schools I was accepted to. (laughter)

I love it.

Yeah, well. But that's how I think. That's how I was raised; I had grid paper and mechanical pencils. I never saw a yellow pencil or a yellow lined sheet of paper until I got to grammar school.

(laughter)

Well, my father never spoke English until he went to grammar school. So, you do what you're from. I'm taking notes on a piece of grid paper as we speak because that's what I use.

Uh huh.

So I made a matrix; colleges of acceptance on one side, and then consideration factors on the bottom. And I looked at things like location, cost, did the major match what I wanted to do, graduation success, placement success. I looked at all this stuff that was published in 1972, and prioritized the seven schools. Cornell was on the top. Then my father says, "Well, you can't." And I said, "What do you mean, I can't?" He said, "You should go to Erie Tech. You know, Erie Community College and go to the University of Buffalo like I did. You'll save more money. It's the same degree." And I said, "No. It's not the same degree. And I don't want to go there." So, we went to Niagara Community College which is the local community college where I lived and sat across from the desk for the dean and I showed him my resume and I showed him all this

stuff and he said, "What do you want to do?" And I said, "I want to be a biomedical engineer. I want to make artificial hearts like Dr. DeBakey, and artificial limbs, and make the world a better place by marrying all this technology with the needs of the medical world." And he said, "That's fascinating. But students like you don't go to schools like this." I said, "Oh, really. Where do they go?" And he said, "RPI, Clarkson, Cornell, Georgia Tech." I said, "Really? Tell the guy sitting next to me." My father was sitting next to me. And I was taught to respect my elders, but my father and I have disagreed on many things most of my life. Women and technology's one of them. So, we went to Cornell. So, my father says, "Well, I'm not traipsing all over the country." I said, "Fine. Let's go to Cornell." We went there, beautiful tour, gorgeous campus, beautiful curriculum. Sat down with the financial aid guy and he said, "Your family has to contribute 5,000 dollars a year towards your education." I looked at him and I said, "That ain't gonna happen sir." I said, "I'm the oldest of seven. There will be five of us in college by the time I'm--, there's five of us in high school now." I said, "My father's an engineer, but he's not a Roosevelt. It ain't gonna happen." I said, "You're going to have to help me or I'm not going here." He says, "Well, your family has to." I said, "Thank you very much. I'm not going here." And I went to Clarkson sight unseen. Never been on the campus. I saw pictures in catalogues and stuff like that. Didn't know anybody else. I was the only one out of my graduating class that went there. It was the right choice. In hindsight, it was absolutely the right choice because it was small, private, specialized. I had full PhD profs for every single class I took. I never saw a TA. Never. Not in the three and a half years I was there. Maybe there were TAs in the laboratory that I didn't see. But I never was more than two rows away from a full PhD prof. And I got taught by Dr. Broughton, Dr. Misiaszek, Dr. Matijevic. I mean, in hindsight it was absolutely the very best place I could have gone. I never would have gotten that at Cornell or RPI. Definitely not at state school. You don't take courses in your major 'til you're a junior. You never see PhD profs. I knew that back then. And that's one of the tools I use to recruit people now.

You did know that back then?

Oh, yeah. Because part of the data that was in the catalogue, and I don't have a 1972 Clarkson Catalogue but I'm sure it exists.

It does.

It talked about the PhD to student ratio, and it talked about never being in a class bigger than 30 where you could touch the professor. And, even in the freshman classes that are taught in the lecture halls; we had these big lectures but then we had 30 person recitation classes for chemistry and physics.

And you said you didn't visit, yet you chose Clarkson. Obviously, in part because of this kind of ratio. Do you remember other reasons why you ended up picking Clarkson given that you got into so many schools?

Money. They offered me the most money - the most scholarships. And, it was number two on my list and Cornell flunked. They weren't going to help me. They were so prestigious that they weren't going to help Diane DiFrancesco in 1972. I mean, 5,000 dollars a year to my family; in

today's money that's like, I don't know, 40-50,000 bucks a year. Right. Unattainable. I don't care how much my father made.

Yes.

And I made the decision. Dad didn't say a word.

Yeah.

So, I came up, yeah. (laughter)

So the choice was obvious at that point.

Well, that's what I thought. I'm a very analytical kind of person. I mean, I was raised that way, obviously, because of the household I was raised in. But I am like that. I mean it's not just my genes; this is who and what I am. And I never apologize for it because 95% of the time, 98% of the time – it works. And, the 2% of the time it doesn't work: "Oh well. I made a mistake and I'm not going to make that mistake again." But, if I use my brain for decision making in my life, I'm plus Six Sigma as far as success rate goes.

So, I came to Clarkson not knowing a soul two days before my 18th birthday. Oh! When I decided to go to Clarkson, my father said, "Oh, you can't do that because you're going to break your mother's heart. You move away, you're going to break your mother's heart." And I said, "You know, Dad, my mother's heart's stronger than that." And, I said, "Besides, there are six kids left. She's not even going to miss me."

(laughter) Oh.

Yeah. He tried everything. Okay. I give him credit for that. My father was a pretty smart guy. But this one wasn't going to work. So I came to Clarkson August 22nd, 23rd, 1973. And my Mom and my Dad in the station wagon with all my stuff. And it's a six hour drive from Buffalo, so it's a long drive. Don't remember much about the trip up. Remember coming, turning into campus on the hill and the big white house was where I was going to live. I mean, there were all these dorms and then there was this big white house. I got assigned to Holcroft. Okay, fine. It's a big white house. My roommates were Elizabeth Fessenden and Melissa Poulin. Now Liz and I were both the oldest of seven. (laughter) Liz and I both had purple luggage.

(laughter)

In another life, I'm sure we were bonded somehow. But I don't completely believe that. But it was fun. And we became instant friends. And Melissa was a math major, so the next year she didn't live with us. You know how that goes. And I have pictures where I was much thinner and my parents were much younger; Dad had more hair. And we unloaded the car, we went out to lunch – downtown. Wherever the hell downtown was back then. Somewhere on Main Street, I don't remember. I'd never been to this place in my life.

Right. (laughter)

Well, that did not impress me. The fact that one of my roommates was another oldest of seven and had purple luggage – that impressed me.

Uh huh. (laughter)

And I'm sure it wasn't done by a computer. I'm sure somebody in the housing department sat there and said, "Oh, DiFrancesco, Fessenden, sure, uh huh. Third floor of Holcroft. Okay. Fine." So, we went out to lunch and my father, we ordered lunch, and I'd never been out to lunch with my parents by myself before. Ever. And my father said, "Well, do you want a beer?" And I thought my mother was going to die.

(laughter)

(laughter) I thought she was going to crawl under the table. I said, "Sure, Dad. I'll have a Molson." "Okay. I turn 18 in two days, who's going to arrest me?"

Uh huh.

Yeah. It was blast. And then, they left and apparently, the story goes, and you'd have to ask my mother to give more detail, they didn't speak until Syracuse.

Wow.

I mean, that's 150 miles. That's three hours in the car.

And why?

Beats me.

Uh huh.

They let their oldest go. I mean, they were going home. They were going back home to six kids. I don't know what in the world anybody would shed a tear about. But now that I'm 52, I do understand that.

Yeah.

But my parents are 22 years older than I am. So they were in their forties. I guess it was a traumatic experience. I loved it.

(Inaudible). You loved going there?

Oh, abso-freakin'-lutely. Out of a house of nine people to a room with only three. Oh, it was wonderful.

(laughter)

Yeah. Liz and I talked about this at length because she had six other siblings. But they lived on a farm. I mean, I lived in suburbia.

You wrote on your pre-interview questionnaire that Holcroft was wonderful.

Absolutely.

Tell me, besides the opportunity to live with only two other people as opposed to eight other people, what else was wonderful about it?

The house is fantastic. I'm sure you've been in it.

I've been in, yeah.

But it is; I mean, can you imagine living there? There were 50 women in my class and 25 of us lived in Holcroft and 25 lived in Moore House. Now, Moore House was an upper class dorm, so supposedly those girls got a better break. Nuh uh. There were seven working fireplaces in the house [Holcroft]. There was a kitchen downstairs where we could cook our own food if we wanted to. There were 14 foot ceilings. The doors, the front and back doors are four inches thick. I mean, I'm not an architecture person; I could care less. But, now. (laughter) Now that I understand what that is, and the place that it's perched on the top of the hill. I mean, if that home existed in Skokie, Illinois, it would be a ten million dollar home.

Right.

Yeah. It was like moving to a palace as far as I was concerned. Oh, I had to share the bathroom. Big damn deal. I shared the bathroom with my five sisters my entire life. I don't remember having private bath quarters.

Right.

It was just a great, and the 25 of us really bonded. I can't list all the girls who lived there, but half the class.

Right.

And I remember spring of freshman year. I made dinner for everybody. People think that's absolutely frigging ridiculous, but that's what I did. I made the sauce downstairs in the kitchen in Holcroft, and I worked for SAGA [campus dining], so I said, "Hey, it's closed on Sunday night. Let me use the space." And I cooked 20 pounds of pasta and served my 25 Holcroft friends.

That's wonderful.

No. No. We always had 25 to 40 people for Christmas and Easter dinner. I just did what my mother taught me.

You had done that. Yeah.

The sauce was great. (Inaudible). The whole house smelled like my sauce. (laughter)

You're making me hungry right now. (laughter)

Exactly. All my Holcroft sisters said, "What the hell are you cooking down there?" And I said, dinner – Sunday. Be there. And it was a blast, and I said, "You can't come in your jeans. You've got to dress like you're going to church."

Wow.

Sunday dinner. And I remember doing that. And I don't remember the date or the place, but there are some things about living in Holcroft freshman year. It's much, much different than a group dorm experience. It was like being in a sorority.

Because of the intensity? Because of the bonding experience.

Yes. Yes. And there were only 50 of us in the class.

Yeah.

Out of the 650, and I was a ChemE, Beth was a DoubleE, and Melissa was a math major. The two girls that we ended up rooming with the rest of the time I was there were Kate Thompson who was a civil engineer and Carolyn Wolfe who was a math major. And we were all in this together. There were no sororities at Clarkson. We were a sorority by default. You know?

And, when you say, "We were in this together," tell me more about what you mean by that.

Well, it's the early '70s. It was before Title IX; it was before Roe vs. Wade. The other three girls I roomed with the rest of my career, Kate, Carolyn, and Beth, were all valedictorians from their little high schools. They went to smaller schools than I did. I'm the only one that came from a suburban school. And now it's like being in a sea of valedictorians. We're all smart. We wouldn't have gotten in if we weren't smart. We all wanted a technical career or we wouldn't have come to Clarkson in the middle of nowhere. If we were coming to college for a fun time, going to Clarkson, no. That wasn't in any of the literature. It was 24:1. There were 24 guys for every girl there. It was kind of cool. We had our pick. But the 24 that were allotted to me – 23 of them were jerks and the other one is Dave Davis and he became a pastor.

Interesting. (laughter)

Yeah, well. What can I tell you.

I want to go back to Holcroft or your first year in a moment,

Sure.

but I want to turn North Tonawanda Senior High for a moment.

Okay.

Because you were telling me a little bit about that and you graduated very high in your class and Regents Honors Degree, and math and science classes. Tell me a little bit about the educational emphasis there when you went to high school. Was what you did fairly typical?

No.

Okay.

No. No. Do you want me to describe it in terms of those 736 people I graduated with?

Yeah.

It was about a 50/50 mix. All white. You were either Italian, Polish, or German. Because that's what North Tonawanda was.

Uh huh.

I was in the power clique.

(laughter)

(laughter) We were called Anastasi's Animals [the head of the clique was Wende Anastasi]; that was our nickname. But, between the 12 of us we ran the student council, we ran the paper, we ran the yearbook, varsity cheerleading, we were sports captains, we were all in honors, we were all going off to college. All of us; the twelve of us that hung together in high school all went off to college. And not all of us did what we said we were going to do. But, the typical North Tonawanda—, when I look back in the '70s, it was pretty subdivided into three groups. There were the kids that were there to learn; the honors kids, and the kids scored High Regents grades. They were there to learn because they wanted to make something of themselves. There were the kids that did whatever was minimally required to get by. And there's always that group in any demographic. And there was a bunch of kids whose sole purpose was to get drunk every weekend.

Uh huh.

Drinking age was 18 in New York at the time.

Right.

But, obviously, there was a lot of alcohol in high school; there still is. And there was very little crossover between these three groups. It wasn't demographically divided. It wasn't ethnically divided. It wasn't economically divided. It was what you chose to do. My father graduated from NT High in 1950. It was a different building, but this was my father's alma mater. So, there was some legacy element in this. There were opportunities to do lots and lots of things in high school. I was highly involved in sports. I was highly involved in church activities. I was a musician for a folk group in my church. We went to Ascension Church, Roman Catholic Church.

What did you play?

At the time, guitar and clarinet. I know how to play piano. And I can handle most woodwinds. But I was the folk group leader for Ascension all through high school.

And which sports did you play in high school?

Basketball, volleyball.

The same as at Clarkson.

Yeah. Well, I was shorter then; I was 4'10" when I graduated from high school. And, hello.

And played basketball – I love it.

I played varsity basketball at Clarkson too.

I know.

Get out of my way. I could out dribble anybody.

You must have been very tough.

