

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY

NEW BRUNSWICK

AN INTERVIEW WITH CLIFFORD A. ELLIS

FOR THE

RUTGERS ORAL HISTORY ARCHIVES

WORLD WAR II * KOREAN WAR * VIETNAM WAR * COLD WAR

INTERVIEW CONDUCTED BY

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TRANSCRIPT BY

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Shaun Illingworth: This begins an interview with Clifford A. Ellis in New Brunswick, New Jersey, on August 8, 2007, with Shaun Illingworth. Thank you very much for coming in today.

Clifford A. Ellis: [You are] welcome.

SI: Also, thank you for all your help in getting the Class of 1958 involved in this program. To begin, could you tell me where and when you were born?

CE: October 14, 1935, in New Brunswick, St. Peter's Hospital.

SI: Okay. I would like to ask you about your parents. First, what were their names?

CE: Okay. My father's name was Sedric E. Ellis and my mother was Helen Mitchell Ellis.

SI: Your father was originally from New York.

CE: Yes. I have notes on that one, too. Yes, at Port Jervis, New York; I had to look it up. [laughter] My mother was a teacher and historian. She knew all that information, but I had to look into it, because I didn't remember it, but, ... when I filled out the form, [the pre-interview survey], that was Port Jervis, yes.

SI: Do you know if there was any immigration history on his side of the family?

CE: I'm trying to think. There may be. ... My mother would know, but I really don't know, no.

SI: Do you know how your father or his family came from New York to settle in New Jersey?

CE: Not really, no. I had one booklet; "A Family History and Genealogy of Henry Case (1715-1767) and Margery Carscadden (1714-1792) Orange County, New York" printed 1960, that I found out [about] after my mother passed away, and it did have, like, the history going way back to William Case, born 1616 in England. He left England aboard the *Dorset* in 1635 for America. It had a listing of my mother's genealogy from 1616 thru 1960 when it was published.

CE: It was very interesting and it was just unbelievable, the background information it shows in it. I have a cousin, Joan Mitchell, who lives in Piscataway and she dates [her ancestry] back to ... American Revolution, and they belong to that, whatever it is, the women's organization that has to do with that type of thing.

SI: The Daughters of the American Revolution, [a women's organization whose membership consists of women descended from patriots of the American Revolution].

CE: Yes, right, ... and she sent me a copy of her application form to join the National Society of Children of the American Revolution. ... It was very interesting. Her Aunt, Kay Mitchell, was a member of the Daughters of the American Revolution.

SI: What about your mother's family? Do you know anything about their background?

CE: She was from New York, also. I think I had here, Howells, if I remember. Let me see what I put down on hers; yes, Howells, New York. Again, she was the one that was really familiar with everything [about] our family history, and she used to visit all the cemeteries and visit relatives in vicinity of Howells and Port Jervis, New York. ... She's buried with my father, in Howells Cemetery, Howells, New York.

SI: Did they ever tell you how they met?

CE: I don't know. I know that my mother lived on Metlar's Lane, Piscataway, New Jersey ... but how they met, I'm not sure. I know they got married there on Metlar's Lane, at the old farmhouse that her mother and father owned, but how they met, I don't remember.

SI: Your mother's parents had a farm on Metlar's Lane.

CE: On Metlar's Lane, and then, my parents got about three acres from my grandparents, and built their home, on the corner of Suttons and Metlar's Lane, right across from Camp Kilmer. When my grandparents moved to Florida then, my parents got the rest of the farm. It was a total of seventeen-acre farm.

SI: What kind of farm was it?

CE: As far as I know, it was just a vegetable garden, and we had chickens, I remember that.

SI: Your grandparents farmed that.

CE: ... I'm talking about ... the garden my parents had. I remember ... there was an old farm building on my grandfather's property and there was an outhouse. ... I don't remember what type of farm they used to have. ... My father used to have corn, peppers, and tomatoes in his garden.

SI: What did your father do before he met your mother?

CE: My recollection is that, I guess, he went to one year at Rutgers, Ag School, [Rutgers' College of Agriculture, now the School of Environmental and Biological Sciences], I guess, and then, he got into new car business. He owned Ellis Pontiac dealer[ship] in New Brunswick. ... When World War II started they stopped building new cars. He then sold used cars for awhile. ... Then, he was a real estate salesman and later worked on home improvement projects.

SI: Do you know, roughly, when he would have gone to Rutgers?

CE: I would assume it would be somewhere in the '20s; I'm not clear what year, but my recollection was, like, one year.

SI: Did he ever tell you anything about his time at Rutgers?

CE: No. My mother went to NJC [New Jersey College for Women, now Rutgers University's Douglass Residential College]. She was in the, I think, ... second class of NJC, '23.

SI: Did she tell you about what NJC was like when she went there, when it first started?

CE: I never got too much into that. ... She was a schoolteacher, and then, when she married and had a family, then, she was a homemaker. Later on she was a substitute teacher in Piscataway Township.

SI: Before she got married, did she teach in the New Brunswick schools or the Piscataway schools?

CE: I don't know.

SI: You have three sisters.

CE: Yes, three sisters.

SI: Where do you fit into the order?

CE: I was number three, right. My oldest sister, Mary Elizabeth, went to Douglass. ... I don't know when they changed names between New Jersey College for Women to Douglass, but she graduated in '54 from Douglass. ... She was a journalism major.

SI: I think that was just before they switched.

CE: I think it was, yes, I think it was, but I wasn't positive on that. [Editor's Note: The college was renamed in 1955 for its first dean, Mabel Smith Douglass.]

SI: What were the names of your other sisters, for the record?

CE: Okay, ... my other sister's name was Helen Louise. She went to nursing school in Brooklyn for one year. ... My youngest sister was Ruth Jean. ... She graduated [in the] first class at Piscataway High School and she went to college in Florida somewhere. I'm not sure where.

SI: What are some of your earliest memories of growing up on the farm on Metlar's Lane in the late 1930s?

CE: ... I remember, one time; we used to go to Culvers Lake. My father's grandparents had a house at Culvers Lake, and I remember going up there. ... I also remember, I was sitting in the backseat of our car and my mother was driving. My father was in the backseat and he had his foot rest[ing] up on an armrest. So, I imitated him and put my foot up on an armrest and my mother went around a curve and the door opened. I went flying out, and, luckily, no car was behind us, and I was okay. I also recall my mother telling me that my father had a bad auto accident ... He was in a coma for about a month, but he survived the accident.

