RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

NEW BRUNSWICK

AN INTERVIEW WITH ERNEST JELLINEK

FOR THE

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INTERVIEW CONDUCTED BY

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TRANSCRIPT BY

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Shaun Illingworth: This begins an interview with Ernest Jellinek on January 16, 2012, in Lions Gate CCRC, Voorhees, New Jersey, with Shaun Illingworth. Thank you very much for having me here today. To begin, could you tell me where and when you were born?

Ernest Jellinek: Okay, I was born in New York City in 1921, August 16th, to be more precise.

SI: Can you tell me your parents' names, for the record?

EJ: Okay. My father's named Charles Jellinek and my mother is Elsie Jellinek. Now, those names were Anglicized. They actually came to America as children from Hungary. They were eight years old at the time, although four years different. My father's family came over in 1904 and my mother's family came over in 1908. They grew up in different parts of Hungary, where, apparently, their families had been for several generations. In fact, I traced my father's family back to a small town about eighty miles west of Budapest called Dunaalmás. I learned a lot about that by going through records and none of it was supplied by my family, which was quite surprising. My father's father lived with us for several years while I was a teenager and I played chess with him often, but he never talked about the old country. I was too young and too naïve to think about asking him questions about how things were over there, why they decided to come over, how they managed to come over. So, I never learned anything about that.

SI: None of the other family members shared anything about that.

EJ: Well, there's nobody else, actually, because just my grandparents' family came by themselves. So, any other relatives that they had did not come over and were lost, as far as we know. There was no contact. However, in later years, I obtained information about my father--my mother gave me his birth certificate, for example--and that got me curious. So, I went through all the genealogical channels, which you're probably familiar with, the Mormon Church and so on. I found that they had microfilmed the vital records from the synagogue near the town where my great grandfather lived. So, with those records, I was able to find the name of my great grandfather, which I did not know, his wife, the fact that they had seven or eight children, none of which I knew about, and, particularly, that I found that four of those children and my great grandfather died within six months of each other, apparently from an epidemic that was going around there. Strangely enough, my grandfather never told me about this. I mean, you would think that it was a big thing in his life, but he wiped it out, but I did find that from the records. So, in 1984, I had enough information about this that my wife and I went to Hungary. We found this town. We found the synagogue that they went to, which the Nazis had converted into a museum of Greek and Roman sculpture. We found the cemetery that he--that's my great grandfather--and his children were buried in, although we did not find their tombstones. It was all overgrown. We found the house that they lived in, because it was such a small town that the houses were just identified by a number and the name of the town. So, they lived at 41 Dunaalmás, D-U-N-A, which stands for Danube, and Almas, A-L-M-A-S, means apple. So, it was "The Apple of the Danube" that they lived in. This town was right on the Danube River and their house was on the side of the road that faced the river. So, their backyard was right on the Danube River. That was amazing and, when I brought a picture back of the house, my father recognized it. He was in his mid-eighties at the time and he had left there at age eight. It was great.

SI: He did not have any stories about his life there, before he came to the US.

EJ: Not at all, not at all, same with my mother.

SI: Did any of the family history on your mother's side come through?

EJ: I have the birth records of my grandfather and we never went much further, never able to find as much information as I did for my father. I think two things made the difference. One is that my father's name was very unusual and that it was a small town, whereas my maternal family's name is Wunder, W-U-N-D-E-R, which is German for wonder. So, a lot of people have that name and they came from a larger town and I was not able to find out anything more, but I did know both of my grandfathers. So, we did have some time together, but not much at all of the old country. In fact, strange thing about it, [laughter] my mother's family came from the eastern part of Hungary, actually northeastern part of Hungary. When I asked my grandfather, "Where'd you come from?" he said, "Hungary, Poland, Russia, Ukraine." So, to me, that meant he traveled. Well, I didn't find out until much later that what he meant was, where he lived was taken over by different countries. Eventually, the part that he was in was Austrian-Hungarian Empire. It turns out, also, that my family name, which would be Jellinek, is in the Czech language. So, even though they lived on the Hungarian side of the Danube, just across that was Czech-speaking people. So, my great grandfather may have come from the Czech area, because of his Czech name, which, incidentally, translates, "*Jelen*" means deer, animal, and the E-K is a diminutive ending. So, I'm a "little deer." [laughter] We have a few ladies who are refugees from the Czech area living here, in Lions Gate CCRC, and one of them in particular takes great delight--first time she saw me, she says, "Mr. Jellinek, did you know that your name is Czech and that it means 'little deer?'" [laughter] So, yes, we talked about that a bit. So, every time she sees me, she always says, "Mr. Yellinek," because that's how they say it over there.

SI: Jumping ahead a little bit, you knew your grandfathers growing up. Did they learn English or were you speaking to them in their native language?

EJ: They both learned English. They spoke with an accent. In my younger days, they spoke Hungarian to each other. Apparently, that was not a Yiddish-speaking area, so, they spoke Hungarian. Some of the vital records are in the Polish language and some in the German language. In fact, German is the language of Austria, so, in Austria-Hungary, it was their official language. So, many of the forms that I saw, with the birth records, for example, the column headings were in German, although the writing was script, whatever it happened to be, in Hungarian.

SI: After both families came to the US, did they settle in New York City, that area?

EJ: Yes. They settled in New York City. There's a Hungarian section, or there was a Hungarian section. I'm not sure exactly where it was. We were there many times, because, although my parents married and moved away, we went back to visit; as I recall, somewhere around 83rd Street, in that area, I believe on the west side, but I'm not positive. I should've looked that up. So, they settled in the same section and my father, apparently, met my mother there. They were

both determined to assimilate, so, they spoke English perfectly, without an accent. My father worked his way through engineering school, Cooper Union, and he graduated in 1920. He got a job at Con Edison [Consolidated Edison, the New York City area power utility company] in New York and he worked there for his entire life.

SI: Do you know what he did for Con Edison?

EJ: Well, he was a mechanical engineer. So, he did design work for these gas holding tanks. You've seen these big tanks they have; even in New York, I assume, there are areas. I don't think they're used anymore--very large circular thing, with steel columns along the outside, and then, there's probably metal, a balloon sort of thing, that rose as they filled it with gas, and as the gas was used it went down. So, that's how they stored the gas. So, he was involved in designing that and distribution, and so on. Fortunately for us, the Edison Company had good employment all through the Depression. So, we did not feel the Depression. In fact, I didn't even know what it was. See, in the late '30s, I would have been sixteen, seventeen, eighteen.

SI: What about your mother? Did she ever work outside of the home?

EJ: I believe so. I'm not a hundred percent positive. She talked about being a dressmaker, possibly a milliner, but very little of that. Ever since I was born, she did not work.

SI: Did you have any brothers and sisters?

EJ: Yes, I have one sister, just the two of us, and she passed away about four or five years ago. She left a daughter, who still lives in New York, but she's like a daughter to me now, because both of her parents are gone. She had a brother, also, and he's gone. So, we see her quite a bit. In fact, she's very friendly with my daughter. In fact, my daughter was up there visiting this past weekend.

SI: Was your sister older or younger than you?

EJ: She was about a year-and-a-half younger and we sort of had a good time together. We used to wash and dry the dishes together and sing and stuff like that. Well, I was pushed through school, because, for some reason or other, I was able to read and write and do arithmetic even before I was in kindergarten. So, when I went to kindergarten, they recognized that and they used to try to keep me happy by sending me up to the first grade to read for the teacher, stuff like that. So, I got pushed through elementary school, and then, into a rapid advanced junior high school, and then, three regular years of high school. So, I graduated James Madison High School in January 1937. So, my sixteenth birthday would be in August '37. So, it was before my sixteenth birthday.

SI: You were fifteen when you graduated.

EJ: Fifteen-and-a-half, yes.

SI: Do you know how your parents met?

EJ: How they met? not exactly, except that they lived in the same section. So, that's about all I really know.

SI: Was that section the Hungarian section you described earlier?

EJ: Yes.

SI: Once they got married, did they move out right away, when you were born?

EJ: Yes.

SI: Had they already moved out by that time?

EJ: They had an apartment in Brooklyn. I remember living there. It was near Fort Greene Park. I remember when my sister was born--big excitement. I didn't know she was coming, but I was only, like, one-and-a-half when she was born, but I remember some excitement. In 1925, they bought a house in Brooklyn, further out in Brooklyn, in Flatbush. It was actually 1462 East Seventh Street in Brooklyn. It was a two-family house, brick. It was apparently a new section, because the roads were all dirt at that time. I remember the tradesmen coming through with horse and wagons and I was lucky enough to pick up horseshoes from time to time. So, I remember living there, and they paved the street and we had a nice life there.

SI: Did they have electricity when you first moved in?

EJ: Oh, yes. It was modern in all respects. In fact, I have a picture here. It's two-family. One family lived upstairs and one downstairs and it was attached to another identical unit on the other side. Then, there were three such buildings, with a two-car driveway between each of them.

SI: Did your family own one unit or did they rent?

EJ: No, they owned the whole house and they rented out the other unit. So, I guess that was their idea of having rental income. I remember, we lived in the downstairs part of it, which is smaller than the upstairs, and then, later on, they moved to the upstairs and they rented out the lower part, which gave us more room. One nice thing about that house--my dad was a tennis player. I don't know where he picked that up, but he went out and played with men in various locations, but he also taught my sister and myself to play. At that time, in Prospect Park, which was the main park in Brooklyn, the city set aside one grassy area for playing tennis. They did not provide tennis courts, like they do today, but they chalked off tennis courts on the grass. If you had your own net, you could set that up. So, my father bought a net. They had a building with lockers, so, he stored the net there, and weekends, we would go down, we'd play tennis, we'd picnic in the park. The net was set up pretty much like a tent; the poles at the sides have spikes driven in the ground and they had ropes from the top with pegs. He drove them in the ground, tightened it all up. It was good. So, I learned to play tennis on grass.

SI: Tell me a little bit more about the neighborhood, what it was like, what your neighbors were like, economically, ethnically, that sort of thing.