I'm a point guard. But I'm tough for a lot of reasons. But, yes. And sports was a diversion from my intense academic pursuits. I would never get home after school; I always had something to do after school. Yearbook or sports, or hanging with my friends. But we had to be home at 5:30 every night to have dinner. And I would spend from post dinner 'til midnight doing homework. All of my siblings were asleep, and I was at the desk doing homework until midnight. I learned to sleep very little starting in high school. That's continued through my life. I don't sleep more than five hours at a stretch because I'd go to sleep at midnight and I'd get up between five and six. That's what I do. That's what my body's acclimated to. Did I answer your question?

Yes, you did. I realized when you were talking earlier, I wanted to come back to North Tonawanda Senior High. And now I want to skip ahead because you were also talking about very interesting things at Clarkson. You were talking about the 24:1 ratio;

Ratio. (laughter)

male to females and what did you call it? Twenty-three jerks and Dave who (inaudible).

And Dave who was a doll.

Still a friend?

Yes.

I guess I'm not only talking about the first year, but however you want to divide it, the social life at Clarkson?

In the '70s, very different than what it is now. We were round pegs in square holes. I mean, it was not normal to be a woman engineer. It wasn't then; it isn't now. But it was even less common. There were 12 chemical engineering women out of 70 chemical engineering graduates from my class. So the 70 of us took classes together. And I knew [the other] 11 [women] because we all went through the same stuff.

Right.

Exactly the same classes. I mean, freshman and sophomore year we all took the same classes basically. You sub-divided into your majors as sophomores. So I took one different course than Beth did my sophomore year. She took a double E course; I took a chemical engineering processing course. But we were still in chemistry, physics, calculus.

You're saying with all the other engineers, not just chemical engineers?

Right. Yeah. We really didn't differentiate into the majors; well, we started as sophomores, but then by junior year, I was taking Thermal Dynamics and Reactor Analysis, and Liz was taking Circuits, and Power Distribution, and (inaudible); I had no interest in it.

Right.

To each his own. I wanted to be a biomedical engineer and ChemE was the closest, and there was a minor in biomedical engineering. So, that's why I picked ChemE over mechanical at the time. Because I think there's a biomed major now that's more mechanical than it is chemical at Clarkson. I don't know. Anyway, the social world was full of parties, drinking, fraternity stuff. There wasn't a sorority, so there wasn't any counterpart to that. As women at Clarkson, we were invited to all of them. There was a freshman mixer. Okay, we came to campus, and the parents went away, (laughter) and then we had a mixer with the faculty pretty much. And, in the back of my senior yearbook there's a picture of me drinking a glass of beer with [Dean] A. George Davis.

Uh huh.

Now, this man was old enough to be my grandfather. And I was legal because it was past my birthday, and we went to Seven Springs, the ski lodge that they had just bought. And that was some claim to fame. I don't ski, so I could care less. But it was a beautiful place and they took us all by bus to this mixer. And SAGA did a barbeque, but they served beer because it was legal. So that's where I was introduced to a lot of faculty. A. George was the head of campus life at the time; my freshman year. So, freshman year, I did a lot of smoking, joking, didn't smoke that much, I have sensitive sinuses. But there was a lot of drinking, a lot of pot, a lot of carousing, and that was interesting. And by second semester, I had a new goal. I wanted to make dean's list, so I stopped doing that every weekend, all the time during the week. It was fun, but I'd rather get A's than B's.

Uh huh. [What about your roommates and suitemates?]

We moved from Holcroft to Wilson our sophomore year. So, now we were sophomore women engineers on this upper class floor. And the guys were still in the quad, in The Pit. So we had better living accommodations than they did.

And, so this was a single sex floor in Wilson?

No. It was a single sex suite with a Jack 'n Jill bath in between.

Okay.

No. It was a co-ed floor.

Co-ed floor, okay.

Holcroft and Moore House freshman year were women only. And we had to be in by midnight. We had a curfew.

You did have curfews? I knew that the early years had curfews.

We had a curfew. It was midnight during the week and I think one o'clock on the weekends. But we could get in and out of that place without the RA knowing. I mean, c'mon, we're intelligent women.

Uh huh. And then in your third and fourth years you lived in the Woodstock Apartments?

Yeah. My third and fourth year we had an apartment in Woodstock; Beth, Carol, Kate and I.

Okay.

Yeah. That was fabulous. Absolutely fabulous because it was brand new. And we could cook our own food which after working for SAGA for a couple of years, it was a delight. Yeah, I worked for SAGA all the way through, basically taking meal tickets or something.

I want to get that in a moment. So you were talking about in your freshman year, making decisions second semester to do less partying, so that you could get the A's not the B's.

I wanted to get on the dean's list.

Yeah. And how would you describe your social life after your first year at Clarkson?

It was different. I mean, sophomore year at Wilson we were with upper class men. I mean, we were the only women on the floor. And it was different because they were a little older. They were a little more mature; some of them were seniors looking for jobs, and it was less partying, less rowdy. I mean, it was a huge step up from the quad and The Pit. I mean, the guys that lived in the quad and The Pit just—, I mean, they called it The Pit for a reason, not just because the hockey guys lived there. It was gross. I never liked going down there because it was gross. They were just fricking slobs. I wasn't raised that way, and I'm sure they weren't either.

Uh huh.

But you do what you're used to doing. So the suite junior year at Wilson, the four of us were pretty intense. We were all dean's list gals by then. And we wanted to get out in four years. We wanted to have job opportunities. So during the week we were pretty study-centric. It would not be unusual for the four of us to be in our rooms after dinner studying until midnight. We used to take an 11 o'clock break. I had a TV in the room; I had an old TV that I absconded from my family, and we used to watch Star Trek.

(laughter)

Eleven o'clock study break. We'd make a bowl of popcorn and we'd watch Star Trek. (laughter) And then, I'd go back to studying. I remember studying until, always past midnight; one, two, three in the morning. And we had eight o'clock classes.

Luckily you didn't need much sleep.

I did well. I learned. And I didn't sleep very much. And I didn't sleep in on the weekends. I was always up before 9/10 o'clock on the weekends. I never slept in. Sunday I'd go to church because I was taught to go to church on Sundays. So I continued that. Junior/senior year at Woodstock we were a little more removed and we were in all different classes. By the time we were juniors and seniors, I didn't have any classes with my suitemates. So, we went in different directions.

And what was socializing like at that point? I mean, it sounds like by that point you must have been very intensely into your academics?

I didn't sleep very much at all my junior and senior year. But I had a good—, I wanted to graduate early. So, I overloaded. If you look at my record, my transcript, you'll see what I did. And it wasn't fun.

And why did you decide you wanted to graduate in three and a half years?

Because I was paying for it myself. My Dad didn't agree with what I was doing. And I said, "Fine. I'm doing it myself." So I mortgaged my life. I came out of school owing a whole lot of money. And I figured if I could overload I could save a semester, and I did. Because I finished taking classes at Clarkson December of '76. So, stupidly in my junior fall semester I took 21 hours. That was seven classes. That was ridiculous. In hindsight that was a huge mistake. But, (laughter) I got everything from an A to an F. Never flunked a course in my life. But, seven classes, well, Organic Chemistry, Fluid Dynamics, Thermal Dynamics, Fluid Mechanics, Physics V, Calc V, a surveying course and a music course. I aced surveying and music, but I flunked Organic Chemistry which was a pre-req to my senior level courses. And I also went to Poland that semester for SWE [Society of Women Engineers], on [Dean] Ed Misiaszek's dime I may add. On Clarkson's dime. I went to Poland. And I missed the second week of class. Well, I never, to this day, fully understand Fluid Mechanics. I just never caught up. I mean, I obviously passed the class but not with flying colors.

And again, that was the semester you were taking seven classes?

Yeah.

Was the semester you went to Poland.

When I went to Poland, and I hosted a SWE Conference. I was the vice-president of the SWE chapter and we hosted a regional conference that year at Clarkson in October. And I was engaged to somebody who was overseas. This was the semester from hell.

Okay. You just mentioned about ten different things that I'd like to hear more about.

Yeah. I know.

(laughter)

Just start at the top of the list.

I don't know which to pick.

Yeah. Where do you want me to start? Overloading was the logical thing to do to get out of school quicker. I mean, I saved three thousand bucks by doing that.

Yeah.

That's a lot of money. Well, it was at that time.

Yes.

It still is. I joined SWE as a sophomore because it was being formed my freshman year and I was an officer my junior year. I was the vice-president. And that was my sorority. That was another fun thing to do. It wasn't school work. It wasn't book work.

If you remember, how did you decide to join SWE?

Oh, it was the right thing to do; just look at the mission statement. Yeah.

So, you knew immediately that it was what you wanted?

Oh, yeah. Absolutely. SWE wanted to support women in engineering. SWE was a young organization; very young. And it had been formed my freshman year. Well, freshman year I had other things distracting me. And I didn't want to join extracurricular stuff. There were no sports teams my freshman year either, for women. I had to just get my feet on the ground. And SWE's been a big part of my professional life. Always has been – always will be. They support women in engineering; what a radical concept. And I know we aren't doing this by a video, but you can see the gestures that I'm making.

I can see, right. (laughter)

(Inaudible).

Your eye rollings there.

You got that right.

Again, so many different things.

Go ahead.

How were you chosen to go to Poland? I read about this in the *Integrator* [Clarkson's newspaper] – that it was the fourth international conference of women engineers in the sciences.

I was the SWE vice-president, I was active as a sophomore and I was elected to be the VP my junior year '75-'76. Well, part of being an officer in SWE, care of Ed Misiaszek who was the dean of engineering at the time, they paid my way to go to Pittsburgh which was the SWE national conference that summer. So, I was a representative of Clarkson, paid by Clarkson to go to the SWE national conference in Pittsburgh, June of 1975. Well, in Pittsburgh they said, "Oh, by the way there's an international conference in Poland." And I said, "You've got to be kidding." So, I wrote my report back to Misiaszek and said, "Oh, by the way, is there any way Clarkson would support me going to this conference? It happens to be the second week of school, but I'd be representing the school and blah, blah, blah," And we made a deal. They paid my way, and I paid for the travel.

Had you ever been out of the country before?

Never.

Before going to Pittsburgh, had you ever been on a plane before?

Yes. I'm well-travelled. My Dad was assigned to California for a couple of years, '59-'61. I started grammar school in California. But I almost don't count that because it was two years of my life when I was five years old and there were five of us, so I don't remember much other than we weren't in New York.

Right.

Yeah, God forsaken place. I don't like California; still don't. Well, we weren't allowed to go outside until it got below 90.

Wow.

Well, we were living in the San Joaquin Valley; it was 110 in the summer.

Yeah.

Well, that's what I remember.

From a five or six year old perspective that makes sense.

Yeah. And Ann and Dan had been born in September; we moved out in December, and moved back two years later. It was an interesting; he [Dad] was a tech rep for Bell, working for Lockheed out in Sunnyvale, California. There was an empty field behind our house which is now an HP Headquarters.

Interesting.

Yeah.

So, going back a moment to Poland.

Poland, so I came back from this conference in Pittsburgh and wrote a report to Misiaszek and to Clarkson to file. You know, this is what I learned, this is what we can do to help our section, blah, blah, blah. And, the last paragraph was, Dear Dean Misiaszek, is there anyway Clarkson would support me to go to this conference in Poland? I'll go if the school will support me. And I don't even know if it came to that or Misiaszek came back and said, "Would you be willing to go to Poland?" "Yes sir." (laughter) On Clarkson's dime. Oh, absolutely.

(laughter)

And then, the summer job I had was working in a travel agency. I had a desk job, an office job. I didn't do engineering co-op. I went and worked for my aunt at a travel agency. So, I got a ticket to Poland for a couple hundred bucks.

Wow.

Yeah. So, they paid my way. I was one of a dozen Americans. I mean, this was behind the iron curtain at the time. And I remember we went up to Long Beach, Canada for a family vacation, and I'd gotten this letter back from Misiaszek, and I said to my father, "I'm going to Poland in September." And he said, "No, you're not." And I said, "I'm not asking your permission. I'm advising you that I'm going to go on a trip to an International Women's Engineering Conference in Poland, and the school's going to pay my way." "Oh, you can't do it. It's behind the iron curtain." Is this just like I can't go away to school, Dad? One more time, I'm not asking your permission, sir. I'm advising you. You know. I was—, I've been a rebel all my life.

Uh huh.

Yeah. So, I went to Poland, I went to school, went to the first week of class, and then took ten days off and went to Poland.

And, what do you remember about the trip?

(laughter) Well, I got engaged. (laughter)

Ah! Because I was going to ask about that.

But let's talk about Poland. I went from Potsdam to Syracuse, then to JFK to Frankfurt, Germany. I flew to Stuttgart, Germany. My high school best friend lived there. She was married to an army guy. And so I spent the weekend before with her. I was going to spend the weekend before and after with her. And then, went from Stuttgart to Budapest to Krakow because that was the most—, I had a very complicated itinerary. But I was a travel agent. I knew how to do this.

Uh huh.