SI: Do you remember having to do chores, that sort of thing?

CE: Oh, yes, we had to ... work in the garden, feed the chickens and cut the grass. ... Then, we didn't have a power mower; we just had a regular push mower. ... The little plot of grass in the front was okay, but the grass in other areas, it was hard to do. ... I remember, we used to have a rope and I would be pulling the mower and ... my father or someone else would steer the mower. ... I remember, we lived right on the curve, so, there was a lot of accidents there. Our mailbox was up near a brook, on the straightaway, but a lot of people ended up having [accidents], and they've redesigned the road now, one-way. We lived right opposite Camp Kilmer. ... The guardhouse was nearby and I remember going up Sutton Lane to the USO [United Service Organizations] building. I remember seeing some of the soldiers, some prisoners of war that would escape and go through our fields and be captured by MPs [military police].

SI: Do you remember when you heard the news about Pearl Harbor?

CE: I remember Pearl harbor, but I don't remember where I was at the time.

SI: Do you remember, as a child, being afraid at all of the war news, that we were at war or that places were being bombed?

CE: I don't remember being afraid. I know we had air raids and we had rationing, but I don't remember being [afraid]. I know we were concerned ... whether there would be, like, an invasion.

SI: Do you remember your parents talking about the war at all?

CE: Just the hardships due to it, my uncle, George Mitchell, who served in Europe. My father, I guess, was exempt, because he had four kids, I guess, or maybe he was ... too old for it; I'm not sure. ... He was born ... in 1899.

SI: Do you remember anything about the Great Depression?

CE: I don't remember anything, about the Depression. I remember my father telling me (a) his brother ... had died at thirteen years old when kicked in the stomach while playing football ... and (b) his sister's, daughter was a commercial pilot, who got killed ... hitting a wire line while landing at a small airport, in New Jersey.

SI: She was a civilian pilot.

CE: A civilian pilot, yes.

SI: I am just trying to get into more of what life was like on the home front for a child. You mentioned the rationing.

CE: Rationing. I remember gas rationing with stamps, cars having the headlights blacked out halfway. I remember ... squashing aluminum cans and bringing them to school; Victory bonds.

SI: Would you do any kind of scrap drive stuff? Would you go around collecting metal?

CE: Newspaper. I know we did it, but I'm not sure how we did that. I remember squashing the cans, buying Victory bonds and I remember the air raids [drills], that we would ... have to duck underneath the seat in the school, or go down in the basement.

SI: Where were you going to school at the time?

CE: I went by school bus to Randolphville School for kindergarten through second grade, and then, New Market School from, third grade to eighth grade. ... That would be around 1949, then, I went by school bus to Roosevelt Junior High School and New Brunswick High School in New Brunswick. I lived in Piscataway, and it was a sending district. They didn't have high schools in the township at that time.

SI: Can you explain to me how they would do things like air raid drills in your elementary school? What do you remember about that?

CE: I just remember just ducking underneath the chair-type thing. I don't remember anything more.

SI: Did you take it seriously or did you think it was fun?

CE: I can't remember. [laughter]

SI: Was your father involved in any kind of Civil Defense activity? Was he an air raid warden?

CE: I don't believe so.

SI: Do you know, roughly, how long he had the Pontiac dealership?

CE: ... Well, he may have had other ones before that, but I would assume that [it was] maybe six, seven years, I would imagine, for the new car dealership. ... Then, I remember that, after the war, he got into a venture for one of the new cars called Tucker, which was an unique car with a third headlight, in the middle. He got the dealership on that, but it didn't fly. I guess there were more economical cars. But he had high hopes on it, but it didn't work out the way he was hoping it would.

SI: Where was his dealership located in New Brunswick? Do you remember?

CE: I think it was on George Street, as you head past Livingston Avenue towards, Douglass [Campus].

SI: What kind of things would you do for fun, outside of school, when you were growing up?

CE: We played football, basketball and baseball. We didn't have Little Leagues, we just had my

friends play in our field. We ended up playing pickup football, and baseball games. ... Then, when I went to New Brunswick High School, I figured, ... "Gee, I'll be an athlete." ... When you compete with the city people, who had ... city leagues and whatnot, they were much more trained than we were on that type [of thing]. I didn't go out for football because I had been sick at that time, but I remember going out for basketball and I got cut on the final cut. ... Then, I went out for baseball and there must have been twenty people signed up for second base. One of my friends we used to play with, Alfred (Hankerson), was the only second baseman taken. He was clearly the most outstanding second baseman on the freshman team. When I didn't go out for football my freshman year, Coach [Joseph] Marino was my phys. ed./health teacher and he mentioned cross-country. So, I went out for cross-country and John Ragone was my coach there. I did good and I was, like, the second best member on the team. ... Then, they had indoor and outdoor track. Again, I went out for basketball, got cut, and then, I went [and] played in the indoor track, and I went out for baseball, got cut, and then, I went out for ... outdoor track. ... Running was probably the best thing for me, because it helped me get a scholarship to Rutgers. [laughter] I got an Upson Memorial Scholarship, between my [National] Honor Society and my running, helped me get a scholarship to go to Rutgers. Without it, I probably wouldn't have been able to go.

[TAPE PAUSED]

SI: Before we paused, we were talking about growing up in New Brunswick. I think you were telling me about your athletic activities. During the war, you would entertain yourself by playing sandlot baseball and football, that sort of thing.

CE: Pickup games, basically.

SI: Did you have a lot of friends nearby?

CE: Well, we all had bicycles. This was out in the farmlands, honestly. ... My friends came from, up to a mile away in both directions, but no one lived close by. ... Our bicycles were a way of getting together.

SI: I was curious about how many people were nearby that you could have contact with.

CE: A lot of them got into Scouting with me. I got into Cub Scouts and then went into Boy Scouts. I'd say three or four of my close friends, got into Boy Scouts also. We were members of Troop 22 in Highland Park.

SI: Where would they meet?

CE: ... It was at a grammar school, in Highland Park, New Jersey. I remember, we used to play baseball games before the scout meetings.

SI: Did you stay with Scouting the whole way?