EJ: Right. That's a good question. I would say we were all in somewhat similar economic circumstances, as far as I knew. People who had--it turns out that on our side of the street were mostly brick houses. On the other side of the street were mostly frame houses, smaller, what we called bungalows. There were a lot of young boys around, in various ages. So, we all played ball together. We had ball all the time. We played what they called punchball, which you played like baseball, except you punched the ball and ran the bases; stickball, same way. We played touch football and there were two guys across the street, the Day Family, D-A-Y. The older brother was a fireman, so that they all worked toward Civil Service types of jobs. That's why they were economically sound. So, he was like the leader. He was a little older than everybody. He had a younger brother who was similar, except that that guy was young enough to be in high school with me. He eventually went to Pratt Engineering School and I believe that he ended up working for the city, in engineering. Let's see, the man next door to us had a printing business, which apparently survived, because I mentioned that I graduated from high school in January, but I couldn't go to college until September, because they always start in September. So, those six months or so, I had a part-time job with this man. So, I ran errands. I learned about the printing business from him. He was in the clothing district of Manhattan, so, a lot of his printing was for them, for labels for the garments, things of that nature. So, I worked for him in the afternoons, and then, I went to night school at Brooklyn Technical High School, just to keep sharp. I took a course in surveying and I forgot what the other one was--solid geometry, I think was--that sort of thing. I originally had intended to get into Cooper Union, which was a free engineering college, but competitive. They took in a hundred students each year, but you had to take their examination and finish within the top hundred. So, I thought I was a genius, my parents thought I was a genius and all that. So, we just counted on that. We didn't apply anyplace else. The time came, I took the test and I did pretty well. In fact, they notified me, "Sorry, but you came in 125th out of two thousand," so, not too bad, but no brass ring. So, my dad knew some other people, who told him about Brooklyn Poly[technic] and, at that late date, they made some arrangements. They took me in to Brooklyn Poly. Brooklyn Polytechnic, it was called, which, incidentally, is now part of NYU. Several years ago, they merged with NYU. So, it's now called Polytechnic Institute of New York University.

SI: Going back to when you were growing up in Brooklyn, was there anything that sparked your interest in engineering? Obviously, your father was an engineer.

EJ: Yes.

SI: Anything else?

EJ: Yes. I liked to tinker with things. My father had a workbench and tools and I always helped him with what he did, but I liked to figure out things. In fact, at first, it was more mechanical than anything. We had a chime clock, about so big, and I had to find out how it worked and all that. I took it apart and put it together again. I remember, there was some big attachment we had on our furnace that I decided I had to know about. [laughter] So, I was able to take that apart and figure it out and put it together again, stuff like that, but, then, I got more interested in electrical

things. I was never the way some kids are these days, being really into hobbies. I didn't want to build a radio ham station, stuff like that, but it's more like doorbells and spark coils and such, but I was interested, mentally, in wanting to know about electronics. I felt, at that time, that electronics was going to be the big thing in the industry, so, that's what I wanted to learn about. It turned out that, at that time, the engineering courses were pretty much behind. So, in Brooklyn Poly, I learned lots about motors and generators and batteries and such. We had, I guess, one or two courses on vacuum tubes and thyratrons and such. So, everything else I had to learn as I went along in my career, but I was a good learner. That was the important thing. When I graduated--before I go on, anything else you want to know about those younger days?

SI: You said your father's employment was not really affected by the Depression. Was there any way, though, that you saw your family being affected by what was happening, or your neighborhood, any changes that the Depression brought?

EJ: Not really very evident, at least to a young person. For all I know, maybe people went to bread banks or whatever. I don't know, but everybody seemed to be eating and healthy and out playing, and so on. I mean, nobody had a lot of money. We went to the movies for a nickel. We went on the subway for a nickel. We'd take the ferry across to Staten Island for a nickel. So, lots of ways to entertain yourself with very little money. I had a friend that we knew--I mentioned we lived near Fort Greene Park earlier. So, this was a young fellow that I liked and we got along pretty well, but his family moved out into Queens, but I learned to ride the subway. So, over the weekends, I would put in a nickel and ride myself out to Queens and walk a few blocks to his house. We'd spend the day together and back home again. We did a lot of walking. We played a lot of ball. As I said before, we had a lot of empty lots that we used for ball fields. The guys on my block, we'd gather together a baseball team and they would challenge people from another block. We'd get together and play baseball, stuff like that. So, I was into athletics pretty well, but it did turn out that, generally, I was the guy who had the baseball, I was the guy who had the football, and so on, and I guess they liked me for that, among other things.

SI: It sounds like you had a lot of freedom to go where you wanted to go, early on.

EJ: Yes, pretty much, and nobody was afraid of traveling the subways like they are now. Things were a lot different. My parents were a little on the scared side. They cautioned us about drugs, for example. They were worried about my sister being raped or something. They were funny people in this respect--although they were enterprising enough to be able to make their way into the world from this strange land, they were still backwards. They were afraid of this, afraid of that, and so on. So, they kept pretty much to themselves. They didn't have many friends, as I recall, and, mostly, weekends, we would go visit the grandparents.

SI: Were there any what you might call "old world" traditions carried on in your family or anything from Hungary, cooking, language?

EJ: Cooking, yes. My mother made favorite Hungarian dishes, like Hungarian goulash, which she called chicken paprikash, which is stewed chicken with paprika, and she made her own egg noodles. I remember, she mixed up dough and took it on a spoon and dropped off pieces of it into boiling water and I loved that, with those egg drops and the gravy from the paprikash. They

also made--I think my grandmother invented frankfurter goulash. So, instead of buying a chicken, she made frankfurters, with tomatoes and onions and potatoes, and we loved that. So, that was a big treat when we went to visit my grandmother. When I speak of my grandmother, I'm talking about my maternal step-grandmother, actually. Both grandmothers died before I was born, in the flu epidemic in 1918, somewhere around then. [Editor's Note: Between twenty and forty million people perished in the influenza (also known as "Spanish Flu") pandemic that swept the globe from 1918 to 1919, following the end of World War I, including an estimated 675,000 in the United States.] So, I never knew my grandmothers. My paternal grandfather did not remarry, but my maternal grandfather did and she was a wonderful lady of the old school, very outgoing and she loved us to death. It was really great. So, we went to visit her. She had a parrot that sang opera. She had a canary that she let fly around the house and we had the hotdog goulash--so, those are favorite recollections.

SI: Any others?

EJ: Now, that same--my maternal grandfather--was fairly religious, in the Jewish tradition, and they always had us over for Passover *Seder*, which they made a big thing out of, the long table. Everybody had to lean back on cushions and such. It was the tradition there. He went through the service, all in Hebrew, that none of us knew anything, what was going on, but it was a nice family get-together. A lot of that did not take on the children. My father was not religious. My mother was semi. I would say she was more superstitious than religious. She was religious from the point of view that she didn't want God to do anything bad to us, so, we had to do the right thing. "God is watching," that sort of thing, but not to the point of going to temple or synagogue regularly, any such. I had to have a *bar mitzvah*. They all wanted it. My parents, I don't think they cared too much, but my grandfathers, to them, it was necessity. So, for about four years before my thirteenth birthday, they sent me to a local synagogue school, where I learned Hebrew and such. Then, in the last year, they hired a rabbi teacher to come to the house, to teach me all the things, but, again, it was teaching by rote, which I didn't understand and didn't take to too well. So, in preparation for the reception for the *bar mitzvah*, my grandfather and father got together and they made their own wine. They got grapes, they pressed them in the basement and filled a five-gallon jug of red wine. The house we were in had a finished basement, but ours had a billiard table in it, which couldn't be taken down. So, we used the next-door neighbor's basement, finished, for the reception. So, we went to synagogue that morning and I did my thing, somehow, and we went to the reception. We had all this party stuff and I was so nervous and I got nauseous. I went home and I threw up. So, it was kind of a devastating day, [laughter] but I got myself through it, but, in terms of religion, it didn't mean too much to me, unfortunately, or to my parents, because they did not follow through by going to services or even observing holy days. So, in that respect, I got more into it after my wife and I were married. I'll tell you a little bit about that later, instead of jumping over stuff.

SI: The neighborhood you lived in, would you say it was a melting pot type area?

EJ: Yes, it was definitely multiethnic. The people next door was a Jewish family and an Italian family, these boys across the street that I told you about were Irish, and it was the same way up and down the street. We all played together. There's nothing made of religion, no anti-Semitic or anti-mick [slang for Irish] remarks, or anything like that. So, it was a pretty happy childhood,

on the outside. Now, my elementary school was about five blocks away and, of course, we walked there, walked home for lunch, walked back again for the afternoon. I didn't have any friends other than these people on the street where we were. Those who were the same age I was were in a lower class, school-wise, and those in my class were older than me. So, it just didn't work out, all the way through. Then, when I graduated from that, they sent me to this Rapid Advance junior high school, which was in Bensonhurst, which was pretty far away, but, still, we all walked, although I used to roller skate. I liked to skate. I didn't have a bike, and so, I skated back and forth, mostly, although I could walk. So, the Rapid Advance was two years. We did the entire seventh grade in six months, the entire eighth grade in six months, and then, one year for the ninth grade. Then, when I graduated from that--name of that school, incidentally, was Seth Low Junior High School. It was the name of an old political person, I believe, from Brooklyn. Then, I went to James Madison High School, which was located at 25th Street and about Avenue R. We lived at East Seventh Street and Avenue N. So, you can count how many blocks it was, down and over, but we walked it.

SI: What would you say about the quality of your education? It was probably pretty good, if you were in all these advanced programs.

EJ: Yes.

SI: Your teachers, what were they like?

EJ: Yes, I learned a lot. I did well. Things I did not do well in, in school, were, for some reason, English and history. I did all the chemistry and biology and physics and all that sort of stuff and math, but English, at that time, I hated to write, I hated to talk. [laughter] They made you get up and talk, which I didn't like to do. So, I was never prepared very well. In history, the same way--I just couldn't bring myself to it. So, I didn't learn much history. However, in New York State, we had what they called the Regents exams. So, in order to graduate, you had to pass all these Regents exams. So, I knew I had to buckle down. So, in like two weeks or so, I crammed and I learned the entire history book and I got an eighty-five on the Regents. [laughter] So, the teacher said, "I should have flunked you, but I can't with that grade." So, I passed.

SI: Growing up in the Depression, as a New Yorker, what did you think of Franklin Roosevelt, you and your family?

EJ: I think I was too young to really know anything to think about, frankly. I had heard my father say anti-Socialist type of remarks, but everybody went along with it and things worked out, somehow. So, I guess people learned to love him. Of course, he had been Governor of New York for two terms before that [1929-1932], so, I guess they knew a lot about him, but, in those days, I just did not have much awareness of things, unfortunately. I was a pretty naïve child.

SI: I was wondering also if you followed, as you were in high school and afterwards, world events, what was happening overseas in Europe, if that was a concern to you.