I got hung up, so I spent the first weekend with my girlfriend. Val, Deb Lehman Raught's sister, Debbie's older sister, Val, was my best friend from high school. And in Budapest they wouldn't let me transfer because I was going from Stuttgart to Budapest to Krakow; that was the quickest way to go there. They put me in a room, they took away my passport, then I thought I was dead. I mean, do you remember the movie where the guy got frisked and was found carrying marijuana and was thrown into jail in Eastern Europe. Well, that's what I thought I was—. I mean, I wasn't carrying anything illegal, immoral, or whatever. But I was a teenager. I was 19, and I was going to an international engineering conference in Krakow, Poland. And they said, "Yeah, right." And I said, "Yeah, right." So, they threw me in this room. I couldn't speak Romanian. I really thought I was dead. Finally got to Krakow. Krakow was fantastic. I've been to three other international conferences for women engineers in science. One was in France, one was in Washington, DC,

but I was a little kid. I mean, I was 19. They put us up in the University of Krakow. I slept on a straw mattress.

Mmm.

That's what was in the dorm. This is 1975. And this was top drawer for them. And I thought, "Oh my God." But some of the women organizers who could speak English kind of took me under their wing, and took me shopping, and took me to the best restaurants. I had a blast. I had an absolute blast. I don't remember a whole lot about the technical conferences I went to, but it's in my report that's filed in the SWE archives. The only thing I do remember, to this day, is they took us all to Auschwitz. This is southern Poland. So, we're going to Auschwitz. And I was like, "Oh, cool. Going to a factory." Here I am 19, alright? We're going somewhere, "Okay. Fine. Road trip." We roll in there and the fog was rolling in, and there's double barbed wire gates. And I said, "What the hell is this?" And they said, "It's a death camp. It was one of the concentration camps." Well, nobody said that on the brochure. I read the brochure. Nobody said that you were taking us to a concentration camp. The whole delegation went. The president of SWE was a young, thirty-some year old woman named Paula something. I don't remember her last name, but she worked in New York, and she was the granddaughter of concentration camp people. So, they took us all through this thing and it scared the shit out of me.

Yeah.

You don't need to censor that because that's as nice as I could say it. I was terrified. I had studied history. I had studied World War II. "Didn't they make up all this stuff to fill up the books?" this engineer is thinking. No. The answer is no.

Yeah.

There were lamps made with human skin. Some of the barracks were still intact. There were bones and hats, and clothes, and glasses, and hair, human hair. And they brought us to the crematorium and this president of the Society of Women Engineers faints.

Wow.

And I said, "What's the matter?" They said, "Oh, well her grandparents were killed here." "Oh, yeah. I would faint too." It changed me. It changed my life. I mean, besides the technical expertise education, that single experience changed my life. There's more to tell about the return trip back to the United States. But when I got off the plane, I kissed the ground. I swear to God. I was so happy to be in the States. I can't tell you. That made me a dyed-in-the-wool patriot. No matter what,

Life changing?

yeah. Well, my grandparents came over here from rural Italy with nothing. And I understand. I finally understood what my grandfather said. How wonderful this country is and how lucky we

are to have freedom, and to vote, and I took all this stuff for granted. I was born in a New York suburb. What would I know?

Okay.

Yeah. That help? (laughter)

Yes. So you were coming back, return trip home and also that you got engaged in Poland.

Yeah, well not in Poland, in Europe. And, came back to Stuttgart. The conference was over, I came from Krakow to Warsaw to Stuttgart because I was going to spend the second weekend, again, with my girlfriend from high school. Well, the day I was supposed to leave it was raining in Krakow. And they said, "Well, we're not." I said, "Well, I need to go to Warsaw to make my connection." And they said, "We're not flying today because it's raining." And I said, "What do you mean you're not flying because it's raining?"

(laughter)

And then, I looked at the airplane, LOT Polish Airlines, and I swear to God it was a biplane held together by barbed wire. Now, I'm sure it wasn't like that, but that's what I remember. Like, "Oh, it's raining. I don't want to fly in that plane when it's raining either. Yeah. I'll wait a couple hours." But I got back to Stuttgart later that day or the next day – I don't remember and my girlfriend introduces me to this guy. And we just had a good time and we partied through the weekend. And then, I got back on the plane and came back to Clarkson, through Montreal. Came over the US border and kissed the ground. Kept in touch with this guy, and we got engaged through the course of that fall. He was an army sergeant, American. My best friend introduced me to him, so I figured he was an okay guy, right? (laughter) Do you want me to continue this?

Continue, yes.

Okay. So, we got engaged in October; over the phone. I had a few months – this was the same semester I double overloaded. I was the vice-president of SWE, I'd missed the second week of school, I hosted the SWE Conference in October for the student sessions in the Northeast. And I played volleyball and worked at SAGA. I mean, there weren't enough hours in the day. I don't care what kind of day it is. So, after that semester was over, I was going to go back to Germany and see this guy. Obviously, work out the details.

Right.

Yeah, details. Well my best friend, when she found out about this, she said, "Well, you can't marry him." I said, "What do you mean I can't marry him?" I'm in love, I was 19 – what the hell did I know. "Well, he's married." (laughter)

Oh.

“And he’s got a couple kids.” And, I said, “Yeah. And where are his wife and kids?” “Oh, they’re in Korea.”

Oh.

“Okay. Fine.” So, spent Christmas with my family, December 26th I get on an airplane, fly to Stuttgart, they’re in the end of their three day Christmas celebration in Germany, and we finally get to be by ourselves. His name was Vince. And I said, “Is there something you forgot to tell me?” (laughter) “You sit on the other end of the room and we’re going to talk.” And he just said, “Oh, yeah, yeah. My estranged wife is,” “Estranged nothing. Asshole. You’re not touching me until this gets straightened out.” So he came back with me to the States because his tour was over in Stuttgart. And he was much older than me. He was 32. I was 19. Came back home, flew home to Buffalo. I introduced him to my parents. I thought my father was going to kill him. I mean, he walked in the house and I thought my father, the look in my father’s eyes was, “Give me a big knife,” you know? “I’m gonna cut this guy’s heart out right now.” And I did understand that because I was 19. We spent a day and a half at home and then we went back up to school. He came up with me. And, so I go to my classes; I’m a couple days late because I was in Europe. I missed the first day of class or something, I don’t remember. And, so I got my class list and I was listed for Organic Chemistry. So, I go to my counselor, Dr. Wilson, and I said, “What. I need to be in OChem2. I mean, I’m a ChemE – it’s required.” He says, “You can’t. You flunked OChem1.” And, I said, “Excuse me?” “Help me understand this.” I failed by one point on the final. I said, “I can’t, you can’t let me take it even though I flunked the first semester?” “Nope. Not allowed.” And I can’t take OChem1 again because it’s not offered. Classes weren’t offered in opposite semesters. I said, “Okay. This is a kind of a chink in the armor. Fine.” So, I passed the rest of it. So, and Misiaszek came to me and said, “DD, you went from a 3.2 to a 1.9. You’ve got to give up SWE.”

Ooh.

And I said, “No. I don’t have to give up SWE. I’ve got to not double overload. I’ve got to not go to Europe twice in one semester. I’ve got to not get—, not be engaged.” I mean, there was a series of things I could have done better obviously. And I got my grades back up. What that semester cost me was 0.4 on my final cum[ulative GPA]. And, it was the best 0.4 cum[ulative GPA] points I ever lost because I learned more.

(laughter) That makes sense.

In hindsight, I mean, I’m talking as an experienced adult now.

Right.

I was crushed. “What do you mean I flunked OChem? How could I have flunked OChem? I was getting C’s and B’s all semester. How could I have flunked?” “You flunked. By one point on the final.” And the guy who taught it was a jerk – complete jerk. And he wasn’t going to give me a pass. So, I took all the rest of my junior and senior classes without OChem and passed the courses without Organic Chemistry. So, obviously it wasn’t that frigging critical.

Uh huh. Pretty impressive.

No. It just was what it was. I wasn't going to prevent this from me graduating early.

Uh huh.

So, I had to take it again, obviously, because you had to have OChem1 and 2 to graduate with a ChemE degree. Took OChem1 my last semester; fall of senior year. And then, I took OChem2 at a junior college in Pennsylvania while I was working. And that was the last credit I needed to graduate.

Interesting.

Yeah.

And then, what happened with Vince?

Well, it was a nice engagement, but after he was up with me for about a week at school, I don't know. He went to Korea to resolve this. The understanding was he was going to get divorced and bring his kids back, and that we'd get married the following January and live in Colorado with his two kids. Well, he went off and never came back.

Ugh.

Good thing. My father would have killed him.

Yeah. Wow.

I don't like being lied to. That impregnated on my young, impressionable brain that I don't trust anybody that lies to me. I don't care how big or small – a lie is a lie. Don't tell me an answer – but don't lie to me.

Yeah, that's horrible, obviously.

Well, it kind of soured me. (laughter) I mean, on the marriage thing. And it really, really made me super-sensitive to lying men which were the vast majority of the guys in school. And I don't mean that in a bad way, but it was the '70s. I was 19. I was a good-looking young woman then. I got lied to a lot. But people lie to get what they want. Those people are not on my list of friends. Does that make sense?

Yeah. It absolutely makes sense.

Yeah. Uh huh. Didn't expect that in the interview today, did you?

Well I,

We all have our stories.

didn't necessarily know what we'd be talking about. Again, you said so many things that I—, different directions that I want to go in.

Go ahead.

You mentioned playing volleyball that crazy semester when you went to Poland, first semester of your junior year. Can you tell me about your athletic experiences at Clarkson? You said that you played both varsity women's basketball and volleyball.

Yes.

And, so I assume based on what others have told me, that you must have been a founding member of both of those teams. Is that correct?

Yes, I was.

Okay.

We were not considered "varsity" because I don't have a Clarkson letter. We were intercollegiate play. Different than intramural, different than varsity. Because, obviously, there were varsity teams but they were all for the guys. And, in the field house which is directly across from Clarkson, there were no women's locker rooms.

So, where did you go to change?

Beats me. Don't remember.

Yeah.

Guys' locker room probably, to change.

Yeah.

I don't remember.

So, what do you remember about your athletic experiences at Clarkson?

Well, we had non-athletic coaches. Marilyn Johnson coached volleyball, and Norm Smalling coached basketball.

And what were their positions here?

They were professors.

Okay.

Norm was in the administration. Marilyn was a professor. I have spoken to Marilyn. Norm died a few years ago. But his daughter-in-law works there.

I'm familiar with the name. Is his daughter-in-law Mary Jane Smalling?

Yeah.

Yeah. Okay.

Yeah. And I loved these guys. I mean, Norm and Marilyn were absolutely wonderful. Dr. Smalling and Dr. Johnson is what we called them. But they were trying to expand the horizons for the women at Clarkson. As I said, I played until my senior year, so I played two years; sophomore year, junior year.

Okay. And, so the sophomore year was the first year that there were women's sports?

'74/ '75. Yeah.

Yeah.

And, it was rough. I mean, they couldn't hand down the uniforms because that didn't work. We had CCT, as a breast emblem on our uniforms. If you look in the yearbooks, you'll see them.

Uh huh. (Inaudible).

Uh huh. (laughter) And we lost. I mean, we were not competitive by any stretch of the imagination. Even most of the girls that played had played in high school. And, when Debbie Lehman Raught [class of 1978] came to Clarkson, she and I had played basketball together at NT [North Tonawanda]. So, we got to play again. So, she and I played together great because we'd played together before.

Right.

Yeah. It was a blast playing with my best friend's younger sister. And Debbie's six feet tall.

I remember. (laughter)

Yeah. Well, she's still six feet tall.

Yes.

I'm 5'1".

(laughter)

But I could out dribble her.

Uh huh.

And I could out-distance shoot her. It was fun. It was a diversion. That's what I needed and I needed a diversion. There's still a piece of me that's a little irked that we don't have varsity letters because we weren't recognized as a varsity sport. And, somewhere along in the '70s women's ice hockey came into being, and again, that wasn't made a varsity sport until about ten years ago. And it only made Division I a couple of years ago.

Yeah. 2003.

I did not play hockey. (laughter)

(laughter) Uh huh. Had you played hockey at all growing up?

Oh, sure. In my backyard. Yeah, I'm from upstate New York. Of course I played hockey.

Right. Yes.

But, did I want to play it collegiate level? – no. No. I played broomball my freshman year and got smashed by the brooms too much. I thought doing it on ice would be suicidal.

Uh huh. (laughter)

(laughter) Hockey was a big damn deal at Clarkson. Again, I didn't read all that, and in the catalogue when I was previewing the school. I mean, it was a Division I hockey school. We had no other Division I sports. There were plenty of other sports teams, but the only thing that counted at Clarkson was men's hockey. Okay. Fine. I went to the games, and drank a few beers, had a good time. But never fell in love with it because I didn't. Now, the most famous person from my class, one of the greatest Clarkson alums is Dave Taylor. He graduated our year.

I'm familiar with his name.

And I've met Dave since; I've seen him professionally. And he's a doll and he's given millions of dollars to Clarkson. Millions. Well, he made millions. He played 17 years in the NHL.

Right.

We had five all-Americans in my senior year. I didn't know what that meant.

Uh huh.

Brian Shields was the goalie. I remember that. And I don't remember the other three. But I wasn't a hockey lover. I played basketball and volleyball, and was a ChemE. So, by definition I didn't have a lot of spare time.

Understandably, yeah. Another thing that you've mentioned is working for SAGA food service,

(laughter)

and on your pre-interview questionnaire you wrote "many life lessons learned" next to that.

That I'll never work in food service again.

(laughter)

That was one of the life lessons.

(laughter) Tell me some of the life lessons you learned. Because that's clearly one of them.

Well, I mean, I grew up in a house with nine people, so I knew quantitative cooking.