CE: Yes, I was an Eagle Scout and I went to Boy Scout camp. That was Camp Sackawanna, in

Sussex County. ... I ended up being a summer counselor there. It helped me become an Eagle Scout, because the hardest thing for me was Lifesaving [Merit Badge]. Basically, I could swim, but I wasn't a great swimmer. [However], being up there ... during the summers, I finally got the courage to go for Lifesaving. [laughter] ... [They] almost like drown you, that type of thing. ... I finally got the gumption and, once I got Lifesaving Merit Badge, I was able to become an Eagle Scout, ... they had a special unit called the Order of the Arrow. ... You had to be extra careful on that one. You couldn't speak during initiation time. ... Then, I went into Explorer Scouts. That was a good experience. I enjoyed it. I remember marching in the Memorial Day parades as part of the Cubs and Boy Scouts. We used to march down Livingston Avenue, George Street, Albany Avenue and then across the Raritan River bridge, into Highland Park.

SI: Was that after the war?

CE: I would say probably it's after the war, because ... I would have been, I'm trying to think, Cub Scouts ... and then Boy Scouts.

SI: About eight?

CE: Yes. So, I would say it was when I was in Cub Scouts and Boy Scouts, so, it was after the war.

SI: There would be a lot of veterans marching in those parades.

CE: Oh, sure.

SI: They are still pretty big events, but, at that time, it was just after the war.

CE: Right, I remember. It was the thing to do. ... A lot of people turned out to watch the parades. ...

SI: I also wanted to ask you a little more about Camp Kilmer, which you were living right next to. During World War II, it was one of the largest facilities for embarkation.

CE: That's correct, right. ... You [would] see all the military vehicles, the MPs [military police]. ... Then, often some POWs escaped. We were all concerned when that was happened. Luckily, there was no fire and gunshots or anything like that. Everything was okay. I had an uncle that was in World War II. He graduated, from Rutgers, probably in '39, George Mitchell. He was an officer and he was in the Europe Campaign. ... I remember him saying they were ready to march into Berlin and they were told to stop and let the Russians go in first. I know he brought home items, souvenirs from the war. I remember there was a Nazi German hat and uniform and other things; I don't know what it was. I know he left them down in our basement.

SI: Did you have other relatives that were in the service?

CE: Not that I know of. After the war, my cousin, Harwood Fish, ... attended Rutgers. ... I don't think he graduated. I think he was in the Navy, to my recollection, because I remember

him in a Navy uniform, I believe. The only one during the war that I can remember is my Uncle George Mitchell.

SI: Would you correspond with him during the war, or did your parents, at least?

CE: No. Well, my parents probably did. I remember, he got married just before he went into the war, about 1942. I remember going to the wedding, and I remember him coming home, but I don't remember anything else.

SI: How often did that happen, where a POW would escape?

CE: I would say it may have happened three or four times, that I can remember. It could have been more, ... but there may have been other ones. They were in barracks in the hospital area. How close they were to us, I don't know. You couldn't go in. ... Camp Kilmer was a closed facility. I remember going to the USO building on Sutton Lane, as I mentioned before. ... We used to see soldiers. I think, one of the military people tried to date ... one of my sisters, but my parents wouldn't go for that stuff.

SI: Did your parents say, "You can talk to them, but do not get too close to them or too involved?"

CE: We didn't get that much involved.

SI: When a POW would escape, would the MPs come to your house and tell you to stay inside, because of what was going on?

CE: My memory is not as good on a lot of the details on it, but I think, once, someone came to the door, because they were having a hard time finding the person. ... They asked us and I think we had told them that [we] saw someone go darting through the fields.

SI: Do you remember soldiers coming through or sneaking out?

CE: Yes, some would be. They looked like they were sneaking out, because, ... down by Lake Nelson, which was about a mile away from where we lived, there was a cocktail lounge called the Nine O'Clock Club. ... A lot of people wanted to go there to socialize, to drink and whatnot. ... I think some soldiers didn't have a pass. They would just sneak out-type thing.

SI: Did you get the sense that Piscataway and New Brunswick were rowdier towns for having this Army base right there?

CE: I didn't notice it, no, not that I know. I think they probably helped the economy.

SI: When you went to the USO, what would you do?

CE: I don't remember. I just remember going in. ... I think they had dances, but I wasn't interested in that. I just remember going in there, but I don't remember any more detail on it.

SI: Did your parents help out with the USO. Did they make food or anything?

CE: Not that I know of.

SI: Was the cultivation at their farm all for themselves or did they do any canning and selling?

CE: We used to do canning, but no selling. One of the problems that came up on [was], my father had a tractor and loaned it out to one of his friends during the early part of the war. ... and the clutch got broken on it. You couldn't buy spare parts. So, we didn't have a tractor after that and [it] made it very difficult, because everything had to be done by hand. ... That was one of the hardships of the war, that everything was for the war effort and there was just no spare parts or any new equipment that you could buy.

SI: What did you think of your education in elementary school and junior high?

CE: I remember I didn't get into kindergarten until I was almost six, because my birthday is the middle of October, and you had to be five by ... September 30th. I remember being heartbroken when my sisters got on the school bus and I had to wait at home. ... It probably helped me in the long run, because it gave me more maturity as I went along. ... I enjoyed going on the school bus to both Randolphville School, New Market School and to New Brunswick High School, and I think it worked out fine. It was just more of a culture shock going from New Market School to Roosevelt Junior High, because everybody from New Market School went to different places. [They] either went to Dunellen, Bound Brook, New Brunswick High School, or St. Peter's. ... When we went to Roosevelt Junior High, you had to choose the foreign language you wanted. ... The ones that had been in [the] junior high school, seventh and eighth grade had some foreign language ahead of time, and they had six or eight weeks of each language. ... They knew which one they wanted to take. I picked German, [laughter] I guess it was because of the war effort, and it was a difficult one. ... I did okay my freshman year, because I could memorize things. I remember going in my sophomore year, when I went to New Brunswick High School. The teacher there was a Mrs. (King?) that I think taught both French and German. ... She had a German accent and you had to do a book report in German. I had enough trouble doing a report in English, [laughter] much less doing a German book report. I barely got through to get college credit. You had to have at least two years of foreign language to be able to go to college, but I squeaked through it. I think if I had taken a different foreign language, it would have been a little easier, since German was very difficult for me.