EJ: They didn't talk about it. The funny part about it, which is the thing that I really hate my family for, is their attitude was, "Children should be seen and not heard." We could not speak up

at the dining room table and he had a violent temper. So, yes, we were just hushed up and I've been somewhat of a loose personality type, to some extent. I liked to kid around. I liked to joke. I liked to make puns and things like that. Every time I did that, he'd get mad. So, he kept me from being Billy Crystal. You know Billy Crystal's story?

SI: Yes.

EJ: He entertained his family. His family encouraged him.

SI: I saw in the book [a book of biographies of residents of the Lions Gate community] that you were a Boy Scout. How long were you involved in that and what did you do as a Boy Scout?

EJ: Okay. I started with the Boy Scouts as a Cub Scout, age nine, and I took to that pretty well. I liked to learn things. I liked to do things. They even sent me to Boy Scout camp when I was age nine. Now, it turns out that Boy Scout camp was really for full-fledged Boy Scouts, but the executive director of the Brooklyn Boy Scout Council was a neighbor of ours. So, they got him to let me go to Boy Scout camp. Again, I was a fish out of water. I enjoyed the activities at the camp. They treated me pretty well. I learned to swim and passed my canoe test and all these sorts of things. I went for five or six years. So, to me, it was a good thing to get away and I guess, for them, it was a good thing to get me away. In those days, it cost like ten dollars a week, believe it or not, and it was an enjoyable experience. We had horseback riding. We had Saturday night council fires. We all got together, sang songs, told stories, put on skits and things. So, I came home with a lot of that and I taught my sister those songs and we used to sing them while we were washing and drying the dishes, which was our job at home. So, those were good times. Also, in my junior high school years, I was a kind of fatty. In fact, kids called me "fatty." I went away to Boy Scout camp one year and I shot up. [laughter] So, I was tall and thin, like in the picture, and my parents didn't recognize me when I came back after six weeks. So, that was a big change.

SI: While you were at high school, did you ever work, summer jobs or part-time jobs?

EJ: Yes. Let me see if I can put that together. I remember one summer job--well, let me start at the beginning. At one point, I got myself a job to sell or deliver--I forget which--*Liberty* magazines. The guy signed me up, he gave me a canvas bag and such, and I brought it home. My father says, "Take it back. You're not going to work." It was that old school mentality. So, I did. In fact, I had to return some premiums I got for taking that job. That was bad, but, as time went on, I guess they understood. There's one job I had in particular--in fact, I brought it to mind just a few weeks ago and I don't remember now whether I was in high school or in college by that time, because my age was such that they sort of blended together--I worked for a man who sold sandwiches to building construction workers. At that time, see, we lived one block off of Ocean Parkway, which was the big thoroughfare right down the middle of Brooklyn, connects Prospect Park to Coney Island. East Seventh Street, where we lived, was one block off of that, parallel to it. At that time, there were still a lot empty lots on Ocean Parkway, but construction was beginning. So, I guess it must have been after the Depression. So, they were building these apartment houses, usually about six stories high. So, this one enterprising man developed a business of selling lunches to the workers. So, he hired a bunch of kids like myself. He had a

storefront on Coney Island Avenue, which was parallel to Ocean Parkway, about five blocks away from it, which was a commercial street. So, he had a storefront there and we made submarine sandwiches. He laid out a long table from the front to the back of the store, put down paper on the tables, put down hoagie rolls, one after [the other], lined up, and we each took a pile of cheese and dealt them out on to sandwiches, pile of bologna, dealt them out. So, we made the sandwiches like that. We cut them up and wrapped them. Then, he grouped them together into boxes, loaded us into his van and dropped off one kid at a time to different apartment construction [sites], along with a cooler of soda. So, lunchtime, we'd sell the sodas and the sandwiches. It was a nice job. One day, a policeman came along. He says, "You know, you need a license to do that." So, I said--what do I know? I'm a kid--so, I told him who put us there, and so, they somehow settled it between them, because we continued to do that. So, that was a good job. Then, when I was in college--I should also mention one other change occurred in my life, that about my senior year in high school, I think, or maybe already into college, I made a bunch of new friends, which were fellows who lived--[laughter] it's strange that I hadn't met them before--but they lived right behind me on Ocean Parkway. Those guys went to a different high school, so, that was one reason for separation, but, somehow or another, you played on your own block kind of thing. The way I got to meet them was, one summer, my parents--as I said, I was in Boy Scout camps--my parents went to a summer hotel nearby up there and they brought me to the hotel for a little change of venue. They had met another couple at the hotel who they found lived right behind us and this couple had a son who was there. So, I met the son. So, that's how that started. So, I became friends with him. Then, so, from then on, I went over, I met--after the summer, I went over--met him, met his friends. There was a lot of other fellows there and we're all in the same grade in high school, but I was two years younger than them, which they never knew. I was tall. So, I just let them think that I was as old as they were. So, we all did things together, primarily playing cards. I learned to play bridge from them--strange for fellows, get together. We played bridge, we played poker, pinochle, and we told jokes. Every one of us loved jokes and, wherever we went, we'd pick up jokes, particularly if we went away for a whole summer. We'd come back, we'd write down all the jokes and come back, tell the other guys. So, we had a great time. So, I'm still a joke teller. I do a lot of that here. So, that changed me a lot. I grew up quickly, socially, although I never got involved with girls. I knew children, daughters of people we knew; I took them out to a movie or this or that. To my high school prom, I took my sister. To my college prom, I took the daughter of friends of ours, who was not a girlfriend-like. So, that's about how things were then. So, one of these guys had a job, summer job, as a bellhop at a hotel in the Catskills. So, he said, "Hey, they need somebody else. Would you like to do that?" I said, "I'd love to do it." So, he got me the job up there in the Catskills. His father was a tailor, and so, the father designed uniforms for us. Up to that point, this guy was working up there without a uniform. He's a bellhop, but people just knew him personally, but not with the uniform. So, we decided we'd have uniforms. So, his father made us nice uniforms. I did that for a couple of summers and that was fun, too, made some money. Again, I guess I met a girl there, too, that I thought was interested in me. She lived in Yonkers and we went home. In the fall, I went to see her a couple times. It's a long trip from Brooklyn to Yonkers, but, by then, I was able to drive. My father was kind enough to let me take the car, but that didn't amount to anything.

SI: Tell me a little bit more about college, what your classes were like, any professors that stand out in your memory.

EJ: That's a good subject. Well, Brooklyn Polytechnic, at that time, was very small. Our electrical engineering class consisted of thirteen fellows, just thirteen. We studied the usual subjects, which I was good in most of them. In fact, there was one other guy and myself who were the outstanding people in the class. The other guys used to come to us, ask us questions. This was not a residential college. Everybody lived at home. We were all spread out all over. So, none of us really got to see each other out of school, except for a couple. There was one guy who had his own car and he used to come over to visit me, so [that] I could help him with his homework, that kind of thing. There was another guy who he lived closer to my high school, walking distance. So, we used to get together a bit. He had the *Book of Knowledge*. Do you know about that?

SI: The encyclopedia.

EJ: It was like an encyclopedia. They called it *Book of Knowledge*, a big thing in those days. So, he had that and I liked to read it. So, I used to go over and read it, but we played tennis together and such. He had a girlfriend. I was invited to some parties with them, but I didn't even know how to dance. [laughter] So, one time, he asked me to dance with his girlfriend and I was pretty nervous about it, but, as far as school was concerned, I did pretty well, so much so that when graduation time came, which was June of '41, so, just before Pearl Harbor, the head of the department offered me this teaching fellowship, that I would teach a class of electrical engineering to mechanical engineers and that I would also take courses for my master's. At that time, master's classes were only in the evening, because, in those days, anybody who went for their master's in that kind of a school had to be working. So, the classes were at night. So, my daytime job was teaching, plus which I proctored the exams for the head of the department, I marked a lot of his exams, plus which I picked up tutoring jobs. People would come to me and say, "Hey, I need help." So, for something like five dollars an hour, I think, I was tutoring. That was supposed to be a two-year fellowship. Pearl Harbor, in December, made me think that I shouldn't continue for two years. So, I stayed until the end of June '42. That's when I went to work for General Electric Company in Schenectady, New York. See if I have anything else to say about that--do you have a question?

SI: On the day Pearl Harbor was attacked, where were you and what were you doing?

EJ: I was playing chess with one of my new friends. I mentioned there were several guys there and they each had different talents and such. This one guy was a chess player and I liked chess, so, we got together quite often to play chess, enough times that we were together as a group, we played cards together, but, like, Saturday, Sunday afternoons, I'd go play chess with him. We were playing in his house and he liked classical music, so, he had a classical music station on we were listening to. That's when they broke in about Pearl Harbor. Now, if my memory is right, at that time, we already had the draft. Is that right?

SI: Yes, the draft went into effect in 1940. [Editor's Note: The Selective Service Act of 1940 required all twenty-one to thirty-five-year-old males to register for the draft. These age parameters were expanded to eighteen to forty-five years of age after the United States entered the war.]

EJ: Yes, and they were all registered for that. They always talked about their numbers. I didn't have to register when they did, obviously. I'm trying to remember now. I would be eighteen in 1939, so, I guess I was registered.

SI: I think twenty-one was the age.

EJ: You had to be twenty-one?

SI: Yes, to sign up for the draft then. They lowered it to eighteen after Pearl Harbor.

EJ: Oh, okay, then I guess they weren't registered, either, then.

SI: If they were two years older, they might have been registered already.

EJ: Let's see, in '41, I was twenty, yes, right. So, I just turned twenty. So, that's when it happened. Now, again, I don't think any of us were worldly enough to know the significance of it, until we heard Roosevelt talk about it and a state of war existed and all that.

SI: Before that, you had not thought about whether America would get involved in the war.

EJ: No.

SI: Had you known anybody who had gone into the service already?

EJ: I knew somebody who was in the service. I'm trying to think now whether it was before that or after. It must have been before. This is a fellow I knew from Boy Scouts. Obviously, it was not during the time that we were Scouts. I can't remember. It must have been about that time, or maybe even afterwards, that he went and I heard later that he was killed, unfortunately. I don't know the circumstances. As time went on, this guy I played chess with was in the Army and he came home and he visited us in his uniform. [laughter] Funny, he talked about the fact that he was working on something secret. He couldn't even tell me the name, which turned out to be radar, which I got to work on, but, at that time, even the word radar was secret, but I remember him talking about that. Then, he went away and we kind of lost touch with each other afterwards. I knew he got married to the girl that he had been seeing. In fact, he had been seeing her off and on during the time that I knew him with these other fellows. He'd made it look like he didn't care for her very much, [laughter] but I found out later he married her. Then, one other guy turned out to be a navigator on a B-25 over Europe. I saw him after he came home, successfully. He completed his required number of missions and survived, which we're all thankful for, and I saw him a couple of times. Well, of course, that was after the war already. So, talking about--so, you wanted to know more about during the early days.