Uh huh.

But to feed 2,000, it goes up a different notch. I was surprised at how poorly managed it was. I mean, even as a student because they got pretty good stuff in. They got restaurant level food, raw ingredients in. But it was just mass production. I mean, they fed us so we would be sustained.

Right.

Well, I live in Chicago. There are 150,000 restaurants there. I don't eat poorly here.

Yes.

Well, it's a different emphasis. And I'm Italian. I like good food, and I like it prepared well. And I like it presented well. I would never eat the spaghetti and meatballs that were served there. It was like a sacrilege because the sauce came out of a bottle. (laughter)

(laughter)

And when I fed those girls at Holcroft, I didn't get the sauce out of a bottle. I made it.

Yeah.

The tomatoes out of a bottle. Different strokes for different folks. It was what it was. It was food service from a university. Could it have been improved? I mean, of course.

Clearly, yes.

Well, but it wasn't that we were poorly fed because it was nutritional. It just wasn't presented well, and it wasn't embellished at all. I have since worked in food service in my life, odd jobs, and now as a restaurant eating professional, I know what's good and what's not.

Right.

I've been on other college campuses and some of them are fabulous. And some of them are worse, substantially worse. But I had to go to work. I worked from four 'til seven, doing whatever I did to help them.

Every day? Or most days?

Four or five days a week. I think we had to work – it was a work study program. So, I think I worked 12 hours a week. I remember a 12 or 15 dollar paycheck.

(laughter)

Maybe it was less than that. I don't remember.

Minimum wage? Yeah.

Oh, absolutely minimum wage. Here I am, and especially by the time I got to be a junior and senior, it was like, you're paying me two or three bucks an hour to sit there counting people walking in the door. Let me go back in the kitchen. I can cook better than you guys can.

(laughter) Right.

You know, (inaudible) brew beer. I mean, I can make something that tastes better than this.

Uh huh.

It was sanitary and it was edible, but it was—, I'm coming from a very, very different place at this point in my life obviously.

Right.

And a lot of people did work study for SAGA because it was an easy 12 hours to work. I didn't work in the labs. I didn't work at the athletic department. I worked for SAGA because, and that was part of my financial aid package.

Right. Now, another thing you had said is that in high school you were active in your church and also that in college you were active in the church. Can you talk about what type of involvement you had at the church in college?

In Potsdam?

Yeah.

I don't remember if I ended up playing in their folk group or not. I honestly don't remember. I went to the Newman Center, not to St. Mary's because it was closer. (laughter)

Right.

That's the only reason. I should have walked the extra three blocks and gone to St. Mary's. It would have been a better experience. But it was very supportive. I remember the Newman Center being open door policy. I remember when Vince and I broke up, I went and talked to the priest and then, I was just beside myself and here I am talking to a celibate, old priest. I mean, what the hell could he (inaudible)?

(laughter)

Well, and I thought about that, but I didn't want to go to a psychiatrist, and this isn't anything an RA can help a kid with.

Right.

Yeah. Parents were far away, and my father hated him anyway. So, that wasn't going to do me any good. It was a safe haven. Absolutely, a safe haven. And it was comfortable. I was born and raised Catholic. I've been a practicing Catholic most of my life. So, anybody that's gone through that experience can go into church and know when to genuflect. I've gone to funerals here in Chicago where I was the only Catholic in the congregation that knew when to stand, and sit, and kneel. Church taught me Latin. Because the mass was in Latin 'til I was in grade school. Taught me how to sing. I had an outlet for my music, outside of high school band. In church, I could sing what I wanted to sing, and I could sign folk songs because that was cool. And it was the '60s and it was post-Vatican II, so that was okay. That was cutting edge back in the day.

Right.

Well, there are churches whose secondary mission is music. And I've been to some of those churches and they're phenomenal. I don't know of any in the North Country, but I've gone to mass in cathedrals in Europe and here in the States and a 200 person choir walks out. And it's like, holy crap. And they've got a full orchestra. Wonderful. What a great way to use the talents you were given.

That's incredible.

Well, math and music are very, very closely matched. There's a whole lot of music skills, wasted music skills, at Clarkson. But there's the pep band if you really wanted to blow your trumpet,

and a lot of guys did. But, it was the '60s, early '70s. It was the beginning of rock 'n roll and Doobie Brothers and all that.

Right.

Beth's favorite album was Elton John. I mean, I know every single word of those lyrics because we heard those albums one thousand times.

(laughter) What was your favorite back then?

I don't remember.

Uh huh.

I was eclectic. Kate's favorite was the Beatles. So, we used to do a lot of their—, excuse me, the Beach Boys.

Uh huh.

We played a lot of Beach Boys. I have Carole King, I have Carly Simon albums from back then because I didn't throw anything away. I was more folky. My favorite stuff was stuff I could understand the lyrics to. And that I could sing and play on my guitar. It was a disconnect from being, from just being an engineer.

Yeah. And when you were talking about the food service work, you were talking about evaluating it differently now. Looking back, in general, have you evaluated Clarkson and your experiences there differently? Or, how have you evaluated them differently since graduating from college?

Oh, quite differently. In my professional career I've never been technically stumped. Never. And I completely attribute my Clarkson education to that. I've done nuclear decommissioning work for Westinghouse. I'm not trained in that. I never took a nuclear course at school. And I was interfacing with Navy sub drivers who used to run nuclear reactors, and I held my own as far as, I understand this. Maybe I don't understand this particular project. I was the decommissioning activity at West Valley. It was an old nuclear processing plant, and I was hired as a facilities manager. I wasn't hired as a decommissioning engineer. Thank God. And,

(laughter)

well, I didn't want to do that. But, I got in—.

This was in the mid-'80s, right?

Yeah. When I came back up to New York.

Yeah.

And I rebuilt their water and sewer system. Again, I never studied that. I never studied that in school. But I knew enough, and knew enough professionally from the training I got from Procter and Gamble, who to do to. If I'm going to rebuild a 300,000 gallon water system, who are the best people to do that. You're going to buy the equipment from them and probably have them do the installation. But this was a nuclear processing site. I mean, the security was immense. I wore two dosimeters every day for a year and a half. It was interesting. But it wasn't the kind of work that I wanted to do. I wanted to do biomedical engineering.

Tell me, again, why you feel like Clarkson gave you this—even though you never took a class in nuclear engineering, how from Clarkson you gained this thing where you never got stumped professionally.

Well, I learned how to learn something I didn't know. Nuclear is just Physics 5 plus a couple more courses—plus a couple more specializations, I guess. So even if I wasn't a technical expert, and this is a good example, with the nuclear stuff at West Valley, I knew who to go to. If I didn't know it, one of the things I learned at Clarkson early on was the team approach because we did freshman engineering projects my first year.

Uh huh.

We didn't have any technical background to do that. We didn't have any computers. We didn't have PC's. Hell, I was still working with a slide rule because that's what they told us to come with.

Right.

Yeah. We didn't get comp-, we didn't get calculators until my sophomore and junior year. And, they didn't get computers until the early '80s. Individual computers. We had to go to a damn computer lab and punch cards. I mean, how stupid was that? But that's what it was.

I know Clarkson was ahead of its time by having the computers when they did in the early '80s.

'81.

Yeah.

My godmother cut that out of the Buffalo paper and sent it to me.

(laughter)

Clarkson University – first, it was still Clarkson College – first university in the country to require every student to have their own PC. How radical.

Yes.

Well, okay. Fine. But besides the technical stuff, it was a fabulous base of knowing the basics and then being able to expand it into biomedical too. If I didn't know it, I knew who knew it and how to get that data from them.

Uh huh.

And if I was a junior engineer, there's a senior engineer that I can go to and learn this from. Because I worked for big companies. It wasn't like I was working for a mom and pop engineering company. So I was trained at Procter and Gamble to be a manager. And I never took a management course in my life. Never took a public speaking course in my life. I can get up in front of any group of people and tell them what I know about subject "X." I'm trained to do that, and I credit Clarkson for doing that because most engineers are introverts. If you want to do some broad comparisons. They'd rather be in their little cubicle with their computers. Or, in their labs doing something. Most engineers are more introverted than they are extroverted. Most women engineers are extroverts.

And why do you think that is?

Oh, it's a no brainer. We couldn't have gone through what we went through if we weren't type A extroverts. You can't go to a school where you are the minority 24:1, and be successful without planting your feet and standing your ground. Not necessarily being aggressive, but you definitely have to be assertive. And, you have to work with the guys. You have to learn to work in that environment. Because my father's notion of I couldn't be an engineer because I was a girl is true. It's a big ole boys club in that resp-, from a social aspect. I mean, how many decisions are made on golf courses.

Uh huh.

Well, a lot.

When did you figure out—, or was it immediate that you knew that you had to be able to play with the boys?

Oh, when I was in grade school. When I knew that this was my vocation.

Okay. So, by the time you got to Clarkson, you had known that for ages?

Oh, yeah. Yeah.

Yeah.

And I have my own techniques. Everybody has their own skills in dealing with this being a minority in our profession.

What are your techniques?

Well, I'm a big sports fan. So, I do a lot of managing and teaching by using sports analogies because people understand that. At school it was all hockey analogies. But I live in Chicago, and I was raised in Buffalo. I can take any problem and analogize it to being on a baseball field, or being on a football field.

Right.

People will understand that. And, if you change the names to be the Chicago Cubs or the Buffalo Bills, and say this is our challenge, this is our mission, getting the ball across the goal line is the equivalent of finishing this project. If you talk to people, if you talk to a group of guys like that, nine times out of ten they'll understand it. The only ones that don't understand it are the gay guys because they're normally not sports buffs. Another gross generalization. But true. Well, in my experience it's been true. I've never met a successful woman engineer who's a mouse.

Interesting.

I've met unsuccessful

And, that's the case at Clarkson too? I mean,

Absolutely.

Yeah.

Absolutely. The women that couldn't cut it went into Humanities, or Business because the people who couldn't cut the engineering curriculum went to Business School. So, to this day I have a very low perspective of accountants. I mean, why couldn't you take the same math we did? Calculus is calculus. Why does there have to be a calculus for business majors?

Uh huh.

Well, and none of the hockey boys were engineers. None of them. Not my year. Not the four years I was there. Dave Taylor was an Industrial Distribution [now Engineering and Management] major.

I think that's changed slightly. I mean, I know that there certainly have been hockey majors who are engineers now.

Thank God. (laughter)

Not many certainly, but—.

Well, but there were none. And, when I went to school most of the hockey guys were Canadians.

And, now there's variety there also.

Good. That's all good.

Now, what about—

Let's get back to the gender difference. I mean, women engineers have to be able to plant their feet and stand their ground because they're not one of the boys. They're not being invited to the golf outings. They don't go to the same bathroom as the other guys. I mean, that sounds really crude but that's true.

Uh huh.

Look at Sara [Grimaldi, DD's niece]. I mean, thank God stuff has changed so much in 25 years. I mean, Boeing wanted her because she was a woman engineer, yes. But they've allowed her to develop because she's good. And why is she good? Because she's a Clarkson engineer. Tony, her brother, who's only two years younger, is the quintessential geek.

(laughter)

He is. I mean, I love my nephew. Dearly. But, if you had to do a stereotype of a Clarksonian, it would be Tony Grimaldi.

(laughter)

Marked, driven, very dry sense of humor, right-wing, conservative Republican. That's in the Fiske description of Clarkson University today. I read that and I almost threw up.

(laughter)

But it's true. But it's true.

And was that Clarkson in the mid to late '70s? (Inaudible).

Oh, God – mid-'70s. Mid-'70s. Absolutely.

Yeah.

Yeah. Engineers make a lot of money. And people with a lot of money gravitate to the right because they want their money. They don't want their money going for entitlement programs for somebody who's too lazy, too lazy to get off their butt and work for it. And I understand that. So, I understand that to a point. But I am a dyed-in-the-wool Democrat. I believe in social justice, and I believe in social programs to help those less fortunate. I wouldn't have gone to Clarkson if I didn't have that opportunity. If Clarkson hadn't given me more money than Cornell offered, I probably would have gone to Cornell.

Right. Yeah. And were you a strong Democrat when you were at Clarkson?

No. No. I was apolitical. I was apolitical most of my life. I didn't care because it didn't affect me directly. Well, let me digress. In the '70s the Vietnam War was still going on. I was very much against the war. I have protest buttons from the Vietnam War that are now back on my backpack. I hate recycling stuff like that. But it was stupid then and it's stupid now.

And given that war ended in '75, so you were going to protests while you were at Clarkson?

Absolutely.

And, how (inaudible).

I had classmates from high school that died in Vietnam. The warmonger guys that wanted to drop out and join the Marines. And they did, and they went there and they got killed. So, then that again, never hit me until I went to Washington, DC and went to the black wall and saw their names on the wall.

Yeah.

I didn't know. I mean, I knew that they had died in combat. From my North Tonawanda alumni stuff. But what a waste. What a fricking waste.

Yeah. Were you unusual at Clarkson for protesting the war?

No. No. There were many, many, many anti-war people at Clarkson. It was the '70s. (laughter)

Yeah. Yeah.

There were boys that were drafted. It was a lottery; draft lottery.

Yeah.

I remember my high school boyfriend and me sitting up waiting for the lottery numbers. And thank God, he was 206, so he didn't have to go to Vietnam.

Right.