SI: You mentioned that meeting kids from a city environment was a little bit different.

CE: Yes. It was a whole new environment, as far as on that aspect. It was a good experience, but I'm saying that I think the most difficult thing is not having that foreign language background to know which one you may want to take. ... The rest of it worked out fine, as far as I'm concerned, and I ... recognize that, athletics wise, that the city boys had an advantage. ... They were the better trained athletes. I had no real problem. As I said, it turned out I was better off being on the track team than playing other sports anyhow. [laughter]

SI: Was there any social split between the city kids and the kids that came from farms?

CE: Well, probably, yes, because a lot of those kids had parties and ... I really never got too much involved in the parties, except at graduation time, when we were all invited. ... Because we went on a school bus, we really didn't socialize as much after school, let's put it that way, except I was on the track team. I remember, we used to go [to] the football games at Memorial Stadium, and [to] the basketball games. So, that part was interesting, but, again, we really didn't have any social problems with city kids. Being a commuter, [having to] ride buses to [go] back home after Track or football/ basketball games was difficult. We had Suburban bus service, but they had a very limited schedule ... It wasn't easy, until I got to, I guess, my junior year, when I started driving. I had my driver's license and could drive. Then, I could do a lot more. Up to that point, we were restricted, because you just didn't have access to go back and forth as easy. ... It's not like today, where they have soccer moms, take you everywhere. Parents really didn't do that much for the kids. They did ... for church and going to the Scout meetings, but, again, to go to different athletic events, we had to do our best to get there and back home. ...

SI: Was the church important in your family?

CE: Oh, yes, yes. We went to All Saints Episcopal church in Highland Park. ... My father had been on the vestry, and then, later on, I was on the vestry. We were very close, and the Episcopal Church was very important to our family. That was something that my father was, and my mother had converted when she married, and then, when I married, my wife Carol converted to [become an] Episcopalian. So, we were pretty strong in that aspect, yes.

SI: What about any social activities tied with the church, like youth groups or anything like that?

CE: Yes, youth groups. I know my daughters, Kim & Kathy, went to the youth Church groups up in the Trenton area. When I was at All Saints, we had parties ... They didn't have youth groups like they do nowadays.

SI: What did your father do after the car dealership went under?

CE: I'm trying to remember. Real estate, he got into real estate, and selling new and used houses. I know he worked up in the Irvington-Newark area with my uncle, Mac Fish. He worked for my Uncle Mac's real estate firm, in Newark. ... After he got out [of] real estate, he got into home improvements, doing siding and roofing and things like that. ... Then, at the end, he got into a service station, but his life was really, the new car dealership, but because of the war; it got past him afterwards. He got into used car sales, but he never did as good as he did with the new cars. ... He owned that. In other ones, he was just a salesman. ... That's my recollection of it.

SI: Do you remember him coming home and talking about how the war was hurting his business? Did he have trouble getting tires?

CE: I know tires [were] a problem. Everything was rationed, but everybody knew that the war effort [came first]. ... Everybody put up with the rationing. The people that had people serving overseas were a lot worse than we were.

SI: Do you remember any of the big events of World War II, like the invasions on D-Day?

CE: I remember D-Day, [the June 6, 1944 Allied invasion of Normandy, France], in Europe and the atomic bomb aspect. I remember playing baseball the day that President Roosevelt passed away. The atomic bomb, I remember helped end World War II. ...

SI: Were there any celebrations in the area?

CE: Everybody ... was excited, but I don't remember anything special, except what I read in the paper. A sailor was kissing somebody, you know, on Broadway, but I don't remember more details. Everybody was happy as could be, that's for sure, and everybody coming home, ... that was great, and then, having the GI Bill made it great for a lot of guys, being able to come back and get an education. I know, in my Class of '58, we had a lot of GIs from the Korean War that came in. I was in civil engineering and half our people were GI veterans. ... I remember, when I was in high school, I had a paper route delivering the *Star-Ledger* to University Heights, which was where the married veterans were at for Rutgers. ... Then, some of my college classmates lived over at the Heights. I remember going there to study, and they had their family and whatnot. It was a good facility for them to be able to live economically and go to college.

SI: That was where they had the trailers.

CE: Right, yes. It was temporary housing, but it was there for a long time.

SI: Does anything stand out about going around and delivering to them?

CE: It wasn't a big paper route, but I know the hardest thing was collecting money. ... I think by riding my bicycle, that was maybe ... a mile away from where I lived, helped strengthen my legs and I think that helped me in my running aspect. ... They were all very nice people, but they were poor, [laughter] as we were.

SI: Did you have any other interaction with Rutgers before you actually came to the University? Did you go to the football games?

CE: ... We used to sneak into the football games. I remember going down to the locker room. I remember going to the baseball games. We used to be ... batboys for them, and I remember I had my bicycle the one time and the catcher at that time was Frank Burns, who was the star quarterback. I remember him wanting a ride. So, he rode my bike and I sat on the handlebars. ... He was a great football coach at Rutgers. ... I remember the pitcher back then in the late '40s was Ralph Voorhees. ... I just recognized, recently, that there's a ... museum called the Zimmerli. I'm not sure how you pronounce it.

SI: The Zimmerli?

CE: Zimmerli, but, when I saw the article in the paper, a couple of months ago, it was named after Zimmerli, the mother of Ralph Voorhees. [Editor's Note: The Jane Voorhees Zimmerli Art Museum at Rutgers University in New Brunswick, New Jersey, is named in honor of the mother of Ralph Voorhees .] ... I know he was from Highland Park and he was a great pitcher. Again, we used to really enjoy going to all the games. ... I know that when I applied to different colleges, I applied to, like, five different colleges. I was primarily interested in Rutgers, because I knew I could commute and they had a good Engineering Department ... but you can't put all your eggs in one basket, ... because you never know what's going to happen. ... I was happy when I was able to get the scholarship and come to Rutgers. ... The other one that was a possibility was Lafayette, up in Easton, [Pennsylvania]. ... I had a scholarship offer, but I wasn't interested in living on campus and that far away from home. So, it was an easy decision to come to Rutgers.

SI: Were your parents and family supportive of you going to college?