SI: If you knew anybody in the service, what you may have known before Pearl Harbor.

EJ: Yes, those are the only two that I knew about.

SI: Do you want to take a quick break?

[TAPE PAUSED]

SI: After Pearl Harbor was attacked, what do you remember about any changes on the home front that affected you and your neighborhood?

EJ: Well, I think the primary changes were involved with the rationing, although, at that time, I didn't see any great effect of it. Now, I was home only until about June--no, August, middle of August 1942. I suppose we had our meat ration and our gas ration, and so on, but I didn't notice anything stressful about it.

SI: How did the opportunity to work for GE come about?

EJ: Well, GE, among others, came around to colleges recruiting, and, of course, they were very friendly with the head of my department, and so on. So, Professor Beach recommended me to them and that's where I went. Now, another of my classmates went to Westinghouse the year before. I don't know where the others went. I don't know, I was not the kind of guy that kept contacts, unfortunately. Looking back on it, you say, "Gee, I wish I knew this guy," and so on. So, I left for Schenectady. It turned out to be exactly on my twenty-first birthday, August 16, 1942, by big coincidence. I think that was a Sunday. I was supposed to report to work the next day. Now, there was a man at GE by the name of Bill Jacobs who was a Polytechnic graduate. So, he became, like, the mentor for Poly people going to work for GE. So, he always gave us advice on what to bring, where to live, and so on, and so on. So, that overcame the initial problems of getting started. I rented a room in the YMCA, for five dollars a week in those days. I took the train, had a taxi to the Y, and that was about it. So, the system at GE at that time, they called it the Test Program, but it's like an internship. They would put new engineers in a particular job for three months. Let me explain, first of all, that what they called the GE Works in Schenectady was a mile-long row of buildings, each one devoted to a different business. So, you had the generator building and the motor building, the turbine building, industrial control building, electronic industrial controls, which is a newer building, because that concept was new, plus, they had some field locations as well. Besides Schenectady, they have other cities with GE businesses. So, they generally rotated the new engineers, three months at a time, from one business to another, depending mostly on the fellow's interests and, to some extent, of course, on what opportunities were available. So, being interested in electronics, they put me on--first assignment, which was great, being summertime, was out in a field location outside of Schenectady. We were doing work on radar antennas and we were doing test patterns, stuff like that. So, since it was outside like that, the head of the project drove his car there from downtown Schenectady. So, he picked up two or three of us and we commuted with him out to the location. Then, after that, they put me into the industrial electronics controls department and that job was involved in the factory, actually on the factory floor, with testing the products. So, in that way, we became familiar with the products. We became familiar with their idiosyncrasies, when they don't pass tests and things like that, to troubleshoot them and such. That was the kind of business, as I told you before, that I was mostly interested in.

SI: Going back to this first assignment, working on radar, do you know if you had to go through some kind of screening or security checks?

EJ: Security? Well, at that time, I don't think so, because they didn't tell us it was radar. It was just antennas, which were what we called bedspring antennas, nothing fancy, just a big flat screen and a bunch of dipoles, that kind of thing. So, what we're doing, the antenna was mounted on a rotating pedestal and we had a field intensity meter off some distance and we would take this pedestal, we'd rotate it angle by angle, and they would measure, record the measurements. Then, this project engineer would come out and he'd make some tuning adjustment, we'd rotate it again, so on, trying to optimize the pattern.

SI: At that point, did they use the word radar? Did you know what radar was?

EJ: I'm not positive. I don't think so. I'll tell you why, because of the next thing I'm going to tell you. So, it came time for my next assignment. I went to see the guy who does the assignments and he said, "I've got something interesting for you. I want to find out if you're interested. You don't have to take it if you don't want to, but here's the story. We're making a product for the Navy. It's secret. I can't tell you what it is, but, if you accept this assignment, we'll teach you all about it. We'll train you in it and you would become a field representative for us. You would go to various Navy yards, and possibly overseas, to work on this thing, to help the Navy with it." So, I said, "Great," [laughter] sounded exciting to me, even the overseas part of it. So, I said, "Yes." He says, "Think about it." I went back the next day, said, "I'll take it." [laughter] By that time, if I can back up a bit to the personal aspects of things, so, I'm living in the Y and I meet other guys, engineers and such, in the Y and, through them, so, I meet a girl and we go out. One of the guys had a car, so, sometimes, we'd go out together, or a different girl. [laughter] One time, for some reason, this guy who had the car says, "I'll sell it to you for fifty bucks." I said, "Okay, I'll take it." So, for fifty bucks, I owned a car, an old Plymouth. Of course, they weren't making cars anymore by then. Then, I found out what was wrong with it, because, driving it at a particular speed, it shook like crazy. At that time, I wasn't smart enough to know that that was due to an unbalanced wheel and I thought it had something to do with the shock absorbers. So, I start taking the car apart and put it together. Anyway, I used it and I took people out. We went to parties in it, but I avoided driving it--it was, like, fifty-five miles an hour, I think it was, it started to vibrate. It was resonant frequency, but I guess, ultimately, I sold it back to him. [laughter] So, one Sunday, February 14th, '43, he says, "There's a dance up at the JCC," the Jewish Community Center, said, "Let's go to that." So, I hemmed and hawed, not being a dancer, such. I said, "Okay, I'll go." So, we went and the dance was hosted by local girls, because there's a lot of out-of-towners for the war effort. So, that's when I met Roz, my wife now, and we danced and we talked and we hit it off pretty well. Despite the fact that she came to the dance with girlfriends of hers, I insisted on taking her home on the trolley car, in February. It was pretty cold. Anyway, so, I got her home, met her father. Her mother had passed away a year or two before that, I believe. She told me afterwards, years afterwards, that her father said to her something like, "Are you going to see him again?" [laughter] So, anyway, I went back home and it was very cold that night. I had to wait for the trolley again. Now, I mentioned before that this GE Works was a mile long. The YMCA was near the front end of this, so, I usually walked to work. My building was near the far end. So, it was about a mile or a little bit less, but that morning, I came out, I said, "It feels terribly cold," and the bus just happened to be

going by. So, I hopped on the bus and I got to work and people came in later who hadn't taken the bus and they had frostbitten fingers, frostbitten ears. It was pretty bad, turned out to be twenty-seven below zero. So, I did call her, Roz, later in the week. I guess I saw her on the weekends. We began going steady, it turned out, after that.

SI: How long did you work there before you got on the radar program?

EJ: Well, I got on the radar program in about June, I believe, of '43. So, I'd been up there since the previous August. When the guy offered me this opportunity, I kind of jumped on it, but, then, I had to explain it all to Roz. I told her it's something that I'd like to do, I've got to do, and we weren't engaged or anything then, but liked each other a lot. So, I went on this training program. So, she understood. So, I went on this training program and some of the stuff was being built in Syracuse, some was being built in Bridgeport, Connecticut, and so, I had to go to these places for a couple of weeks at a time. So, when I left town, I bought her a locket and I put my picture in it and her father looked at that and he says, "That's a goodbye kiss." [laughter] I heard all these things afterwards, but, obviously, it wasn't. So, after the training program, they sent me to work in the Brooklyn Navy Yard and there were other GE engineers working there and there were engineers from other companies, because other companies were supplying equipment to the Navy also. So, most of us were living in the St. George Hotel. I knew Brooklyn, because I grew up there and that's obviously why they sent me back there. So, from the St. George, it was a short trolley car ride to the Brooklyn Navy Yard. GE had a head guy there and we had about maybe four or five other engineers. At that time, radar really was brand-new. So, they were installing them on ships for the first time. My job was, after [they were] installed, to check them out, see if they're working right, and so on, which involved--the main transmitter receiver equipment was on the main deck and, of course, we had the antenna up at the very top of the mast. There were other antennas, but ours [were] at the very top. So, I had to learn how to climb the mast up there. The ships were usually either in dry dock or tied up alongside the dock, so, they weren't moving. So, that wasn't too bad, climbing up; so, a couple of interesting incidents, if you'd like to hear them.

SI: Yes.

EJ: One of the jobs up there was, we had instruments in the pedestal for this thing that had to be aligned. After they were aligned, we had to pin the shafts together--these were rotating gadgets. Synchros, they called it. So, they had to be aligned and a pin put through to hold that alignment. One time, I was up there, with another guy helping me--usually, it was just one of us. Somehow, this guy was there. So, the pin slipped out of my finger and it dropped, but didn't go all the way down. It landed on the yardarm, which was about six or eight feet below us. It was about a foot wide. We could see it landed on there. He says, "I'll go get it." [laughter] So, he skinnied down, he skinnied out on to this thing, picked up the pin. To me, that was very heroic. [laughter] There was another time that I was up there--now, usually when you go up, as I said, there was other antennas. One of them was a radar antenna of microwave frequencies on a pedestal below ours and it could rotate and would rotate close to this ladder that I had to go down on. So, usually, when you go up, you pulled all the interlocks for all the equipment, other guys' equipment, too, so [that] it wouldn't rotate while I'm up there. So, I'm up there and I'm finished and I looked down. This antenna, the lower antenna, is jumping, "Whoop, whoop, whoop," which it's not

supposed to do and I could not get off that ladder without being hit by this thing. So, I was very resourceful. I had a box of cough drops in my pocket. So, I took out--there were a few people working on the deck below--so, I dropped one down, trying to get their attention; no attention. I dropped one and another and another. Finally, somebody noticed these things coming down and figured out what was wrong and he stopped this thing from rotating. Then, I got down. So, it turned out that although I had pulled the interlock on this machine, there was some quirk in the circuitry that when somebody turned the switch on the panel from true north to relative bearing, the antenna would jump accordingly. So, it wasn't rotating, but it would switch its bearing position and that was not included in the interlock circuitry, which is a fault of the designer. So, hopefully, they've learned about that and fixed it since then.

SI: How many ships did you wind up installing this on? Was it just a constant activity or would it take you a while to put this into a ship?