How stupid. I have matured politically, honestly only since I've been here. Since I've been in Chicago. Because it really didn't matter the other places I lived in. I didn't live any place long enough to call home. I moved 20 times in 15 years.

I saw from your resume that you certainly moved around a lot. Let's actually turn to your life after Clarkson.

Okay.

I'm aware of the time and I've got that it's ten 'til one here. I'm fine. But I want to make sure that you're also fine.

I'm okay.

Okay. Let me know if that changes. I'm interested in both your professional life after Clarkson, and also your personal life after Clarkson. Where would you prefer to begin?

Professional.

Okay. So I know your first job after Clarkson was at Procter and Gamble.

Uh huh.

How did you decide to work there right after graduation?

It was 1976 and I started interviewing because I was two semesters from graduating. And I got 17 job offers coming out of school.

Wow.

It was 1976, and I was a woman chemical engineer.

Yes.

Well, you've got to take that in context.

Yeah.

Two of them were to work the oil fields in Saudi Arabia with Exxon. And they told me that I'd have to cover my head, and never drive a car, and always go out with a man. And I said, "Are you out of your fucking mind?" I'm a ChemE, and it was unbelievable money. In today's [dollars], probably a quarter of a million bucks, plus flights, plus living, plus, plus, plus. But I said no because they didn't want my brain, they wanted my gender. Interviewed with Exxon down in Houston and they wanted me to sell lubricants to gas stations, in a skirted suit, in a convertible. I said,

(laughter)

I said, "What do you—," I said, "Are you out—," I have chemical engineer on my resume. "But we want you to sell lubricants to our gas stations." And, I said, not, "No." "Hell no."

(laughter)

"You're insulting me. Don't you understand this?" And they didn't. And I didn't go with Exxon. I had three offers from Procter and Gamble. So, it wasn't if I was going to work for P and G; it

was where I was going to work for P and G. At the time I took the third interview my senior year, walked into the plant and the guy said, “Welcome to Staten Island. We make Ivory Soap here and we’re going to offer you a job.” And I said, “It’s, you know, 7:35 and you’re offering me the job?” And, he said, “Yes.”

(laughter)

And, “Our job the rest of the day,” because I had already had two other offers from them, “was to convince you to come to Staten Island rather than Cincinnati or Pennsylvania.” And I said, “Have at it.” Be my guest. That was the greatest interview I was ever on because I had the offer five minutes into the interview.

Yeah.

Yeah. Well, and again, now I was 5’1”, I had this blue polyester, three-piece pant suit.

(laughter)

That was my interview suit. My lucky suit.

(laughter)

(laughter) Procter and Gamble was a Fortune 100 company. They were very pro-women; they took engineers and made them managers. And I knew that was a reasonable path because I really didn’t want to be in the lab. I wasn’t a research kind of gal. I kind of figured that out by the time I took all those labs. And in the early ’70s, in the mid-’70s, they were putting in applications to make medical products. Because I did my research on the companies that I interviewed with. So, I picked Pennsylvania because it was the same monetary offer for all three jobs.

Uh huh.

Cincinnati was an R and D [Research and Development] job. New York City, Staten Island was a manufacturing job making Ivory Soap, and Pennsylvania was a manufacturing job making Bounty Paper Towels. Now, for the same money am I going to go to Cincinnati, or New York City, or Pennsylvania. Duh – one more time, analytical brain kicked in and I took the job in Pennsylvania. So, for two and a half years, I helped make Bounty Paper Towels. Started as a process engineer, basically a quality assistant attached to one of the manufacturing groups, and then became a manufacturing foreman – team leader. And swung shifts, and worked weekends for two and a half years in the biggest, best paper plant in the company. You know anything about P and G?

A little bit.

Their plant in Mehoopany, Pennsylvania’s the largest in the world. Largest paper plant in the world. So, I learned lots. (laughter) I learned lots about taking this chemical engineering degree

and putting it to work. But I learned to be a manager. They taught—, the first six months was a management immersion kind of thing.

Oh, as soon as you got on the job?

Oh, absolutely. Because they only hired engineers to be managers because you can teach an engineer how to be a manager. But you can't teach a management person how to be an engineer. And we're talking about 60 million dollar paper machines times six.

Yeah.

Seventy-two acres under roof. I mean, it was the whole fricking valley.

Yeah.

It's still the largest paper plant in the world. And I was one of their young prospects. Kate Thompson and I, my suitemate, went to Procter and Gamble. January, 1977.

And, so you started there then right after you graduated in December of '76?

Yeah. I didn't graduate. I had to take that stupid OChem course.

Oh, right. But I mean right after you left Clarkson then.

Yes. I went to P and G.

You went to Pennsylvania. And what did you like about the job?

I was respected for my intelligence. I was respected for my potential because they hire people, obviously, on their potential. But they hired Clarkson engineers. They hired Cornell engineers. And they hired guys coming out of the service. That's it. There were 3,000 people that worked at that plant and there were 200, 350 managers. Fifty new managers a year.

Wow.

And I was in the January '77 class.

Yeah. Then what do you remember -

They took us off site for a week to go through what I call management 101. They put us through management accounting, economics, finance, psych 101, 102, business psych. A lot of Maslow's hierarchy of needs kind of stuff, Pythagorean theorem and all this stuff I never studied in college because I'm an engineer. I didn't take an accounting course. I can do fourth level calculus but I don't know how to balance books.

Uh huh. (laughter)

I wasn't trained to balance books. Nor do I want to.

Uh huh.

But if you're going to manage a million dollar business in your corner of the plant, you have to know how the numbers add up.

Yeah.

You have to understand how .00001 cents annualized to this company costs them or saves them. And I learned that at P and G.

It sounds like an incredible program.

It is the best place to work coming out of college. There are very few places that have that kind of reputation. GE does, Bethlehem Steel at the time did. I didn't want to make steel. Who else did I have offers from? Corning Glass has a similar program. Most major Fortune 100 companies do this if they're taking somebody out of their major to do something else. Johnson and Johnson, Bristol Myers Squibb. They all have fabulous engineering to management transition programs. Because they know they're getting somebody smart.

Right.

You couldn't get an engineering degree. Nobody gives engineering degrees away. Or, if they do, they're not accredited for long. No, because to this day, I tell people I'm a chemical engineer and they look at me, "Really?" I said, "Nobody lies about that." (laughter) Nobody lies about that. Because if somebody does lie about them, we have a little society that we send them out and they're not saying that anymore. Yeah. They don't cut their tongue out, but nobody can falsify that. I loved P and G. I worked my ass off. I worked from 70-100 hours a week for that company for seven and a half years.

So you left Pennsylvania and went to Alabama within P and G.

I was transferred on my request because that was the medical plant. That was their brand new ground floor start up medical plant.

Okay.

All that stuff that I read, researching P and G, came to fruition in '79. I went to Alabama in August of 1979 and saw a picture of a plant, artist concept kind of thing. And my mother and I are standing there in the middle of a cotton field looking at this picture, and she says, "You've died and gone to hell." (laughter)

(laughter)

I said, “No, Mom. It’s Alabama.” “You’ve died and gone to hell. Are there any Catholic Churches in this town?” I said, “I’ll find one, Mom. Don’t worry.”

Uh huh. (laughter)

(laughter) Again, like Clarkson, didn’t know a soul. At least going to Pennsylvania, I knew Kate because she was my suitemate. Kate Thompson.

Uh huh.

But then we were on different shifts and different departments, and I never saw her again. But, literally, never saw her again because we were on opposite shifts.

What was life like in Huntsville, Alabama?

Oh, Jesus Christmas. This is August 1979, right?

Uh huh.

So I go and rent a one bedroom apartment. Move my stuff from Pennsylvania. And I am immersed in a group of 70 managers from everywhere but Huntsville, Alabama. The plant manager was from Memphis. My module manager was from Cincinnati. My department manager was from, I don’t know. He was Japanese. No, he was Chinese. But from Georgia. So nobody was from there. And it had just been rolled out publicly that this was gonna be a Procter and Gamble manufacturing plant to make surgical drapes and gowns. A new brand that’s never been made before. The building was 250,000 square feet which is two and a half times the size of a Wal-Mart. And when I got there in August there was a slab of concrete in the middle of this cotton field. We were making product by January. No joke, I worked 100 hours a week. And I came from the best plant in the company. I came from the best manufacturing plant in the company: Mehoopany, Pennsylvania. That paper plant up in PA. And everybody thought that I walked on water because I came from the best plant in the company. Well, and people at Mehoopany thought I walked on water because I came from one of those premier engineering schools. So, the gears were greased for me.

And you were very young still. I mean, ’79.

Oh, I was 20 when I started at P and G.

Yeah.

And I was 23 when I transferred to Alabama. It was a huge cultural shock. Not only working for people from all over the country, working for a different part of Procter and Gamble, but living in Huntsville, Alabama was, it was as much a culture shock as going from NT [North Tonawanda] to Potsdam.

Hmm.

As going from Pennsylvania, rural Pennsylvania to this second largest city in the state of Alabama which by rights is at the bottom of the barrel because it is. I mean, depending on how you measure things. Educationally it is. There's no doubt about that. So, I worked my ass off. I got promoted in another year to department manager. And bought my first house when I was 24. I bought a three bedroom, two bath house when I was 24 years old. And, (laughter) yeah, well, I made more money than 90% of the people in town.

Yeah.

And I was just a first level manager for P and G. I got the promotion, and I bought the house. I took one year's income tax return and a HUD loan and bought a house because I was paying 400 dollars in rent. Why didn't I pay 400 dollars for a mortgage?

Right.

I mean, again, the numbers made sense. But I bought it on the wrong side of town, they told me. Now. Procter and Gamble was very progressive when it comes to multi-culturalism and diversification, and minority rights. I mean, there were black managers there. There were black employees there. They had a lot of women engineers there. There were six or seven of us out of those 70; 10% of us were women engineers on this project - on the start-up project. And, they told me, my friends, "You can't buy over there. It's the wrong side of town. It's the black side of town." I said, "I don't give a shit. It's a nice house. It's a nice neighborhood." And I bought it for 36,000 dollars.

Mmm. (laughter)

I'm going to pay that much for my next car.

Things have changed. Yes.

Yeah. It was 1980. It was Huntsville, Alabama.

Yeah.

Huntsville,

And so, how long were you in,

I was in Huntsville for five years.

I was going to say, you changed positions so I presume, based on your resume, quite frequently within those five years.

Well, but that's Procter and Gamble's way.

Moving up I presume?

Well, I was moving up the ladder; I wasn't dead. I had three positions in Pennsylvania, and I had four positions in Alabama.

Yeah.

And I loved it. I loved it. I was never bored. It's like being in Chicago. I'm never bored here. If I'm bored, it's because I'm too lazy to get off the couch and do something.

Uh huh. (laughter)

I like not being bored.

Yeah. Tell me more about what you liked about the job, or jobs in Huntsville.

There was always opportunity. There was always—, and I did well. I worked, I mean, I was coming off of two and a half years of running shifts, and working weekends, and working 70-100 hours a week. And the start-up, I also worked 100 hours a week. Those first six months were hell. But then I settled into what became my expertise which is quality management. And helped younger engineers. Now, I was all of 24 at the time. But they were hiring kids straight out of school. And I was a senior first level manager, so I knew more than they did.

(laughter) Right.

Well, but that's how they do it. It's a peer—, it's a team approach.

Right.

And it was very much a participatory management approach at this plant. So, that really meshed well with who and what I am. I had an office mate who was a brand new civil engineering graduate from University of Alabama, Tuscaloosa. Nice, strapping, good looking guy. And he was a nice guy – Ronnie. That's all I remember. I don't even remember his last name. But, Ron and so I said to him, "Hey. Welcome," you know, "Where'd you go to school?" Or, "What did you do in school?" And he said, "I played baseball." And I said, "No. What did you major in?" "Civil engineering." This man couldn't calculate his way out of a paper bag.

(laughter)

Talk about technically inept. Now, he had a degree in civil engineering from the University of Alabama, but he didn't have a tenth of what I learned at Clarkson. Not one tenth, technically. Now, he was a good ole boy and he went and played golf with the plant manager. I didn't play golf. Major mistake. I didn't play golf. I don't play golf. I have too many allergies. I don't like it; hitting a little ball in a hole. How boring.

(laughter)

It's not like basketball or volleyball. It's not a team sport.

Uh huh.

It's not a team sport. So, there was a women's manager support group in Huntsville. And the plant manager said, "We will help these women succeed." He told everybody that worked for him and all the people that worked for them that the seven of us that came in as first level managers were going to succeed in this company. Because they were going to do everything in their power to help us develop. None of us were dumb. We wouldn't be there if we were dumb. It was a cherry picked selection of managers to start that plant. And we opened the plant in six months. I mean, you don't take a piece of concrete and make it a functional plant in six months.

That's amazing.

Well, God bless Procter and Gamble. It was phenomenal. I mean, you can't duplicate this. A start-up opportunity comes along once in a lifetime. And that was mine. Kate Thompson, my suitemate, she stayed in Pennsylvania. She didn't have the opportunities I had. But she wasn't willing to move to Huntsville, Alabama. The other piece of Huntsville was being out of work which I wasn't very much of the time. I joined a church, met some friends at church. Met some of the fellow managers that I worked with. We ended up going to the same church. Met who was to become my best friend for life. Her name is Ginger Morosky. She was a new hire graduate from Georgia Tech. She came in as a production engineer. But she didn't have an engineering degree. But she got the job because she went to Georgia Tech. A mutual friend introduced us, and we became bosom buddies for life. She's still my best friend. She lives in Texas. Ginger and I were two peas in a pod. So funny. I sold my first house, and Ginger and I co-invested and had a custom townhouse built. By the time I was 26, I had a 2,000 square foot custom built house with my best friend.