CE: Oh, yes, sure, because my oldest sister Mary had gone to NJC [New Jersey College for Women]. I remember being a freshman in high school; we had to make out a report on my career plans. ... My grandfather had been an mechanical engineer, and he was involved with the oil business, the design of the refinery tanks. ... I remember going to the city engineer's office in New Brunswick to find out what was involved in being a civil engineer, and it turned out that's what I went on into at Rutgers. ...

SI: Were there any teachers in school that piqued your interest in the sciences or math?

CE: I was always good in math, but I remember when I was a sophomore, the geometry was a lot different than regular math. That was a little more difficult, but the algebra, trig and solid geometry, all that was very interesting and that helped me as a background for going to be an engineer. I remember taking chemistry, and one of our projects was to go do a report. ... [With] a friend of mine, we drove to Newark, to the Ballantine Brewery, and made a report on beer. ... That was interesting. We couldn't get samples, we were too young. Physics was more difficult, but I got through it okay, ... as far as college, the civil engineering classes were my favorite. My favorite professor were Ralph Del Mastro and Dr. Joel Wiesenfeld. They were very good. When I got into civil engineering, in my ... sophomore year, ... I missed a class in surveying to compete in a cross country meet. ... My surveying professor, Sam Sailor, was very upset, saying, "If you want to be a civil engineer, what comes first, your education or running cross-country?" [laughter] I said to him, "I'm going to do both." I was able to accommodate both, but I didn't miss any more surveying classes. ... I also remember freshman English Composition. My professor, Dr. Lamont, was a good professor, but he didn't give too many tests. One day, I missed one class to run at a cross-country meet on a Saturday at Van Cortlandt Park in New York City and ... that was the one day he had an unannounced test that I missed and I could not make it up. I ended up flunking first semester English Composition. I had to take it over again in the spring and take second semester Composition in the summer.

SI: You mentioned in your notes that you were interested in West Point at one time.

CE: Yes. I remember, in high school, we had a combined track meet, with high school teams, from Highland Park, Princeton, and New Brunswick High Schools . . . We went up to West Point to compete against the Army plebes. I was very impressed with West Point. It was a very beautiful place, and the dining hall, I remember seeing the plebes [as they] stood at attention and how they had to eat. . . . We had a great time and we won. We had a balanced team. We weren't favored, but we had the best from three high schools and we nipped out the plebes. . . . In high school, we could run a mile, but, at the meet with West Point, we could run the two-mile. I ran the two-mile, and the plebe who beat me from Army set the school record. . . . I came in second. . . . In cross-country, I used to run two-and-a-half miles in high school, but I had the endurance and I enjoyed running the two-mile and it gave me experience when I came to Rutgers. . . . At Rutgers, I ran cross-country. The freshman ran three miles, and the varsity five miles. . . . In track, they ran the mile, two-mile, sometimes three-mile races, so, the endurance helped me. What I found more difficult at Rutgers [was], they wanted you to run more than one event. So, I'd run the mile, then, I'd have to come back and run the two-mile later, and that knocked a lot out of me, but I did okay. . . . I'd won the mile, and came in second in the two-mile. I remember; oh, the other thing I wanted to mention, let me go back [to] one other thing. I remember my father taking me, in the late '40s, to Madison Square Garden to see the Melrose Games, indoor track meets, and we used to go with Doctor Howell from New Brunswick. I remember my father enjoying it, and I think that helped me get interested in track, I also remember, when I was in high school, in my senior year, I ran the mile at the . . . national high school championship meet in New York. I didn't do that well in my heat, but having the chance to run at Madison Square Garden on the indoor track was a great thrill. . . . At Rutgers, we went to Colgate for one of the outdoor track meets. I remember running at the Penn Relays the two-mile. . . . The winner was Jim Beatty. He was an Olympian. I also raced in the four-mile relay at . . . The Penn Relays. It was a great experience, but we didn't have the talent to compete on the national level, but it was very enjoyable.

SI: Had you had opportunities to travel and see what was beyond the Piscataway and New Brunswick areas, like on these little trips?

CE: I know, when I went into the advanced ROTC, after my junior year, I went to Fort Bragg, North Carolina, for six weeks [of] summer training. I remember, I was very impressed there, with the 82nd Airborne. They were a real elite-type group. I remember, we were taken out to the area where they do the jumps off the jump towers and they were asking for volunteers. I jumped up, [laughter] and then, I sat down, after common sense prevailed, because I really wasn't trained to do that type thing. [However], we had four or five of our people in my training company that did it. They really enjoyed doing it. I remember, my senior year, going to Fort Benning, Georgia, to the Infantry School. We went on what was called a "Flying Boxcar," [a C-119 transport aircraft]. . . . It had bench seats along the side. We had parachutes and barf bags; they were like ice cream bags. Everybody was wondering, "What's these bags for?" For those that had a big breakfast that morning, lost their breakfast. Luckily, I hadn't eaten that much that day, but just watching the other people, it was a rough ride, bumpy, and seeing guys heave their breakfast, you had to have a strong stomach to get through it, but that was an experience, having the parachute pack on your back.

SI: Going back to when you first came to Rutgers, what were your first days like?

CE: Well, it was a big adjustment. I remember when we went to convocation. ... at Kirkpatrick chapel. ... I think it was Dean (Owens?) or Dean, the one that used to be doing the football announcement on local radio station WCTC. ... I remember him saying, "Look to your left, look to your right; they probably won't be one of the graduates." ... The classes, back at that time, they weren't as large as they are now. It was a much smaller college. I think we may have had seven hundred freshmen, I think we graduated in the neighborhood of four hundred, and that included the transfers that came in. ... A lot of my friends had difficulty, especially engineering, if they ... lived on campus and got involved in more of the social life in the fraternities and whatnot. It was a bigger adjustment ... because the engineering [students], we had a lot more credit hours than the normal liberal arts students. They might take about fifteen credits; while we took between eighteen and twenty-one credits. We had labs over at the Heights [now the Busch Campus in Piscataway] and recitation periods made it much more difficult. A lot of engineers had difficulty with physics and chemistry. That separated the boys and the men, basically, in the engineering field, in that they ... were both difficult courses and if they couldn't pass them, then, they either flunked out or transferred into another major. ... I commuted and lived at home. ... Even though I did athletics, track wasn't as difficult as football or basketball. ... I was able to commit myself to studies. I didn't really get into a fraternity until my senior year. ... At that point, ... I got into more campus activities. ... Before that, it was just [that] I had to work harder. ... I had ... one of my friends in civil engineering who was married and had a baby. I guess, he was going to go into ROTC Advanced. ... Then, when he got married and had the child, he had to drop ROTC and lacrosse and worked almost full-time and going to college at the same time He was able to get through okay.