EJ: Well, I was there until about September. It must have been maybe half a dozen. They're usually all destroyers. Destroyers are the largest number of real fighting ships of the Navy. They have cruisers, which are bigger but fewer; the battleships, which were even bigger, still fewer. So, the destroyers' battle mission, usually, they went out in groups and, prior to a landing, they would shell the islands or whatever, and that's why there's so many of them. So, in August, I got word from my bosses, I'm being reassigned to New Caledonia in South Pacific. So, New Caledonia is an island that's somewhat between New Zealand and Australia. So, I had to get shots, I had to get a passport, being a civilian. I've got to back up again for a moment. Right, so, I got these orders and Roz and I'd been seeing each other, despite the fact I was living in Brooklyn, but I'd go up and spend a weekend with her. Some weekends, her father would let her come down to Brooklyn, but insisted that she stay in the YWCA, which had very strict rules about letting men in. [laughter] So, she came down, she stayed there. In one of those later visits, we were at my hotel--by that time, I had moved into the Towers Hotel, which [was] a smaller hotel, nicer, and it had a nice roof garden. So, we used to go up there, look at the skyline and such. So, I proposed to her, one of those times, and she accepted. I did not have a ring; I wasn't that ready. So, by the time that I was going overseas, we were already engaged. I bought a ring in New York and gave it to her when I went up to Schenectady. So, the last few days, I spent in Schenectady, getting the shots and such, and we spent time together. Then, I left. Is there anything else you want to know before we go overseas?

SI: You were doing the radar test patterns and testing the products in the factory. Typically, what would you be doing? You said you were troubleshooting the product, but what would a typical day be like? What products were you testing?

EJ: Okay. At that time, I was working mostly for photoelectric products, what we commonly call electric eye types of things, also, industrial timers. That department made a lot more sophisticated types of equipment, which I did not get involved in during that test period, but, nevertheless, it was the area that I wanted to get back into and that I eventually did, after the war, which I'll tell you about later.

SI: In that job, did you have a lot of exposure to what was happening in the factories, on the factory floor?

EJ: Oh, yes. I got an excellent picture of how they did things in factories, how they made stuff. I think, for part of that time, I was in the bigger industrial control department, the non-electronic, where they had big switches and panel boards and such, and I'd see the people making these wiring harnesses, they called them, which is the same kind of thing that they do when they build airplanes--lay out the wires to go where they need to go and tie them all together, long before they're ever connected into the equipment. So, I had--I'm not sure that I'm confusing part with when I worked there later--but I did have a lot of opportunity to pick up knowledge of how they did things in the factory.

SI: I was wondering if you saw, for example, more women coming into the workforce there or if the war was affecting things.

EJ: There were a number of women, yes. I made no particular impression at that time, to say, "Hey, look, a lot of women," or whatever. When I did come back and work in that department, we did have a woman engineer, which [was] unusual for those days, but that's jumping ahead.

SI: During the war, do you remember working with any women engineers?

EJ: Well, during the war, I was overseas. So, let me tell you about that, to start with. So, when I left Schenectady, in September of '43, I took the train to New York. They had booked me on the United Airlines Mainliner to San Francisco. Oh, by the way, to do all of this, I was given orders. The Navy deals in orders. They print out orders, like they do for all their officers and such. So, I had orders in my hand to report to Nouméa, New Caledonia. So, I took civilian aircraft, United Airlines, from New York to San Francisco, which, in those days, was a DC-3, twenty-one-passenger airplane. It took over twenty hours to get to San Francisco. They flew for, like, three hundred miles at a time and they landed, they refueled, they took on and off passengers. So, I left New York, like, five in the evening and got to San Francisco, like, ten in the morning, their time. Then, my orders said to report in to the naval base at Alameda. There, they put me on a Navy airplane to go to Pearl Harbor. Now, that was a cargo flight, seaplane, four-engine seaplane, what they called a PB4Y3. So, we took off from the water, which was a great experience. I was the only passenger. It was a cargo airplane, propeller, no jets in those days, so, unpressurized. So, we're flying at low altitude. They cooked steaks for dinner, on a range. They gave me a bunk to sleep in and when I woke up, we were about to land in Pearl Harbor, ten hours. These days, it's half that time. At Pearl Harbor, I don't remember if I stayed there a day or two. I probably did, because, then, I had Navy orders to fly from Pearl down to New Caledonia. That flight was very interesting. It was a two-engine seaplane and it had two other passengers, high-ranking naval officers. One was a captain and the other a commander, who were going out to take charge of a battleship out there. So, the three of us flew down. Nouméa, at that time, was the headquarters of the South Pacific Fleet, Admiral "Bull" Halsey [Fleet Admiral William Frederick Halsey, Jr.]. So, that's where we were all going. Now, to get there, this airplane can only fly for about six hours at a time. So, we would take off from the water in Pearl Harbor. We would land at some atoll out in the Pacific. A barge came out and fueled us up, whatever else they did, cleaned the toilets, maybe. We took off again around noontime and flew until six o'clock, to another atoll, and there we stayed overnight, in a hotel, which turned out to be a Quonset hut. The reason for all that was that Pan American Airlines had already

established routes to fly from the West Coast to Australia and they had to do the same kind of puddle jumping, same kind of airplanes. So, they established these primitive hotels for overnight stays and that's where we stayed overnight. Next morning, we get back on the same plane, take off another six hours, another atoll, refuel and take off again. That time, we landed in Suva, which is the capital of the Fiji Islands. So, it was a little more populated. Again, we stayed overnight and one more six-hour flight to Nouméa, landing in the water. So, at Nouméa, I was assigned to the man who's in charge of all the radar stuff out there on Bull Halsey's staff. Just a few things I remember about it was, one, I was still in civilian clothes. So, I went down to the PX [post exchange] with another guy to get clothing. So, we bought khakis that all the naval [officers wore]--we were supposed to have officer's privileges. So, we were treated like an officer. So, I got officer type khakis, pants and shirt. [laughter] The guy asked us, "So, what kind of a cap do we want?" So, we took a visor cap with what they called "scrambled eggs," gold braid, which top-level officers wore. The guy gave it to us. [laughter] So, we're walking back in the street and the younger officers saluted us. We had to salute back; interesting experience.

SI: Did you keep that throughout or did they have you change it?

EJ: Well, eventually, I got rid of that and I just used what they call an overseas cap, the folding kind you can put in your belt. That's in my picture also. Now, in Nouméa, I don't recall having much work particularly, because, although it was a fleet headquarters, most of the fleet was not there. One day, they gave me orders to go to an island called Efate, where the battleships were harbored. So, I got on an airplane, this time from an airport. It was the same kind of DC-3 airplane that I flew United Airlines, but military called a C-47, had bucket seats down the side. So, we get to Efate and I'm taken out to a battleship. It was nighttime by the time I arrived there and everything's blacked out. So, I'm in a small boat and we go out into the harbor. The guy in the boat explained to me that the battleships all have anti-torpedo nets around them, which basically are--there's booms sticking out from the sides of the ships, with these woven mesh steel nets. So, a torpedo would hit that instead of hitting the ship, and the nets were laid out on floats and the buoys. At one point, there was an entrance with an overlap. So, the boat goes into that entrance, which, apparently, the driver of the boat could see; I couldn't. [laughter] We get to the ship and I have to climb up the ladder in the dark, everything blacked out. So, the story there was that this ship had brought the radars out with it on its deck and they were being installed right there. So, I helped them install it and had to go through the alignment and stuff like that. An interesting incident occurred while I was up on the antenna pedestal--this time, it's not way up on the top of the ship, like on the destroyers, only part way up, on a separate kind of bridge. Now, this island was, I guess they're all extinct volcano types of things, because you look around, it's just hills and the water. I hear sounds of airplanes and I look around. I look down, I see the guns on the ship, the antiaircraft guns, all tracking airplanes and I don't see anybody else. So, I'm worried. "How could they leave me here? We're being attacked and nobody said anything." Well, I found out, afterwards, it was a training exercise with our own airplanes, coming over. They all knew it, but they didn't tell me. [laughter]

SI: How long did the job on the battleship last? How long would it take you to do an installation?

EJ: I think I was there for two nights on that ship. The last day, they got a message from the admiral of the fleet, admiral of that battleship fleet, who was on another adjacent ship. He wanted to see me, [laughter] this little guy just out of college. So, they sent me over in a boat. These messages, incidentally, came by these signal lights they have, no radio. So, they sent me over in a boat and I go up to see the Admiral. He's got a conference room set up and I'm in the middle and all these officers around. They're all asking me questions about radar and such. It was very nice.

SI: What were they most interested in? What were they asking you?

EJ: I mean, not only how it worked, but what the anomalies were, false echoes and such. Then, they told me a story. There are several radars on these battleships--ours, the GE radar, which is a big bedspring at lower frequencies to pick up distant airplanes. The other one, I told you about before, was what they called surface search radar, that it detects ships around them, but, then, they also had a fire control radar, with high accuracy. It's tied to the cannons. They told me a story about a battle that they had up above the Solomon Islands, where one of their battleships locked the fire control radar on to a battleship, enemy battleships, that they did not see and they fired on it. The echo from that ship disappeared. They sank it. They were so thrilled with that. It's really amazing. [laughter] Well, I'll get to this after a bit, a funny incident, too. So, anyway, we finished our meeting and I got back to Nouméa. Again, I don't remember doing a hell of a lot right there. They had an officers' club, so, people went to drink, which I didn't care a lot for. Then, after a while, I got orders to report to a destroyer tender named the USS *Argonne* [(AG-31)], named for a World War I battle. In fact, it was a World War I ship. It was located in Tulagi, which was a harbor type island off of Guadalcanal. So, to get there, I had to fly to Guadalcanal. Yes, they gave me orders. The military ran an airline, MATS, Military Air Transport System. They have an airport, they have a check-in office, and so on. So, you make reservations with them, they tell you what flight you're on and I had a flight early in the morning. So, the airport was some distance out of Nouméa. So, they drove me to the airport the day before and I stayed in their barracks overnight and took the flight out in the morning. Now, the flight, it's a thousand miles from Nouméa to Guadalcanal, which is too far for a regular C-47, but that's what they flew. So, they had the same bucket seat C-47, with a fuel tank down the middle of the airplane. So, we were sitting there, like, kissing the fuel tank and we take off and we get to Guadalcanal okay. So, from the airport, to get to Tulagi, I had to take a military ferry that ran back and forth. So, they jeep-ed me from the airport to the dock, but the last ferry for the day had already left. So, I didn't know what was going to happen. There happened to be a PT boat there, tied up at the dock that was refueling. So, the commander of the boat became aware of my predicament. I told him I had to get to the *Argonne*. So, he says, "Well, my base, my PT base, is at Tulagi, also, and that's where I'm going right now and I'll take you to the base. I can't take you to the *Argonne*, but I'll take you to the base now and we'll take you to the *Argonne* in the morning." So, I had a PT boat ride thirty miles across what they called "The Slot" to Tulagi. They put me up in officers' quarters. I guess I had dinner with them and I had breakfast with them in the morning and they took me out in a small boat to the *Argonne*. Now, I keep wondering--that's the same base that John F. Kennedy was at. [laughter] You know his story about the PT boat and all that, but I didn't know anything about that at the time. I was too naïve to be keeping a diary and I keep wondering if this guy, commander of my PT boat, or maybe one of the other officers, was John Kennedy; could be, I don't know. I'll never know.