How wonderful.

On the right side of town. And we could go out our back porch and we could see the Saturn V Rocket from the space camp in Huntsville.

Oh, amazing.

Oh, beyond amazing. I want this opportunity again. Because that home here in Skokie would be worth a million bucks. I picked out all the flooring. I picked out all the carpentry. I picked out all the light fixtures.

Sounds wonderful.

It was; it was gorgeous. Three floors, three bedrooms, four baths, double car garage. I had a Trans-Am. I mean, I was living the life.

(laughter)

One of the things we did in Pittsburgh was make a wish list. I was 18 at the time, right? Well, I accomplished everything on that wish list by the time I was 26. Time for a new list.

(laughter) So, a couple questions. One is, you said that while you were in Huntsville you got involved in what became your life's work of focusing on quality management. How did you get involved in that while in Huntsville?

Well, in a production setting in Procter and Gamble, you have people managers, team managers, foremen, whatever their title, supervisor; whatever kind of title you like to put with it. You have technical managers that are responsible for the equipment and not necessarily the maintenance but the upgrading of the equipment, and then you have quality managers who are responsible for the quality of the stuff coming off the production line. Now, obviously if these people aren't working as a team, you're not going to get good stuff off the line. But my first job as a process engineer was a quality related position. It was my job to help that department make good stuff. So I had to do everything in my power to help that, those rotating teams make good Bounty Paper Towels. There are a hundred components that go into making a paper towel. Okay. Fine. (laughter) And, my boss was a promoted technician, so he was a mechanic. I knew every damn screw on that machine. Why, I don't know. But that's how he taught me. He taught me blue collar. He taught me on second shift. We'd go out and we'd turn the screw this way and turn the screw that way. And I'd see how it affected the product. Well, when I went from this process engineer lab manager position. And they also made me in charge of the lab which was a testing lab. That was very ChemE. My second full-time position was being a team manager, team leader. And, I was part of this team that rotated shifts and made this stuff. I was the production manager. And I was very good at that. But I had more expertise when it came to the testing and the quality parameters. It was more analytical. It's right or wrong if it's a quality parameter. When you're talking about managing a person, there's a whole lot of in-between besides right and wrong.

(laughter) And so you liked the black and white? You liked--

Absolutely. I'm an engineer. Born and bred. Doesn't that make sense?

Absolutely.

Yeah, I think my life makes perfect sense. I mean,

Makes sense to me too so far.

well, there you go. That's what I'm (inaudible).

Now, what prompted the move out of Huntsville to West Valley, New York? What prompted you to take the position at West Valley Nuclear Services?

Well, they closed the plant. The plant in Alabama was closed.

Okay.

Shut down. That prompted me to leave in 1984.

Yeah.

And I left. I sold the house. I sold my boat. I shipped my car to my parents, and I bought a motor home on a signature loan Saturday afternoon. And, gave two weeks' notice and left. I wasn't the captain of the ship. I didn't have to go down with this thing that I helped build and maintain for the last five years.

Right. Yeah.

So, I went to Texas, got my best friend Ginger; she did the same thing because she was a quality manager at the maquiladora company in Mexico [this was a sister Procter and Gamble plant in Ciudad Acuña, Mexico, directly across the border from Del Rio, TX]. She sold her car, got rid of her personal possessions and we, Ginger and I, took an 8,000 mile trip around the country.

(laughter)

In the summer of 1984. I was 29 years old.

Sounds wonderful.

Yeah. (laughter) That whole thing is an hour discussion in itself.

Uh huh.

But, suffice to say, Ginger and I took an 8,000 mile trip around the country in four months. I went from Alabama to Texas to Washington to Canada to Las Vegas and back to Texas in four months. It was fabulous.

Yeah.

Yeah. So, I parked it one day in—, Ginger wanted to do something else with her life. So, she basically did something else. She moved out, got an apartment, and went did some banking. I said, "Oh, you're using that industrial management stuff that you studied in Georgia Tech now, huh?"

(laughter)

"Now that you're not an engineer at Procter and Gamble anymore." And I went to grad school. I started at University of Texas at Arlington; that's on the bottom of my resume somewhere.

Yes. I saw that.

Yeah. Well, that was the window.

And why did you decide on an MBA?

That was the right masters degree for the kind of work that I enjoyed. It was marrying technology with business, and the MBA was the easiest way to get there.

Uh huh.

Masters of Engineering Management didn't exist in that time and in that state. I was in Texas. So, after accounting, economics, and business law, for the first time in my life in academic environment I said, "This is bullshit," and I wasn't nearly that nice, but that's the best describer I can say right now.

Uh huh.

Yeah. It was crap. It was just awful. It was a big, fat state school. It was the University of Texas at Arlington. And compared to Clarkson, it was like going from a Mercedes to a Yugo. It was awful. It hardly went. And I was in lecture halls at seven o'clock at night with 500 business graduates that were going for their MBA. Well, I was 29. I'd worked for P and G for seven and a half years, and I really thought most of what they taught me was baloney.

Uh huh.

It didn't relate. It didn't relate to reality. The business law course was taught by a Harvard lawyer, and it was basically how to set up an oil company in Oklahoma. Which I was never going to do. Well, but it was Texas. It was the mid-'80s.

Right.

The econ course I did fine in because I knew more calculus than the professor. And, it was basically calculus analysis of economics. Supply and demand. Proportional ratios. That's Calc III, I took that.

Well, that sounds very disappointing.

Yeah, it was. It was very disappointing. And the accounting course was taught by a twit younger than me and she was a pain in the ass. She was a bad professor. And I finally went to her, after doing all this crap, and I said, "I don't understand this. I'm doing the homework. I'm reading the book. I'm in class every night, and this doesn't make any sense." And she said, "Well, what's your undergraduate in?" I said, "I'm a chemical engineer." She said, "You'll never understand it. My husband's an engineer, and he doesn't understand this either." I said, "Listen lady, I'm paying you good money. All I want is a fucking B. Give me a B, get me the hell out of this class and I promise you on a stack of Bibles I will never take another accounting class as long as I live."

Yeah.

I said, “It’s your job to help me understand this. That’s why this university pays you. That’s why I pay the university. You’re not doing your job.” You know, I’m 29 – she’s 25, and she’s just looking at me like, “Who the hell are you?” I said, “I’m one of your students. And, I’m not going to pass this course unless you help me understand this. I’m not stupid, lady.”

Right.

“Help me get out of this course.” And it just left a bad taste in my mouth. So, I left and I had a job offer from West Valley. My father, I think, sent me a clipping and said, “Come back to New York.” And I’m thinking, “I never want to go back to North Tonawanda as long as I live.” But West Valley offered me more money than I made at Procter and Gamble. It was a facilities position which I had done at Procter and Gamble, so I was building on some skills. It wasn’t medical, but it was a job. And it was good money. I made a lot of money at Westinghouse because it was a government contractor. But because it was a government contractor, they were stupid. It was a cost plus contract, and they didn’t do any more than what was minimally in the contract. Now, we’re dealing with nuclear waste.

Yeah.

I mean, if this thing screwed up, we could pollute the aquifer of North America. And they were very cavalier about it. “Oh yeah.” (laughter) “Oh yeah.” You can touch things in that plant, and you will not walk out. The wall behind my office was a contaminated room and it had 1800 rem, you walk in you wouldn’t walk out. This was a dangerous place to work. And Westinghouse’s job was to decommission the site. Okay. That’s good. I like that mission. But I was a facilities engineer – I was not a decommissioning engineer. And I didn’t want to be a decommissioning engineer. And they wanted to make me a decommissioning engineer. So, I rebuilt their water system and their sewer system; then I left because it was not the right industry. And I got a better job with Bard and made IV sets and ambulatory infusion pumps. It was a small plant outside of Lockport. For a year. That was a blast. I was the only engineer on site. And the people from corporate would come and talk technology with me and I’d understand them, of course, because I’d been dealing in mechanical manufacturing most of my career. I understood this. And I was a quality expert. So, when the FDA came in, I understood what that meant and what had to be done. So, I was a valuable asset to that company.

And what was a blast about the job? You said it was a blast.

It was a blast because I was highly respected. I was technically, professionally respected. That is not given. That is earned. It’s kind of like—, and I make a lot of parallels to the military because people can understand that too. Anybody that’s in the officers’ corps can get to be a captain. Anybody in the non-comm corps can get to be sergeant. But you can’t get to be a general or an admiral unless you really know what the hell you’re doing.

Uh huh.

You can't get to be a vice-president or a director in the engineering world unless you really know what you're doing. And you have to earn that. And Sara's [my niece Sara Grimaldi's] biggest bitch is they discriminate her because she's young. Well, you're a young engineer. You don't have the 30 years' experience I do, kid. I said, "Don't take it as a personal insult. It's just a professional evaluation." "Well, dammit. They shouldn't discriminate against me because I'm 26 years old." "Well, yes they should Sara."

(laughter)

"Because, and this is the reason why. Because you don't have the experience I have. I've earned the stripes on my back."

Now, did you have this perspective when you were 26 years old?

Goodness no.

(laughter)

But Procter and Gamble didn't play that. Procter and Gamble did not discriminate against me. Me personally, or me professionally. They did everything in their power to make me a professional success, as Clarkson did. When I went to school, the professors at Clarkson did everything in their power to make sure the girls didn't fail because they were girls. We weren't treated any differently as far as the qualifications were concerned. We had to take the same tests. But none of the girls that went there were stupid. So, if they gave us 50/50 chance, nine times out of ten we would succeed.

Uh huh.

And I was put in that same element at P and G. I was put in that same element with Bristol Myers Squibb. I was put in that same element with Abbott Labs. These are companies that I worked for that I respect. I don't respect West Valley Nuclear because they didn't give a shit if it polluted the aquifer of North America. They were there to make money. They were a department of energy contractors and they were there to make money. And they made lots of money and so did I while I worked for them. When it comes to dollars, I made more money there than I did anywhere else. But I didn't like the do-what's-minimally-required crap. I'd never done that in my life. And I didn't want to do it there.

Uh huh. And going back to Bard for a moment – why did you end up leaving Bard?

Because they closed the plant.

Ah. Again. Okay.

Yeah. I don't put that on my resume. I do this through interviews.

Yeah.

Yeah. I've been involved in two plant closures, and a department closure. And it's not fun. Because once it's announced, you might as well abandon ship because nobody cares. Why are you going to go in and put in good work when they're going to put you out of a job.

So did you leave Bard before they actually closed? Or after?

No. No. When they closed. I worked 'til the end. And then, I got a severance package for the year that I worked there. And said, "Okay. I can live anywhere in the country. You know, I'm 30," I don't know what year it was.

'88 I got from your resume.

Okay. Then, "I'm 33 years old and what am I going to do with my life?" "Where do I want to live? Because I can live anywhere. I have a fabulous resume." Procter and Gamble, Westinghouse, C.R. Bard, I mean, these are giants for their industry. So, I decided to go back to Texas. Stupid me.

(laughter)

But I did. Because it was warm there, and I liked living where it was warm.

And was Ginger still there?

Yes.

Okay.

As a matter of fact, Ginger got married while I was living in Texas. She found the love of her life and married him. He's a retired lieutenant colonel. (laughter) Good for Ginger. And they live in a big, huge house. This big, huge mansion in Fort Worth. It's a national historic site. I mean, it's a gorgeous—it's an absolutely gorgeous house. And I wouldn't live there for all the tea in China.

(laughter)

Because it's in urban Fort Worth, and I don't need or want that. I lived in (inaudible).

So why was it stupid? I mean, you said it was stupid for you to go back to Texas. Why was that stupid?

Well, I don't like the culture in Texas. I don't like the politics in Texas. I don't like the culture. It's cultural. I mean, I've lived all over the country.

Uh huh.

And I don't like the Deep South because you're a damn Yankee, and you're never accepted because you weren't born and raised there. That wasn't true in Alabama *at work*. It was true in Alabama outside of work.

And that was because everybody at work was from somewhere else anyway?

Right. Right. And talk about multi-cultural fusioning. We had to. We wouldn't have made it work if we didn't.

Yeah.

You can't erect a plant in six months and make it work unless you work together, when you're from all over the country. But everybody had their area of expertise. And I was a quality expert because I'd run the lab there; I ran the lab; I ran the lab in Pennsylvania; I ran the lab in Alabama. And I did it very well. Because I used the principles that I was taught in Pennsylvania. It helps to know the company jargon and whatever; it's whatever organization you're in. It helps to know what the expectations are. And the one thing I remember of the thousands and thousands of things that Procter and Gamble taught me. The very first premise in every office, in every place in the plant in Pennsylvania, was you do what's right. They were called the Mehoopany axioms and there were 13 things listed. And, I honestly don't—; I mean, it was open and honest communication, decision making at the lowest possible level, participatory management. But the very first thing on the top of this credo, on the wall in every office, every conference room, everywhere in the company, everywhere in that plant was, "you do what's right." Above and beyond the standard operating procedures – you do what's right. And, if you do what's right, 99 times out of 100, it's going to be fine. And I believed that. I mean, I sold my soul to P and G. But I believed what they said. They'd never laid anybody off. They'd never closed a plant. Up until the mid-'80s. We were the first plant they'd ever closed. So, we were born, built, and closed in the span of six years. They lost millions of dollars. They sold 42 patents. The product's never been made since because it was all proprietary equipment.