SI: Was he a veteran?

CE: No. It's just that he was a very bright individual, let's put it that way.

SI: However, a decent number of the people in your classes were veterans.

CE: Oh, yes, I would say that. I don't remember my ... sophomore year, but I know definitely, junior and senior year, that we only had, like, twelve civil engineers and we got to know them closely at that point, and four or five of them were veterans. They were good students, they were hard workers and had families [to] support, too. ...

SI: Do you think having the veterans in the classroom affected that whole experience?

CE: I think it helped me. ... I was the only one that was in advance ROTC, but none of them said anything against it.

SI: Were the veterans more vocal in class?

CE: No, I don't think so.

SI: Did they push everybody harder?

CE: No. ... They had to work a little harder than themselves. I remember one of the veterans I helped. ... We had gone up to a hockey game in New York to see the Rangers play, but I really didn't know anything about hockey, I'd had a cold and I guess it was a virus bug and one of the veterans, ... we stayed overnight and he caught my bug. ... I got sick, and went to the infirmary and, shortly after, he got sick and he lost quite a bit of time. ... He fell behind in calculus and I helped him, catch up on [it], ... but I felt responsible. [laughter] He got the virus because I had the bug initially, ... basically, if he hadn't gotten behind, he wouldn't have needed the help. He would have done well.

SI: Were you on the civil engineering track right away or did you have to enter that later on?

CE: ... I signed up for civil engineering, but ... in the freshman year, I think all engineers took surveying. ... Then, if you were in the civil engineering, the second year, then, you got into more advanced surveying. ... I had signed up for civil engineering right from the beginning and stuck through it. We had some that came in from junior college that came into our program. ... Some of my friends, had also signed up for the two degrees. ... They could get a BS [bachelors of science] and a BA [bachelors of arts], with a five-year program.

SI: Do any of your classes or professors stand out as being particularly good or bad?

CE: I remember, I'm trying to think a second, the two most outstanding ones, ... I mentioned before, Anthony Del Masro, and then, the other one was Dr. Joel Wiesenfeld. Those were two outstanding civil engineering professors. ... There was a very distinguished one that got involved with soil engineering and foundation engineering. He had written books and was a very learned man, but he had a foreign accent and it was very difficult to understand him sometimes. ... He also had an unusual way of teaching. I remember, once during a test and we all looked at it and we were all dumbfounded, how difficult it was. He then replied it was an open book test. It didn't help too much, because it's very hard, and I remember, later on in the course, to take another test, I went in there thinking the test was going to be open book. When I opened up my book, he said, "Mr. Ellis, what do you have your book open for?" [laughter] "Well, I'm going to use it." He replied, "No open books allowed." [laughter] I didn't understand when his tests were open book or not. I think he was better teaching graduate students. ...

SI: When you first entered Rutgers, did they still have a freshman hazing period?

CE: I remember we wore dinkies. I know it was black dinkies, but I don't remember any real hazing, except at the fraternities. Anyone who pledged there had hazing, but not as bad as some of some other campuses now, with the heavy drinking. They had beer, but no hard liquor.

SI: Other than the dink, there was nothing else you had to do or any clothes you had to wear.

CE: Not that I can remember.

SI: Okay. Were you involved in the social aspect of college?

CE: Not as much, no.

SI: Was there anything?

CE: I was involved with Canterbury Club, which is part of the Episcopal Church. ... I think it was the only thing I got involved [in] socially on campus, until my senior year. ...

SI: What would you do?

CE: We had monthly meetings, [at] Saint John's Episcopal Church, New Brunswick. We had evening prayer service and dinner before the meeting. So, it was a chance to meet different people. I remember seeing some girls from Douglass. I remember dating one or two girls from Canterbury Club. ... I remember, ... my freshman year, I did go on a boat trip. ... One girl I knew at Douglass had gone to ... my grammar New Market school. ... When I was over at the NJC student center, I saw her and I asked her for a date. We took the boat ride up the Hudson River.

SI: Was there much other interaction with the Douglass Campus?

CE: No, because, ... [in] our engineering classes, there wasn't that many; I think, at the end of my ... junior or senior year, there was one girl who was in one of my engineering classes. One of the summer jobs I did, was Woodlawn on NJC campus. There was a big house there, that people could stay and have dinners. ... I was ... almost like a bellhop. I sat at the desk, answered the phone and helped with the luggage, people going in and out. I did that for a couple of years. It was good ... pin money and helped pay for the gas in my car. ... It was usually quiet there and I could study at the same time there.

SI: It must have been difficult to balance that, your coursework, and your commitments for track.

CE: Track. ... We only practiced once a day. Now, they practice a lot more than what we did back then, but I was committed to track. I enjoyed doing it. Basically, that's probably one of the reasons I didn't have as much of a social life, ... between the studying, track ... and commuting, I didn't have the money to do much more on that aspect. I know, when I went into Advanced ROTC, getting that little stipend helped me in that aspect, too. I don't remember how much it was, but that check helped pay for the gas and other expenses. [laughter] It made [it so that] I could do a little bit more my senior year, when I got into the TKE fraternity.

SI: Why did you decide to go for Advanced ROTC?

CE: [laughter] I really don't know why I got into it. I guess maybe it was a little bit of a sales pitch in it. The other thing is, I had to take some other courses, and I wasn't that much into liberal arts-type courses. ... A lot of the engineering guys took music and art. I wasn't interested in those subjects, I didn't know what other ones to take and I guess knowing there was some

money involved in it, I figured, "Well, I'll give it a shot on it." So, what the specific reason is, I don't know. ... I enjoyed it. ... It was a good experience.

SI: Why did you opt for the Army training instead of the Air Force?

CE: I guess because I lived next to Camp Kilmer and saw all the Army soldiers and MPs. Back when we were freshmen, everybody had to take ROTC. It wasn't a voluntary-type thing. When you went there, you had to take two years.

SI: I wanted to ask you if there was any activity at Camp Kilmer during the Korean War. Do you remember anything about that?