SI: Once you were there, what was your next assignment?

EJ: So, I got to the *Argonne*, which was a destroyer tender, which means that it's the mother ship for a group of destroyers. The destroyers are all anchored out in the harbor, like we were, and the mother ship provided ammunition for them, provided food for them, provided maintenance for them, and that's why I and engineers from other companies were on the *Argonne*. So, our job was to service these other [ships], the destroyer fleet. By that time, they all had their radars on them and our life on the ship, I'll tell you about that first. I was assigned to an officer's stateroom with another engineer. So, we had an upper and lower bunk; I was in the upper. The other guy was there before me. [laughter] We ate in the wardroom with the other engineers and the officers. Food was good. One interesting thing about this--this was before desegregation. So, the blacks in the Navy were cooks, dishwashers and stewards in the wardroom. So, we were served by a black steward, French type service. He'd come out with a tray, he'd put a tray in front of you, help yourself, from his tray to your plate. So, it was pretty good living and eating. Night times, there were movies on the fantail, the kind where one reel ends, he has to stop and put in another reel, those kind of movies, and, day times, we worked. Usually, I was sent--we worked by request. The destroyers would send a request to the *Argonne* that they needed help for something. So, I would be taking a small boat back and forth, from one ship to another, and you go through all the routine of, "Permission to come aboard," and so on. So, it was interesting, the kinds of problems I ran into, a lot of cases, the people just asking questions about, "Why does this look like that?" and so on, and so on. Sometimes, the things didn't work and I had to work with them to figure out what was wrong and fix it. There was one funny case, I remember. The main display we had was what we called the A-scope. Now, that was a horizontal display where the horizontal was time-wise--so, the left of it was when the radar sent the pulse out, and then, the rest of it showed signals that were received. Horizontal position represents target distance and vertical amplitude represents target size. So, if you received a signal from some airplane, you'd get a blip, and so on. The antenna rotated around. We also had what they called the PPI, Planned Position Indicator, which is pretty much what you see on TV now for the weather radars. It goes around and you see blips from airplanes or ships or whatever. So, in this one problem case, this A-scope, which is about five or six inches wide, the display, instead of going all the way across was, like, an inch, little tiny blips, and so on. So, there's obviously something wrong with the power supply and that was the case. So, I just showed them that the power supply tube. It was all tubes in those days, too, obviously--so, the power supply tube had become gassy. So, it was providing some power, but not full power. So, that's why the display was so small. So, we replaced the tube. One interesting comment, I started to tell you before, which fits in here, quite often, when we're putting new radars on ships, the captains would say, "I don't need that newfangled stuff. We work fine," but, out there, the Captain said to me, "Make sure that thing's working right, because we're leaving first thing in the morning, going out on a mission." So, attitudes had changed a lot. So, that's the beginnings of radar.

SI: How did the weather out there affect the equipment? Did it affect it at all?

EJ: No, actually, for the most part, the weather was good. It was hot. We had a rainy season, which was pretty short. You want to stop?

[TAPE PAUSED]

SI: We were talking about your work on the destroyers. How long were you stationed on the *Argonne*?

EJ: Well, actually, the *Argonne* was replaced, after a while, by another ship, the *Whitney* [(AD-4)], and it was like a one-for-one exchange. So, the tech reps like me, we were just moved over onto the *Whitney*. So, the same work continued, just that our mother ship was a newer and bigger one. Then, after some later time, that was replaced by a brand-new ship, the *Dixie* [(AD-14)], which was bigger and better, but same type of work continued. The time now, let's see if I can recap this--maybe you want to turn it off for a sec.

SI: Sure.

[TAPE PAUSED]

SI: We just figured out the time. You said it was about a year.

EJ: Yes. So, I was on the *Argonne*, it was replaced by the *Whitney*, and then, replaced by the *Dixie* and, altogether, that encompassed about a year, from about October '43 until October '44. When I was on the *Dixie*, we were in Tulagi, as I said before. So, at one point, the battle for the Solomon Islands was taking place, up in Bougainville, which was the northernmost of the Solomon Islands. So, these destroyers that we were on were involved in that, but, once Bougainville was taken, they decided that the fleet should move further north. So, the *Dixie* packed up and sailed up to Treasury Island and I was on it at that time. So, it was an interesting experience, that we were underway for I don't know how many hundred miles, but, also, the fact that they had a gunfire exercise, also, while we're there. They had five-inch cannons on them. So, they shot those. That was pretty good, interesting. So, then, we pulled into Treasury Island and made that our new base. Now, while we were in Tulagi, as I mentioned before, that was the home to the PT base and, possibly, home to other things, because there was an officers' club ashore at Tulagi. Now, drinking is not allowed on Navy vessels, but Navy people drink. So, wherever they go, they create an officers' club on shore. Enlisted men can go ashore and they drink on the beach, but the officers always have a club. So, in Tulagi, they had a fairly formal officers' club, because it served the PT people as well as the destroyer people and whoever else was ashore there, but when we get up to Treasury Island, it is completely uninhabited. We're the first people there. There's no officers' club. So, one of the first things that happens, after the *Dixie* drops anchor in Treasury, they send a crew ashore to build an officers' club. The ship actually carries liquor, even though they're not allowed to drink aboard, but they carried liquor, locked up, and they're able to stock an officers' club. So, in free time, people'd take a boat ashore to the "O" club and drink and whatever. Also, of course, I joined them. That was that picture. We were also able to check out pistols from the ship's armory. So, I learned to shoot a forty-five colt automatic that way. They gave me a pistol, ammunition. We went off into the jungle, shot beer bottles and such. Of course, we serviced the destroyers, similarly to what we did in Tulagi.

SI: Did the destroyers change?

EJ: No, same fleet of destroyers. They were just moved further north, so [that] they didn't have to travel so far to their base after a mission. Then, finally, the *Dixie* was ordered to R&R in Australia. So, we were sent ashore to the Naval base at Espiritu Santo in the New Hebrides Islands, which are further south. In fact, there was no war effort down there at all. I don't know why they sent us there. It was a waste of time and money, but that's the way things were done. So, I don't know what else took place up there in Tulagi, up in Treasury, whether we were replaced by another ship or whatever. At that time, the *Dixie* was given orders to go for R&R [rest and recuperation] in Australia. They were not going to send contract engineers to Australia for R&R. So, instead, they sent us to an island, Espiritu Santo in the New Hebrides. Now, the New Hebrides are further south, so, it's further away from the war zone.

SI: How long were you on Espiritu Santo?

EJ: So, we were at Espiritu Santo, I was there until early February '45 and, mostly, it was a make-work kind of situation. We had a shop. I guess we had no ships to work on. I remember things I kept busy with. We were able to gather a bunch of aircraft radios, which were designed for twenty-four volts DC. So, I'd found a way that I could convert them to work on 115 volts AC. So, I got some rectifiers and whatnot, I wired them up to run on AC, and so, I rebuilt these things. We gave them to the hospital. So, that was it. In Yiddish, we call that a *mitzvah* job, doing good. One of the guys had a typewriter and a manual, so, I taught myself to touch-type. [laughter] Also, it was a big island and we can check out jeeps from the motor pool and I could drive around the island. So, yes, we went out, we had opportunities to interact with some of the natives, trade cigarettes for shells. I have a pair of a boar tusks that I got for a pack of cigarettes. I still have them. I don't know what to do with them. They're ivory, basically, but, also, let me tell you a bit more about basic life there. We tech reps were stationed in a Quonset hut. This whole thing that we lived in was a coconut plantation, Lever Brothers plantation, so, rows and rows of coconut trees, coconut palms. [Editor's Note: The Lever Brothers were British manufacturers of soap products and owned oil palm plantations throughout the South Pacific. By 1930, the company merged with Margarine Unie, a Dutch company, to become Unilever.] The military put up Quonset huts, here and there, and they cut down the trees and left stumps and put the floors of the Quonset huts on the stumps. So, we had a tin roof and coconuts. So, night times, the coconuts would go crashing on the tin roof, [laughter] palm fronds would drop down on the tin roof. There was one case, that I know of, that an officer was hit on the head by a coconut and he had to be sent home, concussion. We had an officers' mess. So, we ate with the officers. We had an officers' club. We'd drink with the officers. At that time, you paid something like twenty-one dollars a month, I think it was, to belong and the drinks cost ten cents each. At the end of every month, they'd find themselves overstocked, so, they would sell you a whole bottle for, like, a dollar--bunch of drinkers. [laughter] Navy's known for that. There was one very interesting--we also found that there was a restaurant out in the jungle that was run by some Indonesian people, and so, some of us used to go to that for dinner, get something different from what we had. That was interesting. That was a Quonset hut, also, and there was telephone service, by the way. So, we can call them, make a reservation. They had two seatings. So, you go in at the appointed time. They had long tables lined up, oilcloth tablecloth. At each seat was a salad and a beer bottle full of red wine. That's what attracted people. So, for three bucks, you had your salad, the wine and a main dish, which was steak and French fries. So, every once in a while, we did that, and then, another exciting thing happened. As I said, this was a big island, so,

I heard that the Army was sending the 27th Division there for R&R. Now, that was a division out of New York City, that had been involved in many campaigns in the islands, like Saipan and Okinawa, and so on. So, they were being sent for R&R on our island. Well, it so happens that I have a cousin who's in that division. So, after a few days, I took a jeep and I went out and I found him. He was a sergeant. He was a reconnaissance sergeant. He had survived many campaigns, somehow. Of course, they're being rested for still another attack. So, I felt sorry for him. I said, "Ted, come for dinner up at our place." So, about once a week, I'd jeep down and I'd pick him up. I dressed him in one of my shirts. He sat with the engineers in the officers' mess and they didn't care. They were happy to see him, but he was not an officer. So, we had him to officers' mess once a week. So, one week, his colonel happened to be a guest, also, and the Colonel saw him and said, "Don't do that anymore." [laughter] He didn't get court-martialed.