Ugh.

Yeah. I know. Somebody in Cincinnati fell out of bed one day and made a bad decision. I know who that person is and I swear to God if I ever see him on the street, I will walk up to him, shake his hand, and then punch him in the face. Because he put 500 people out of work. Well, and after hearing all those axioms that—. He didn't do what was right. Yeah.

Yeah.

He didn't do what was right. And the corporation, and Procter and Gamble doesn't make a whole lot of mistakes.

Uh huh.

But this was one of the worst mistakes this company ever made. And it cost 500 people their jobs. And somebody got killed there. I mean, after they announced the plant was going to close,

you get lackadaisical, you get short time, and somebody got sucked through the equipment and was crushed.

Ugh.

And this was right after I left. I knew this guy. He was married; he had a couple young kids. It was like, this is why I left. Because I don't need to go down with the ship. It's not my ship. It doesn't have DiFrancesco on the back. It has Procter and Gamble.

You could get off.

Well, I was the captain. Military jargon, I was a captain. And I was a respected mid-level manager contributing blah, blah, blah, blah, blah. But I saw the forest for the trees. And got the hell out before they closed the plant within six months after I left. I knew they were closing the plant. That's why I left.

Yeah. Now, if we can go back to Texas for a moment here.

(laughter) Sure.

Two jobs in Texas,

Yep.

so how did you choose those?

I went back to Texas; my sister Paula lived there. So I bunked with her for a little bit. As a matter of fact, this 21 year old that's living with me now, was a baby. She was about 10 months old.

(laughter) That's neat.

And I stayed in Jessica's room, and she'd get up in the middle of the night and I'd play with her and change her diaper, and then put her back to sleep. I didn't sleep much; didn't affect me.

(laughter)

Yeah. And now she's 21 and going to Theater Camp out of my house. Go figure.

(laughter)

I came, so I went, without a job, but I had a place to stay. Ginger was in Texas, and my sister was in Texas. This is Dallas, Fort Worth. So, I had a place to stay. It wasn't like I just closed my eyes and picked. And I'd lived there before, for a year in the mid-'80s. I got a job as a new product development manager for the largest mask manufacturer in the country. The name of the company was Tecnol. They sold to Kimberly-Clark since. So, again, I was this young, bright engineer that they hired for my technical skills. And I helped turn that company. A lot. I did

everything I was taught at Procter and Gamble and Westinghouse and just made it a more mature company because it was basically a mom and pop plant that made these surgical masks and gowns. Surgical masks and drapes and stuff. It was ultrasonic welding. I knew something about that. I knew something about the plastics; the raw materials that they were using. And, my boss, one day told me to come in on the weekend and clean out the warehouse, because I had all these new developmental materials that companies had sent me to play with, and test with, and all this kind of stuff. So, I did that all Saturday. Monday, the dumpster's full of this junk and the owner comes in in his Porsche, and just goes ballistic. "Who's throwing out all that stuff?" I said, "I did."

(laughter)

"Why'd you do that?" "Because my boss told me to. He told me to clean out the development racks in the warehouse." "What did you do that for?" (laughter) And I said, "It's untraceable test material. We can't use it for anything anyway." "Oh, yes. Yes. I could have converted that stuff and sold it in Mexico." I said, "You can't do that. You can't make medical products out of untestable material. Untraceable material. It's an FDA rule." He said, "I don't care. I'm the boss." And I said, "I don't care if you're God. You are not going to make sellable material out of that stuff with my signature on it. It ain't gonna happen." He said, "I'm the boss." And I said, "And I quit." I said, "You're going to go to jail someday, sir. Not by me, but I will not work for an unethical company." And he was pissed as hell. I wanted to go out and slash his tires. But I just left. Then went to work for Abbott. It was a better company, obviously. So, that was,

Hmm. And, then you went,

I left because of the conflict of ethics.

uh huh.

Yeah. Conflict of ethics. They guy told me to falsify some records. And I told him to go to hell. And I'd do it again. I mean, it was the biggest, best, most beautiful office I'd ever had in my life. Big mahogany furniture. I mean, it was gorgeous.

Hmm. (laughter)

Yeah. Well, the guy's an asshole. And he will pay. You know, what goes around comes around. He was breaking the law. And was willing to break the law to make a buck. Major companies can't do that; they'll be sued. (laughter)

Uh huh.

And I went to work for Abbott, and I was a validation engineer for their re-agent manufacturing division. They made little table top blood and urine testers. If you go to a medical office and they tell you to put out your arm and they put a drop of blood in a machine. Those were the machines that analyzed. And my job in the quality department was to validate that what these machines said was true. It was fascinating. Great company. Fabulous plant. Fabulous facility. Gorgeous,

North Dallas, Rolling Hills; made a lot of money. Made some nice friends. And then they shut down the department.

Wow.

Yeah. It's not a pretty story; my resume. (laughter) Exit reasons aren't pretty. But that's why it is the way it is. I had every intention of graduating—, I had every intention of being a vice-president or president of Procter and Gamble. And if I would have stayed with them, I would have. But my only choice coming out of Huntsville was a rural pulp mill in Georgia. I said, "I want to quit because I don't see a future." I explored options to transfer with the company. Oh, you can go to a pulp mill in Georgia. I worked at a pulp mill in Pennsylvania. I'm not doing that again. And, this is rural Florida. Nuh uh. No. I quit. So that was my option. And I said, "Thank you. No. Here's my two weeks' notice." "You can't quit." I said, "Oh, yes I can. You don't have me on contract."

And how did you pick Bristol Myers Squibb after leaving Abbott?

I knew that the end was in sight with Abbott, so I put out feelers and I got it, I don't know how. It was through some—, I got it through a recruiter. That's how I got the job.

Uh huh.

Well, I moved from Dallas to North Carolina which was just fine with me because I'd had enough of Dallas. George Bush had just been elected governor. So I wanted to get the hell out of dodge. I knew enough about politics that I didn't want to live in a state where he was going to be governor. And I was a damn Yankee. I never fit in, socially – never because I was from New York.

But you stayed in the South though.

Yeah. I know. But, North Carolina's *North* Carolina. (laughter) There's a north in that part of the address.

Right.

But, BMS [Bristol Myers Squibb] – the plant I went to in Greensboro, North Carolina made sterile wound care dressings.

Okay.

And ostomy appliances. And I was the quality manager for the sterile side of the business. I had 80 people reporting to me on three different shifts. Running tests, incoming product, outgoing product, sterility verification. Yeah. It was a great job. Good money. Good respect. I had a very bad boss there. But you have bad bosses occasionally. Made friends for life. Joined a church. Helped build a church. Those church friends of mine from Greensboro are still my best friends. I call them every other week. Still very close with them. Joined Pilot International. I had joined

Pilot International in Huntsville; it's an executive business women's civic club and stayed as a member-at-large in these other locations. And then, joined the club and they made me president in a year and a half. Why? Because I knew what I was doing.

Uh huh.

Yeah. That was pretty obvious. Yeah. Because the bylaws normally say you have to be a member for so many years and be on the executive board for so many years. Oh, no. We went around that because I knew what I was doing, and I had a vision for the club. So now, I was only working 50 hours a week. So I had time. So I did a lot of church work and I did a lot of civic work in Greensboro. And I loved it. But I knew when I went to Greensboro that I was only going to be there for three to five years. I had no intentions of settling there for life.

And why did you know that?

Because I wanted to come to Chicago.

Ah.

At that point in my personal life I knew that I was going to make a move to Chicago.

Okay. And so, you left Bristol Myers Squibb in '93.

Uh huh.

And that's because at that point you were ready to move to Chicago?

Uh huh.

Okay.

I was laid off. I was formally laid off. They eliminated the position. So, I had planned to stay there five years. But I stayed there three because they laid me off. And I had a severance package and outplacement support, and I said, "Fine." I'll use the first month of the outplacement support here in North Carolina while I pack my bags, and then I'm going to use the rest in Chicago. And I did. That was a great cross-country trip because it was October and the Adirondacks were in full color. Or, the Appalachian Mountain range was in full color. It was spectacular. You know how it is in September in Potsdam.

Yeah.

It was like that for, like, seven/eight hundred miles. Eighteen hour trip. It looked like God spilled paint on the hills. It was incredible. And then I had a fully packed car, going up I-75. Well, that was one of the best trips I had. Yeah. I've seen most of the country. And I will see it all before I die. I have nine more states to go.

That's great.

And then, I get to go back to Europe.

Also sounds good.

Yeah. Got to have a plan.

(laughter) So, you went on this fabulous cross-country trip from Greensboro to the Chicago area.

Never been here before. Had friends to stay with. And they said, "Oh, yeah. We'll put you up." And I'm thinking, "Okay." Then, I got a job soon. Like within a month. And then wanted a bigger space, so moved to a bigger rental; I rented this townhouse that I now own. And the two big jobs I've had in Chicago, I don't even remember. Were with, I'm looking it up because my head's getting tired now. No – it's on my resume. But the biggest ones were with Hudson RCI, Hudson Respiratory and Ferris Manufacturing. And in both of those cases I was either the manager or director of QA. Quality Assurance and got them ISO 9000 certified inside a year in both cases. Very sellable skill obviously. But both of these were mom and pop places, and I was hired and laid off within a year/year and a half because I'd gotten them certified and apparently they didn't want to pay my salary after that. I wasn't a contractor. I was their Quality Director/Quality Manager. I'm the one that worked with the FDA. I'm the one that worked the ISO certifiers. And my name's on both of their certs, as you walk into their office. But in '98 or '97 when they said, "Oh, your services are no longer required." I said, "Never again." And I started my own consulting firm. And I do ISO 9000 and FDA compliance quality support for businesses on my schedule. And I do an awful lot of it my pajamas.

How nice.

In the middle of the night at my computer because that's what a lot of it is. A lot of it's documentation and paperwork. The biggest job I've had, contract job, was with a company that was shut down because they ignored the FDA. (laughter) And the FDA shut them down. Well, that's what happens when you make regulated products and you don't follow the regulations. So, I with a team of other consultants helped rewrite this company's quality system. Wrote them a new quality manual, new testing procedures, new validation procedures. And every Monday morning I'd get up at five and drive up to Wisconsin and spend four or five days up there and then have the weekend back home. I did this for a year and a half. And bought this house; instead of leasing it, we bought it.

I'm looking at the time again, and I would be happy to continue but you said you're sort of getting tired and you also have a deadline here.

I have a doctor's appointment. (laughter)

Yeah. Do you want to continue?

What time is it?

It is 20 to 2:00 my time.

I've got about 15 minutes.

Okay. Alright.

Where would you like to go next?

Well, I've got one more career question which is to whom, if anyone, have you turned for career guidance along the way?

Several. I trust a handful of my former bosses for career questions. I trust the Society of Women Engineers; they've given me a lot of leads and a lot of contacts. And I've done work, professionally, for the Society of Women Engineers. So, I don't have a problem picking up the phone and calling these kinds of people. I've called some of the people at Clarkson. I called Bob Plane once. He was the president when I was at school. And I used to babysit his kids. So, I called him. I was in Arizona; I said, "Dr. Plane, this is Diane DiFrancesco." "Oh, DD. How are you? Where are you? What are you doing?"

(laughter)

It was like I saw him last week. "Okay." I said, "I have these two job offers and I'd just like an independent opinion. And I trust your opinion." And he goes, "You can do anything you want DD." (laughter)

(laughter)

"Whatever makes you happy." I said, "I never heard that out of your mouth at school. I heard, you go to class, and you do your homework. That's what I heard." And, he goes, "Yeah, well, but that was then and this is now. And, I'm happy—"

How long after graduation was this?

Oh, about ten years maybe.

Wow, that's pretty amazing.

Dr. Broughton and I stayed very close. As a matter of fact, this copy of *A Clarkson Mosaic* that I bought—, I must have been on campus in July of 1996 because he signed it for me. And, I will send this to you.

That's neat.

Because it's a very nice inscription.

I'd be interested in seeing that. That's really neat.

Yeah. "Thanks for being a good friend over the years. Bradford B. Broughton."

Yeah. So, if we've got less than 15 minutes left, why don't we turn to your personal life after Clarkson.

Okay.

You start wherever you want to start.

When I graduated from Tech, I had four other siblings in college. My family is still based and centered out of North Tonawanda, New York. My parents still live there; two of my siblings live there. Starting in 1979, my sisters started to marry other engineers. (laughter) And from June of 1979, there was a marriage in my family every year for eight years. So one of the very important things in my personal life is being an aunt. And I can talk ad infinitum about this. But there are 17 grandkids in my family. And I'm the only one not married and don't have my own children. And that's okay. I was okay with that before. But I'm even more okay with that now. I take this job of being an aunt very seriously. And I always talk to the kids like an adult. I never talk down to them. Case in point would be Jacob Grimaldi. Jake is 12.

He's 12, right.

Yes. Yeah, Jake's 12 and uh oh, "We gonna talk about colleges again, Aunt DD?"