CE: I'm trying to remember back then. ... I think Kilmer was probably still open at that time, but ... I just don't remember when it closed. ... I know that when it did close that it was a big impact on the economy of the area, but, then, Rutgers picked up a lot of the land and facilities there, ... with the Kilmer Campus [now the Livingston Campus] there now. That was a big break for Rutgers, I'd say. ...

SI: Yes. Do you remember any other ways that the postwar period affected the New Brunswick area, for example, the GI Bill?

CE: The GI Bill helped.

SI: Did the GI Bill help Rutgers grow?

CE: That helped with a lot of veterans using the GI Bill to attend Rutgers.

SI: Did you have neighbors who had worked at the camp who were now out of jobs?

CE: No, not that I can remember, but I think it was just the economy, and then, the business people in New Brunswick that missed it.

SI: Did you see downtown New Brunswick changing a lot in that period?

CE: Not that I can remember, no.

SI: Particularly after you got into the Advanced ROTC training, what stands out about that training? What do you think was good and bad about it?

CE: Well, I enjoyed the summer camp and going to Fort Bragg and Fort Benning. ... The drills we had got to be pretty warm in the uniforms, I remember when we were marching to Buccleuch Park, the uniforms were winter weight, I know that some of the guys got into the Scarlet Rifles, [the Rutgers Army ROTC precision rifle drill team], and did a good job on that aspect on it.

SI: Were you looking forward to military service?

CE: ... One of the things that came up on it [was], when I put in for what branch I wanted to get into I put in for the Corps of Engineers. When my orders came back, they had me in the infantry. I was upset, so, I put in another request. ... I had an uncle that worked in Washington, DC, under the Truman Administration, and I contacted him to see if he could help me. ... He did what he could, and he had told me it wasn't going to happen. The letter they wrote back to me said that the quota for infantry was much higher. They didn't have as many people signing up for infantry, so, they had to fill that quota first, but what my uncle had told me was, [what] the basic problem ended up being, that the other military schools, such as West Point and VMI [Virginia Military Institute], ... had filled up the quota for the Corps of Engineers. ... When my revised orders came through, they had me down for infantry six months and an eight-year obligation. Then I wrote back, "I'd like the Corps of Engineers, for two years." They wrote back saying, "You know, if you want two years infantry, you can have it and you'll switch with somebody else who doesn't want the two-year-type [commitment]," and I said, "No, if you're going to put me in infantry, I'll just take the six months." ... I was disappointed, because I had a good record and I figured, with my civil engineering [background], I could help them more in Corps of Engineers. I remember going to Infantry School at Fort Benning and I did very well down there. ... I came out ... in the top five in the training there. I think the most interesting experience was the escape-and-evasion-type course that we had to go through. It was a difficult training course you had to use a compass [for] and follow a map and trail. My civil engineering surveying background helped me on. Some of the other trainees got caught ... captured and put into, a stockade-type thing. I had no difficulty, and I didn't get captured. I wasn't that good with the rifle. I remember, ... you had to get a minimum of a 160 score on the rifle range, and I guess my hand wasn't real steady or I wasn't good with the sight on the rifle. ... 160 on it, and I barely made it. I remember ... one of my bunkmates there was upset that he ... just missed it by one or two points. ... I just made it by one or two, and he said, "Are you sure they scored it right?" I said, "Hey, [laughter] they scored it, I didn't score it," He had to go back to rifle range on a weekend to do the thing over again. ... I remember, when I was an officer and we went down, we took rifle range practice yearly at Fort Dix, when I was in that Reserves. I remember going to the rifle range and shooting the pistol. ... I never got any training on the pistol and I could not do very well [laughter] with it either.

SI: Was the training in the Rutgers ROTC a lot of basic infantry-type training?

CE: Yes.

SI: Did the training have to do with what to do with a platoon?

CE: The platoon, right, ... because, when we did the marching, we got into company/platoons, and squads. So, it was more infantry, but the curriculum covered more. ... The actual drills that we had is what made me think more of infantry. ... When I had the opportunity, after six months, I just stayed with the six months on it, and then, I figured, "Well, if I'm going to be that, then, I want to get [done] early, get it over with." So, I just told them, "Put me in as soon as possible." So, my orders came in to go about the middle of July. So, I had, like, six weeks between graduation [and reporting]. So, I went and got a job with the Federal Bureau of Public Roads, ... just outside of Washington in Alexandria, Virginia. I worked there as a trainee, for six

weeks, and then, I went into my six months' active duty. When I came out in January of '59, my father had been very sick at that point, so, I decided not to go back to Washington. ... I'd also had a job offer from, ... at that time, it was called the NJ State Highway Department. Now, it's the NJ Department of Transportation, and, when ... I told them I'd like to start back in June, they said, "Well, if you're going to go in the service, you go in the service and contact us later," so that when I came out with my father being sick, I decided to work with the NJ State Highway Dept. and I wrote back to the Bureau of Public Roads that I wouldn't be going back there and decided to go with NJSHD. ... They had a field office in Edison, which was close to where I lived in Piscataway. So, it made it easy to go there and I can help out at home, until I got married. I got married about a year later to Carol that I had met at a Rainbow Girls dance which ... my sisters belonged to I can't remember it, but my father was always interested in Masons and Tall Cedars [of Lebanon, a Masonic order] and my ... mother was involved with Order of Eastern Stars. They had a Rainbow Girls dance over in New Brunswick and, at that dance, I met Carol. I invited her out, and then, took her to the fraternity parties and ... I pinned her, I guess, my senior year, and then, I got engaged ... at Christmastime 1958, when I was still in the service, and then, we got married in June 1959, but I think the fraternity ... helped me get more socialized in that aspect of it. It helped a big part on that, really.

SI: Did you join the TKE fraternity because you wanted to get more involved?

CE: I wanted to get more in the campus life on it. ... I had a little more time at that point. ... I felt more comfortable on it, but going through the fraternity [in] your senior year made it a little more difficult, because the other pledges were younger [laughter] than I was at that point and that made [for] a more difficult adjustment, and to fit the time and to still help at home made it a little more difficult, but I was able to squeeze it through. It made [it] a lot more tighter. In hindsight, ... once I got into it, I said, "Gee, maybe it was more than I could bite," but I got through it okay and I enjoyed it.