SI: How did all the tech reps get along? Did you form a little unit?

EJ: Oh, yes, pretty much. Well, of course, we played cards together and such, told stories together. Oh, one guy printed up calling cards for everybody--a tech rep thing. Let me pull them out.

[TAPE PAUSED]

EJ: Ready to go?

SI: It seems like you had a pretty good working relationship with the Navy.

EJ: Definitely.

SI: With the officers.

EJ: Oh, yes.

SI: Working with the destroyer men, did you get to know the people on the ships or just the people on the tender?

EJ: Well, I guess I did not get to know the people on the destroyers. I mean, they came and went, that kind of thing. Of course, the people on the ship that I was living on, we got to know them pretty much, but, unfortunately, I wasn't the kind of guy who kept contacts and stuff like that.

SI: Were you subject to the same kind of discipline that people in the Navy were, to some degree?

EJ: Well, I assume so, but I'm not quite sure what kind of discipline you're talking about.

SI: For example, not being able to do certain things or go certain places. You have to keep the same hours, duty hours, that sort of thing.

EJ: Well, yes, I guess so.

SI: As a civilian, did you get a certain number of hours off or a day a week off?

EJ: Well, out there, there's no such thing as time on and time off. [laughter] You're just there. It's not like you go home.

SI: You said they would not bring you on R&R. Did you get any kind of leave opportunity or chance to come back?

EJ: No, just the time during travel, like, when I was in Hawaii for a couple days waiting for transportation, something like that.

SI: In terms of contact with home, did you have the same mail service?

EJ: Oh, yes. Well, of course, we had the same mail as the military, but I had to send in reports every week to GE, on work and on expense accounts, that kind of thing. I was originally assigned, they said, for one year, but, in September '44, no replacement came. So, I had to wait for a replacement, who didn't come until February '45. So, I mean, that's the sort of contact I had and it's all by mail, but the thing is that, for example, they could send me checks. I could cash the checks. The ships had a bank, post office, and so on. So, it's really a city in itself. You have the usual service, except for telephone; no television in those days.

SI: Were you ever in an area where you were subject to enemy attack or where there was any kind of danger?

EJ: Not really. While I was stationed on these ships, we had drills, which you have to have, and there were, I'd say, maybe three instances where they had what they called a GQ alarm. That's [when] they ring the bells and everything. Everybody's [at] general quarters, like an enemy airplane spotted somewhere. Most times, they were false alarms. There was one time, they told me, that a Japanese plane had gotten to within a mile of us and dropped a bomb, but we were usually so far away from where they could reach. I mean, that's the whole idea of having these kinds of bases. So, the destroyers would go up and face enemy action, but their base would supposedly be far enough away.

SI: Did the systems you worked on change at all? Did the technology improve? Did you have to learn new things?

EJ: That's a good question, yes. We had, I would say, three kinds of changes or differences. Trying to figure out where to start here--okay, so, this radar I told you about, the bedspring, SC, which was a rectangular thing, the company later came out with what they called the SK, which is basically the same transmitter receiver, but it had a much bigger dome-shaped antenna. Then, there were two other products that were not directly related to that. One is, they made a portable radar, which was, like, on a tripod that had the transmitter receiver and the scope built right into it. So, if, for example, you're on a ship and the main radars fail, you can use that, that kind of thing. Then, one other interesting product I got involved with--I told you before about the PPI,

the Planned Position Indicator, that displayed like weather radar. They built one like that for sonar. So, sonar is like radar with sound waves underwater. Up to that point, as far as I know, they had it continually rotated and just listened for the echoes. So, they built this PPI for sonar, so [that] you can actually see the blips on the scope and see their position, just like you would see the airplanes on the radar scope, but that's it, during the time that I was working on it.

SI: When a change would come about, was it implemented on all the ships at once or did it have to be implemented piecemeal?

EJ: No, one at a time.

SI: Would you always get what you needed to do the job, basically?

EJ: Well, like, these portable radars, for example, they would ship them--in other words, they didn't have to be installed. So, whoever got one had one, period. The sonar thing had to be installed, so that definitely was a one at a time thing. This big SK antenna I told you about was not even of the same nature, because that was only for bigger ships, like cruisers and battleships or aircraft carriers. So, I only got involved with them after I came back, which I'll tell you about shortly, but just a quick summary. When I came back, I was assigned to the Brooklyn Navy Yard again and, by that time, the ships were different. So, we can get into that after a bit, if you want to.

SI: You said February 1945 was when your replacement finally came.

EJ: Yes.

SI: What happened to you after that? Did you come right back to the States?

EJ: I got orders to come back. See, when you get orders, military orders, that also includes all your flight priorities and things like that. By that time, the airplane technology had changed. So, I flew from Espiritu Santo directly to Fiji in a four-engine airplane, not a seaplane, and I flew from Fiji nonstop to Hawaii, also on a four-engine propeller plane. I think they were, like, DC-4s or DC-6s by that time. So, that was much different from the puddle jumping I did a year-and-a-half before. Similarly, I flew from Pearl Harbor to San Francisco. So, I arrived at San Francisco in my Navy khakis, tropical uniform, [in] February. So, first thing I did, I grabbed a cab to a store where I could buy an overcoat. Then, I went to United Airlines to get a flight back to New York. Things were tight in those days, transportation-wise, and so on, but I had some kind of priority. I forget just what the numbers were, but it turned out, unfortunately, they actually bumped somebody from a flight, put me on. So, that's how I got back to New York. My parents picked me up at Idlewild [now JFK International Airport], because they still lived in New York and, technically, that was my home. So, I went home with them and I got in touch with Roz and she came down by train a day or two later. The interesting thing there was, [laughter] she told me what train she's coming on. So, I went down to Grand Central Station, which was crowded with people, and I'm at the gate for her train. She taps me from behind. She'd somehow gotten on an earlier train and she found me in the crowd; right, babe?

Rosalind Jellinek: What's that, dear?

EJ: You found me in the crowd at Grand Central.

RJ: Oh, yes. That was an experience to be remembered.

EJ: After a year-and-a-half.

RJ: It was crazy.

SI: Did the company give you any time off?

EJ: Yes. So, what happened then, I went to Schenectady. I had paperwork and stuff to do up there. I did tell you before that we were engaged before I went overseas. So, we got married two weeks later. I was assigned back to Brooklyn Navy Yard. So, the two weeks that we're up in Schenectady, I was working, theoretically. Then we were married, and went to Brooklyn, I was on vacation and had a two week honeymoon there. So, I had a chance [to] show her the town and such, pick up all the loose ends, look up some old buddies. [laughter] We did find one. I told you about the navigator on the airplane. In fact, his family was in the jewelry business, so, we went there to buy her wedding ring. Then, we settled down in the Towers Hotel, the same place I'd been staying before. I went to work back at the Brooklyn Navy Yard. By that time, things were a little more advanced. That's when they had bigger ships, this SK radar I mentioned. They were in the process of building the--I think it was the *FDR* aircraft carrier. So, that's where we were installing this big SK, and so on. It was interesting being there, because the ship was just about all built, but they were testing it out, and so on. So, I watched them testing the catapults that launch the airplanes. They did this by taking what they call the dolly, a big mass of steel with rubber tires, and they hitched that to the catapult and, "Boom," they let it go. It flew off the deck, into the water, and a tugboat with a crane picked it up, put it back up on the deck. So, it was interesting, watching that catapult work. So, I never did see airplanes being catapulted, except in the movies, but I saw how the catapults worked, really amazing. What else happened down there? Well, being married, the other guys that I worked with mostly were married, too, by then. So, Roz and they had a ladies club. So, they socialized together. We had meat rationing. After a few weeks in the hotel, we found a furnished apartment nearby. So, we moved into an apartment, which is much better. We couldn't even get a telephone at that time. They had a waiting list, but we finally got a--I don't remember if it was a two-party or four-party phone and, ultimately, a single line--what a life.

SI: Do you remember where you were and what the reaction was like on V-E Day and V-J Day? [Editor's Note: V-E Day was declared on May 8, 1945. V-J Day was declared on August 14, 1945.]

EJ: Definitely, very exciting for us. That was taking place--we were right there in New York. You saw all the pictures in Times Square, of the sailor kissing the gal and all that. We weren't there, but, yes, we were quite excited by it all. [laughter] We had one interesting thing that day, V-J Day. I was in the bathroom shaving. We had the kind of a toilet without a tank. So, I wore glasses and I took my glasses off. I put it on the seat while I was shaving and she came in to

watch me shave and she sat down on the glasses and broke them. There was no place open that day to get them repaired.

RJ: The man who never forgets anything. You know how long ago that was?

SI: Yes. After V-J Day, did your job change?

EJ: Yes. Well, we still had the same work there, but, obviously, the war being over, things dropped off a bit. In fact, in November, they told me to pack up and the job was over. So, I went back up to Schenectady. I had a car by that time. We packed up whatever we had, went back up to Schenectady. We lived with her father. Her father was alone all that time. He had a three-bedroom house. So, we lived in there. Then, at GE, I had to get a new job, but I went back right to that electronic industrial control department, which is what I was so interested in. That was expanding like crazy. So, they were hiring right and left. So, there's no problem getting a job there. In fact, they took some of the other technicians who weren't even qualified for that work. So, they didn't last too long up there. I mean, some of the technicians were not college graduates; they were just technicians. So, they were not about to design new industrial electronics and such. So, I went to work there on photoelectric equipment, electric eyes. The products I worked on--one of the first ones was electric eyes to turn off streetlights. These days, you look up, you see the streetlights, they have a little thing on top, turns them on and off. Well, back in those days, they didn't have anything like that. All the street lighting was what they called series lighting, which meant that they had separate wires run from pole to pole, for streetlights, all the way back to the utility company. It was like Christmas tree lights and they threw the switch there to turn on the lights and all the lights would go on. At that time, after the war, there's a lot of new home construction, a lot of new road construction, so on, which meant that the utilities were putting in a lot of new utility wires, but they were not about to put in new streetlight control wires. So, they wanted each light to be controlled by itself and that's where the whole idea came in. So, GE, one of their departments, made the streetlights. So, it's only natural for us to team with them, for them to make a luminaire that had the light below and a globe on top that we put our electronics into. That's what we did. So, in those days, the electronics that we had--two tubes, two vacuum tubes, plus, [an] electric eye tube. It was a tube, not solid state, but utilities were buying them. Connecticut Light and Power Company bought ten thousand of them. So, they were installing them right and left. I had to make some trips down there to troubleshoot some of them, but, yes, we learned a lot, did a lot; a lot of other interesting products. I don't know how much you want to go into.