(laughter)

You know, "If you want to, Jake." But even when he was younger. Like, when Sara and Tony [Jake's older siblings] were up at Clarkson, and even before he went to school, I'd say, "So, Jake, what do you want to be when you grow up?" That's my classic line. That's the Aunt DD line. "What do you want to be when you grow up?" And Jake said, "I want to be an astronaut." And I said, "Well, if you want to be an astronaut, you probably should get an engineering degree." "Oh, like Sara and Tony?" "Yes. Like Sara and Tony." "And where do Sara and Tony go to school?" "Well, they go to Clarkson, Aunt DD. Look, it's on this shirt." And I said, "Who gave you that shirt, Jake?" "Well, you did, Aunt DD." "How come you gave me a Clarkson shirt?" I said, "Because I went to Clarkson too." "You're an engineer too, Aunt DD?" "Yeah. I'm an engineer too." "Really? What do you do?" I said, "Well, I make medical products that help save people's lives. I'm a biomedical engineer. I'm not going to be an astronaut like Grandpa. I'm not a rocket scientist like Grandpa."

(laughter)

And he says, "Yes. I know all about Grandpa's rocket ship." I said, "Really? Tell me more, Jake." He said, "Grandpa's rocket ship goes very fast." I said, "How fast?"

(laughter)

“Two hundred miles per second.” And I said, “Okay. So, you read the Agena technical description. Huh, Jake?” I mean he was just four or five years old. He said, “No. Grandpa taught me that.” “Good. What else did Grandpa teach you?” “He taught me how to fish.” I said, “Good. You go fishing with Grandpa now, okay Jake?” “Okay.”

That’s really neat.

But stay with the Grimaldis. When Sara was in grade school, I said, “Sara, what do you want to be when you grow up?” And she said, “Well, I want to be a nurse.” And I said, “Oh, that’s wonderful. Aunt Paula’s a nurse.” She goes, “Yeah, Aunt Paula saves lives every day.” I said, “Yes, she does.” I said, “So, why don’t you want to be a doctor?” She says, “Only boys can be doctors, Aunt DD.” And I said, “You know Sara, Grandpa told me once that only boys could be engineers. And, you know something – Grandpa was wrong.” “And you could be a doctor, Sara, if you want to do this.” And, she said, “Well, you know, Tony can be the doctor, and I can be the nurse.” Tony, her younger brother. And I said, “No, Sara. You can be the doctor, and Tony can be the nurse.” And then the conversation went somewhere else.

Uh huh.

But Sara went to Clarkson, obviously, because of my influence. I mean, I really didn’t push that, but once she got there, she wanted to be a math major because, I don’t know, she wanted to be a math teacher by the time she had gotten through high school. And I said, “That’s great. Aunt Jeannie’s a math teacher. We need good math teachers. But why do you want to be a math teacher, Sara? Now that you’re 18 and an adult, I’m going to talk to you like an adult. Why do you want to be a math teacher?” “So I can get the summer off.” I said, “Wrong. Wrong reason to be a math teacher. If you would have said you wanted to increase the mathematical knowledge of people across the world, that would have been a good answer. But doing that because you get the summers off. I don’t see you as a lazy bum, Sara. You’re the valedictorian.”

(laughter)

“Well, I’m going to go to Clarkson and be a math major. Be a math teacher.” “Okay. Fine.” End of her freshman fall semester, “Aunt DD, I’ve changed my major.” “Really? To what.” “Mechanical engineering. You know, Aunt DD, it’s the same stuff. I’m taking the same stuff as the mechanical engineers and they get more jobs and make more money.” “Yes, Sara. They do.”

(laughter)

“Good.”

You’re obviously an incredibly proud aunt.

I am, but I’m not a parent. But that is one of the things I am most proud of is influence, positively influencing my nieces and nephews. Because they get wrong messages every once in a

while. I mean, my niece Nicole from St. Louis said she wanted to be, I don't remember. She said, "Well, maybe I'll be an engineer," because her Dad's an engineer; a working engineer. And I said, "That's great." And her father said, "Oh, no. You don't have to do that. You just have to marry the right guy." And I turned around to him and I said, "Don't you dare tell her that." I said, "Nicole, you must be able to support yourself. And if you want to be an engineer, I will help you go to engineering school." And her father's fuming. And I said, "I heard that same crap from Grandpa, and you know something? It was wrong then, and it's wrong now."

Yeah.

Yeah. She's probably going to be a nurse. God bless her. I'll send her care packages to nursing school. I don't care. You know, whatever. You know, Jessica's staying here because she wants to work in the front side of a theater. Well, God bless her. I don't have that patience. You know? I'll buy a theater subscription. I'll build the props.

Right.

But be a creative director. Nuh uh. That's not on my list of things to do. But obviously her living with us this summer has helped. So that part of my personal life is very important. What I've done for church has been very important in my life. I was born and raised Catholic; I became a born again Christian in Texas. That's one of the things that happens when you live in the Bible belt. But I try very hard now to be a practicing Christian. It's very hard to practice what you preach. If you use that, if you use the Bible as a measuring stick. Because it talks about respecting people. I mean, not in so many words, but that's the intent. If you're really a good person and a good citizen, then you're going to respect other people. And do what I can do because I have been privileged as far as finances are concerned to help others. I mean, I used to send care packages to my nieces and nephews all the time in college. They loved it. When my nephew, Don, was at the Naval Academy, I used to send him a shoe box full of stuff every month. And he said, "That was fabulous, Aunt DD. I'm the only one in my dorm that got stuff." Candy bars and I said, "Uh huh."

So, in addition to being a proud Aunt DD, you're also very popular Aunt DD, I see.

Well, but I don't want payback. I said, "When you're in my position, you do it for somebody else."

Yeah.

You pay it forward.

Yeah.

I don't want anything in return. What I want you to do is grow up and be the best "x" you're going to be, whatever that "x" is. They're all not going to be chemical engineers like me. I don't think any of them will be. (laughter)

Uh huh.

Why would anybody causally pick the hardest major? I mean, it just doesn't make a whole lot of sense. But, well, it's not the easy way out. But my family doesn't take the easy way out. I wasn't trained to do that.

I can see that.

Yeah. Well, and the other thing, the other personal activity that I spend a lot of time on is the stuff I do civically with the Society of Women Engineers. I've had several positions in the national organization with SWE. I've done some stuff here in Chicago. I've been an officer in Pilot International in two different cities. Because I had the time, and the money, and the energy to devote to making the world a better place. And SWE's mantra [is] to help other women engineers. And Pilot's mantra is to make the world a better place. Their major philanthropy is brain related disorders. And that hits close to home. I had an aunt that died from multiple sclerosis. My father's had Parkinson's for 25 years. And these can be cured.

Right.

I'm a biomedical engineer. I know they can be cured.

Yeah.

And the cure is in the labs. Well, it's going to take money and somebody with some assertiveness to make it happen. You know? Procter and Gamble has an artificial skin in phase III FDA clinical trials. That means they won't have to take skins off cadavers to do skin grafts. That's a good thing. (laughter)

Yeah.

My Dad's life was saved by those vascular access shunts I used to make for CR Bard. I mean, when he was coming out of that, he was trying to explain this procedure to me. I mean, the guy was almost dead. And I said, "Yeah, Dad. I know. I know. I used to make those vascular shunts for Bard. I know exactly what you're talking about." "Oh, yeah." "Remember, this is—, I'm Diane. I'm the biomedical engineer in the family."

Yeah. (laughter) And what about your own family life? Your partner and her children?

That's been another blessing. We met in Texas 25 years ago. And she had two little kids that were adorable. So, we became very close friends and stayed in touch for many years. We lived in different states. When I moved from Texas, she went to Detroit. I moved to New York, I moved back to Texas, she moved to Chicago. I moved to North Carolina. And then, I finally moved here in '93 because, because it was the right thing to do.

Yeah.

She has two grown children. She has a gorgeous nine-month old granddaughter who we spoil and send home because that's our job.

Uh huh.

And what did Aunt DD get for this little bundle of joy at the baby shower? I got her a piggy bank that said "college fund."

(laughter) That's great.

And what am I going to give to her on her first birthday? I'm going to give her a couple shares of stock.

That's really neat.

Yeah. Because that's the right thing to do. I'm in a position to do that. I've made her [my partner's] life and her children's lives much, much better. They've lived higher on the hog. (laughter) They've lived up to my standards. When we have dinner, we sit down as a family. And Christmas and Easter everybody's here. And she and I cook like crazy for our, her kids and our extended family here. Our group of friends here. I remember last Easter, I made a leg of lamb. (laughter) I've never done that before. But it was pretty good.

(laughter)

I'm a good cook. I love to cook. I mean, chemical engineering and cooking are very closely related. And I set the table formally because there were only eight of us for dinner. And I used my grandmother's sterling silver, and my partner's daughter's boyfriend said, "Oh, my God. This is beautiful." And, I said, "Thank you. That's my family's silver." And, my partner's daughter said, "Oh, yeah. That's DD's Grandma's silver." And I said, "Yes. And, it's worth more than your car."

(laughter)

"So, shut up and enjoy the meal." You know, "This is my high holy day. You can be an atheist but dammit Easter's my high holy day."

Right.

"You don't have to go to church with me, but you know, a little respect here girl."

Yeah.

Yeah. It's interesting. It's different than I expected.

When we were talking outside of this conversation, you had said that you're not out at work, it sounds like at all.

Absolutely not.

Yeah. And you made that decision a long time ago?

Yes. I did.

Yeah. Can you talk more about that?

Sure. I don't think gay engineers, and this applies to men and women, get equitable treatment if they are out of the closet. The only thing I can analogize it to that makes any sense is where black engineers were 34/40 years ago. I mean, I worked with black engineers from Tuskegee and they were fabulous engineers. I didn't care that they were black because I wasn't raised to discriminate. I mean, my father and his family had a hell of a lot of discrimination because they were the dumb Italians from the wrong side of the tracks.

Yeah.

Well, my Dad grew out of that. And he made himself a successful engineer. And nobody helped him do that. I think that sexual orientation is the last venue of equal rights that hasn't been equalized in this country. Women got the vote in the early 1900's. The feminist revolution happened in the '70s while I was going to school and I did many things, but I didn't burn my bra.

(laughter)

Well, I just didn't think that was the right thing to do. Who was going to replace my burnt bra? Huh? I would pay for it; not anybody else. But I believe in equitable treatment of gender. I believe in equitable treatment of sexual orientation. But it freaks people out. I do understand why. Because I was raised in the conservative Roman Catholic Church. I was raised in a very conservative, patriarchal house. And my mother was a second class citizen from the day she married my Dad. And I never wanted that. I never wanted to be a wife. There are no wives in this house. We don't do that. We are partners. We are equal partners. And I don't believe the conservative, right-wing, engineering world is open, would not necessarily welcome with open arms somebody that is obviously different from them. They're not like that. Ninety percent, 99% of the engineers I worked with in my 30 year career would never speak to me again if I came out of the closet. And it's not because they dislike me professionally. It has nothing to do with my professional credentials. It has to do with their personal preferences.

And have you known, over the years, engineers, or have you worked, over the years, with engineers who are out?

Yes. Very, very few. But that confidence was earned over discussions outside of work. It was never discussed at work. There was a gay couple, there was a picture of a gay couple in one of the Clarkson magazines about four or five years ago.

Yeah. And actually, I think I may have mentioned to you when we spoke yesterday that there now is a Gay Straight Alliance at Clarkson.

Great. Good. Progress is being made.

And there are certainly openly gay and lesbian individuals here.

Major difference from when I was there. Well,

Were, at Clarkson, I realize, that at that time you were engaged to a man. (Inaudible).

(Inaudible). The answer is I don't know.

I mean, were there openly, but you're not sure.

No. Absolutely not. Not open. No. I don't think so. I'm trying to remember; no. No. Even with the guys. I mean, again, there were 600 men there. No. No, it was not cool.

Yeah. And to what extent are you out to your family?

To my siblings.

Uh huh. But not nieces and nephews, and not parents?

Mmm, my parents, not yet.

Yeah.

I come from a very smart bunch of people.

Yeah.

So, I don't lie, but, yeah. You've got to do the right thing. Remember, P and G taught me to do the right thing.

Right. Yeah. And let me ask you one last thing because I know you need to go, which is: what's your sense of what is ahead for women in engineering?

I hope, and I will do everything in my power to promote women in engineering. I mean, that is SWE's mission in life. I know we are still a minority. There were five percent women engineers in the field when I graduated; there's now 10 percent. Which is a hundred percent increase. But it's still only ten percent. It is not encouraged in most grammar schools and high schools. And again, if I can do anything to change that, and I have. I've done some career days here in Chicago. And that's a blast. I mean, that's just an absolute blast. But there's some social stigma to being a smart, math girl. It's, again, still not cool. And as long as women's professional careers get interrupted, "interrupted," what a word, with pregnancies, that puts you at a time

disadvantage. There is no way to take nine months out, two years out, God forbid five years out to raise young children and then come back and be in the same step as the guys who didn't have to do that. The fathers that didn't have to do that. There's not easy answer for that. I mean, I tried to adopt for decades and couldn't. They just wouldn't let single women adopt. So I vented that by being a wonderful aunt.

Yeah.

That maternal stuff, and vent it towards my nieces and nephews. It's a good outlet.

Yes.

Uh huh. Does that answer your question?

Yeah. It does. And, you know, I certainly have other things that I could ask you, but it's five after 2:00 my time.

Which means I have to go.

I want to thank you so much for taking the time to do this.

Thank you.