SI: I would like to get an overview of your career and what you did in each job, the most interesting stories about products.

EJ: Yes, I don't want to get into too much detail, but that item particularly had a very significant post-war concept to it. I told you about all the new construction, and so on. We also built equipment for steel mills, to detect pinholes in sheet steel that was going to be made into tin cans. Then, our business was expanding so much that the management decided they had to build a new building outside of Schenectady, disassociate themselves from that Schenectady Works. So, they decided to build in Waynesboro, Virginia. We went down there and we decided we didn't want to raise our family down there, for various reasons. So, I had GE transfer me to their

instrument department in Lynn, Massachusetts. So, again, that was industrial type electronics, but it was involved with things that sensed vibration and acceleration that we applied. Like, I got a patent, for example, on a piece of equipment that goes on a papermaking machine that detects imperfections in the paper. An imperfection would come along, it would create a little bump in the rollers. I made equipment that would detect that bump, so [that] they can detect the imperfections and cut them out. So, we moved to Marblehead, Massachusetts, right on the coast, so-called sailing capital of the world, and it was really a nice location, nice activity, but, then, I got an offer from ECA Electronics Corporation of America in Cambridge, Mass., which was my competitor in the photoelectric business. So, they wanted me to become assistant chief engineer there. So, I jumped at it and I left GE, after thirteen years, and I commuted. I drove to Cambridge, about fifteen miles. Then, they made me chief engineer of another division, which was involved in a very interesting product. We could detect explosions in airplane fuel tanks and put them out before they exploded the tank--magic. So, we had a big test station for that out in the vicinity. The Air Force sent us pieces of airplanes and tanks and machine-guns, ammunition, and it was really a neat piece of equipment.

SI: That company was Electronics Corporation of America.

EJ: Right, that was it, ECA, Electronics Corporation of America.

SI: You were there for four years.

EJ: Yes. It reached a point where I could see this company was kind of a finagler, where I found, for example, where I'd get a contract to do a certain amount of work for a company or [the] Air Force and the company stole money from that contract. I was not given the right amount to do the work. They took it and put it in something else. The company president had a yacht that he wrote off as a research vessel for the company. His chauffer was listed as a model shop employee and, eventually, the Air Force sent an auditor and the auditor camped in my office. He insisted we bring a desk into my office, so [that] he can go through the company files. So, I said it's not a good place to stay. I got this nice offer from RCA. That's what brought me down here. RCA, at that time, was building a data communications system for the Air Force, for controlling--actually, it was involved in intercepting Soviet bombers, which was a big threat in those days, they thought. So, they built the SAGE [Semi-Automatic Ground Environment] system, which IBM's responsible for the computers and RCA was responsible for transmitters from the computers to the equipment that goes in each airplane and the Bomarc missile to be guided by the computers to intercept these airplanes. [Editor's Note: The CIM-10 Bomarc was a long-range antiaircraft missile first used in the Cold War.] So, I was the project manager for the equipment related to the Bomarc missile. That's why I came down here. That led to a lot of other things in RCA, including--I don't want to jump around, don't want to get into too many things--but, at one point, we developed an aircraft collision avoidance system, stuff that would go in every airplane and would check the position of all other airplanes relative to it and avoid collisions, but we couldn't get the FAA [Federal Aviation Administration] interested in it. They had their own ideas, but I picked up on the principle that we used, which was high accuracy in data communication and position location. So, I designed a shipboard navigation system using those principles that we sold to the Coast Guard, because they had a problem, before GPS, of navigation in rivers and harbors. For example, Houston is a so-called seaport, but it's fifty miles

from the Gulf. It's connected to it by canal. So, ships going through this canal sometimes collide with each other or go aground. So, they needed precision navigation. So, we got the Coast Guard interested in this and they funded it. They nominated me for an award from the Institute of Navigation. So, I got an award for--what'd they call it? I forget the words they used--anyway, it was the highest contribution to the science of navigation for 1963. [Editor's Note: Mr. Jellinek earned the Colonel Thomas L. Thurlow Award from the Institute of Navigation in 1973.] So, I got that up. It's a big plaque on my wall back there and one of my proud achievements. I have seven patents, too, by the way. So, I stayed with RCA from then on, in various capacities, mostly military communications, navigation, type of thing. In the late 1970s, early '80s, desktop computers were coming in. So, I learned all about them. My son and my son-in-law developed businesses of their own, a printing business and a music business, and I wrote programs for their business and I started selling them to other companies. So, I retired from RCA, formed my own computer company and I did a lot of good computer work, although that was not my original field. So, I learned as time went along; for example, one of my good clients, New Jersey Podiatric Medical Society, society for all New Jersey podiatrists, keeps track of their dues, their continuing educating credits, that sort of thing. I did a lot of other programs, a lot of *pro bono* stuff for Haddonfield Symphony and such. Now that I'm here at Lions Gate, I do a lot of computer work for them. I teach computer classes. I designed the database for them that does their residents' telephone list, keeps track of residents moving. Also, I designed the templates for their monthly program calendars. We have a program director who comes up with activities for every day of the month, movies and such. So, I worked with her, over a couple of years, actually, where I type the stuff for her and I started reformatting the templates to make it easier and easier to do and for people to understand. So, now, she's able to type, fill in the templates herself. So, I'm "Mr. Computer Man."

SI: When did you first get involved in computers?

EJ: Late 1970s, early '80s. Before that, I started; I took some RCA computer courses in programming the big computers. I didn't use them directly. We had a girl in our group--for example, we developed a simulation for this aircraft collision avoidance system--and this girl was a programmer, so, she programmed the stuff. It was all punch cards, that sort of thing, but, later, the company bought a desktop computer, which, at that time, was Hewlett-Packard, but it had two cassette drives, like the audio cassette, and that was it. So, you put your programs and your data on them, but at least I'd learned to program BASIC [Beginner's All-Purpose Symbolic Instruction Code] using that. Then, Radio Shack came out with their computer. I bought one of them, programed it. What should I say? I left my business card with Radio Shack, programming, and people would come and buy a computer for their business and Radio Shack said, "Hey, there's a guy who can program it for you." So, I picked up business that way and that developed to the point where I retired early from RCA in order to just do computers full-time. Over the course of time, I learned the insides of the computer, so [that] I can repair them and such.

SI: Are there any other parts of your career at RCA or your patents that you want to tell a story about?

EJ: Well, I think that pretty much covers everything. I mentioned the seven patents. I don't want to go into each one of them or anything like that; similarly, other kinds of equipment that I can tell you about piece by piece, but I don't think that's necessary.

SI: Can you tell me a little bit about your family?

EJ: Right, oh, yes, big thing. [laughter] So, in August of 1946, our first child was born. He's now past sixty-five. He was here for dinner yesterday. We had two other children, a daughter, Sheryl, born in 1950, and our youngest son, Steve, born in 1959. That was he on the phone, too, before, checking up. See, a little bit about them, Burt was a musician, played all kinds of instruments. He studied piano and clarinet, joined the high school band. He plays all their instruments. I'm surprised--when it came time for him to choose a career, he decided to combine music and business. So, now, he went to a few things. He had a record and tape store for a long time, but, later, he developed a business where he sells sheet music and music books to bands, orchestras, schools, teachers and such. He learned to program computers. He does all this in his house. His two-car garage is now a stockroom, with the computer and two people who do the shipping. He's got, I think, two or three other people come in his house to do this. The reason he started in his house, he was married in 1971 and, a couple of years later, his wife was diagnosed with MS. She was not too unhealthy for a while. She worked and drove and such, but, as time went on, she got worse and worse, to the point where she was bedridden, and that's when he decided to have a home business. So, he created that from nothing, actually. He stayed home with her. Unfortunately, she passed away about four years ago. In MS, your nerves and your muscles just go and go and go, to the point where her breathing didn't work anymore. So, after a year or so of depression, he's now hooked up with a nice lady and he's happy again. Our daughter, Sheryl was born in 1950. She was a good student. She went to college, got her BS in economics, I think. She worked for the New Jersey state government in Trenton for a number of years. She was married. Her husband went to the same school. In fact, they knew each other before they went to school together. They married while they were starting their junior year and they worked their way through the rest, last two years of college. After that, as I told you, she worked in Trenton. He started a printing business, which I helped him out on, including programming, but, eventually, he screwed up the business, went bust. They got divorced and she's now got a nice gentleman friend. Our third son Steve, smartest of them all, I guess--for one thing, he was like an only child for a while. He's nine years younger than his sister. So, we traveled a lot together. He did all kinds of sports. He was into tennis, swimming and baseball. I was his Little League umpire. [laughter] I played tennis as a kid, but I didn't for a long time and he got me back into playing tennis, which I did until I could no longer play a few years ago. He went to the University of Delaware, got a degree in business administration, met a nice young lady who got a degree in biology. They apparently were going steady by the time they graduated. They both went to graduate school in Philadelphia. So, he got his MBA from Drexel. She went to Hahnemann University for an MS in microbiology. While she's there, the same school is educating MD candidates. So, she says, "I'm as smart as them, but I don't get the respect in class that the teacher gives them." So, when she got her MS degree, she went to Georgetown med school. She's now a pediatrician, sole practice. They live in Doylestown, [Pennsylvania]. They have three children, who were all born on August 4, 1996, triplets. So, they're now fifteen years old. My daughter has three sons, who are a lot older. The two older ones are married, each have a child. So, we have two great granddaughters. The third one is in

the Coast Guard and he's engaged and may be married soon. So, they're all doing nicely. Her middle son was in the Coast Guard for six to seven years. He retired to raise a family. Under the GI Bill, he went to college. So, he now has a college degree. He just started a new job in his field, which is criminal justice. So, he's an investigator. That's about it.

SI: Thank you. Is there anything else you would like to add to the record today?

EJ: Can't think of anything right now. I'm sure I gave you more than you need.

SI: No, I appreciate all your time. I wish I could get into more detail, but, unfortunately, time is always an issue.

EJ: Anything more that you would like to know?

SI: You answered all my questions.

EJ: Either now or later.

SI: Thank you very much. I appreciate all your time.

EJ: Okay, my pleasure.

SI: Thank you for your hospitality.

----------END OF INTERVIEW----------

Reviewed by Molly Graham 7/10/2014
Reviewed by Shaun Illingworth 7/15/2014
Reviewed by Ernest Jellinek 7/29/2014