SI: Why did you choose that particular fraternity?

CE: A few guys that I ran track with were ... Tekes and one of them ended up being my pledge brother, another changed fraternities to Lambda Chi after he pledged and the another one was an electrical engineer. He wanted to get into West Point and he finally got an appointment to West Point, and so, he dropped out in May, rather than taking the finals of the sophomore year, to go to West Point and start all over again, as a plebe. That's why I decided to be a Teke. It was a good experience.

SI: Were you involved in anything in the house, any committees or offices in the house?

CE: Not that I can remember, but I enjoyed going to the dinners on it, one time, after I graduated, I was invited back to help during the initiation, but I happened to be sick that time. I understand that TKE is no longer on campus.

SI: What got you interested in the Washington, D.C., area after graduating? Why did you start in your job down there?

CE: Well, I had two job offers. I had one from the Bureau of Public Roads (BPR) in Washington, D.C., and the other from New Jersey State Highway Department in Trenton, New Jersey. [The] NJSHD offer was after I completed my six months of active Army duty in January 1959.

SI: All right.

CE: I didn't want to sit home for six weeks, until I started Infantry School at Fort Benning, Georgia. Therefore, I decided to accept [the] BPR offer in Washington. I was just lucky to work in D.C. as a highway engineer trainee. It was a good experience.

SI: I did not understand that you had the offers.

CE: I lived at the TKE House at George Washington University. I couldn't really afford much and ... I only paid a very minimal amount to stay. I remember going to some of the concerts in D.C. and enjoyed ... the six weeks.

SI: First, you were at Fort Benning.

CE: Yes, yes. I went to the Infantry School for an eight-week cycle. Then, I was assigned to Fort Dix, [New Jersey], as a platoon leader in a basic training company from September 1958 until January 1959.

SI: What stands out about your time at Fort Benning? What do you remember about that?

CE: Well, I mentioned before the two key points, was that escape-and-evasion; I'm trying to think what the other one was. I can't remember anything else, but it was a good training and I enjoyed it.

SI: Can you tell me about what a typical day was like?

CE: It was basically basic training at the officer level. There was a lot of schoolwork involved on it. ... I remember the hardest part was really trying to do chin-ups. I really didn't have much upper body strength, and I couldn't do as many as other people could do on it and I had to do a lot more push-ups. [laughter]

SI: Do you remember them being particularly hard on the new lieutenants?

CE: No. ... It was a combination of good basic training, and ... a lot of ... drilling and rifle range, but I don't remember anything extraordinary on it. It was just crammed in. I think, over the years, that they changed the number of weeks that each basic training cycle [was] from twelve weeks to eight weeks. So, they crammed a lot more into eight weeks. ... I remember, also, that, some of the recruits weren't in good shape and had more difficulty ... keeping up on long hikes.

SI: What did you think about the South, since you had been there twice before?

CE: It was very hot and dry during the summer. ... I don't remember anything more, except it being hot.

SI: When you were at Fort Dix, did you just follow one training regimen or would you get a new class every so often?

CE: I was there four months. I think their cycle might have been maybe ten weeks or twelve weeks. So, we probably had two or three cycles in. ... I remember being a platoon leader. Again, some of the trainees were not in good shape, and when we had the long hikes, it was hard to keep the whole group together. ... I'd stayed back trying to keep the slow pokes up with the platoon. It made it difficult and, back in those days, we used salt tablets and we'd get them with breakfast and they'd push a lot down. Nowadays, they're saying they're not good for you. I don't know, but, back then, that was the big thing and I guess men felt we were going to get dehydrated if you didn't take them. Even though we had canteens, salt tablets was a big item. ... Then, it wasn't a volunteer Army, as it is now, and some of the draftees really didn't want to be there. Some of them got in difficulty, partying and going AWOL. So, there was a discipline problem on that aspect. I remember, one of the experiences was being a pay officer and going to get the money and ... distribute the money in different envelopes ahead of time. My hands were all green afterwards from [laughter] touching all the money. ... Luckily, everything worked out with no shortage of cash. ... I paid the company's officers at the officers' club ... and recruits at the company's headquarters. I also had to try to ... get them to contribute money to different things. It was a good experience. I was glad I was assigned ... at Fort Dix in New Jersey because I was engaged. So, I was able to get home on some weekends. ... It worked out very good.

SI: Did you live on the base?

CE: Oh, yes. I lived in bachelor officer's quarters (BOQ) on post. ... I remember, one of the times, ... I was going to go back to a Rutgers home football game. We had an inspection on Saturday morning and the company commander wasn't there. So, the ... [Sergeant] Major and I had to inspect the platoons. I guess I was a little fussier ... it took me a half-hour longer than the Sergeant Major, but I got done in time to get to the football game.

SI: How directly involved were you with the training? Did you have a sergeant who you would direct to do something and he would carry it out?

CE: ... My recollection is, the training, was in different topics, with different NCOs trainer's [at] those sites. We would have to get the trainees to the various sites on time. We were responsible for all of the training in the company area: PT, marching, inspection of barracks, rifle cleaning, etc. ... Depending on what type training, ... there were specialists for each one and most of those were non-commissioned officers doing the training. We had sergeants who we directed to carry out training in the company area - PT, marching, inspections of barracks, rifle cleaning, etc.

SI: When there was a problem, would you be the one who had to dole out the punishment?

CE: The company commander, really, you know. The company commander made the final decision on any of the harsh-type things. Minor things, ... we would handle, but the company commander was really the one deciding action on any of the serious problems..

SI: When you were on active duty in the military, in the classes, did you talk with other officers about the bigger threats, like international Communism or what you saw as looming military areas?

CE: I don't remember it too much on that. I just remembered, when I was getting out, the company commander tried to give me a sales pitch to continue on. [laughter] It went in one ear and went out the other, because I already had my job lined up and I [was] going to get married in June. So, I really had my career planned in a different direction, but, no, I don't remember it too much more than that.

SI: Your active duty commitment ended in the beginning of 1959.

CE: Right.

SI: Did you then work for what was then the State Highway Department?

CE: That's correct.

SI: What did you do for the State Highway Department at first?

CE: In the beginning, we went through a six-month training program, and, at that point, we rotated through all the different divisions and got a handle on what the department did. ... Part of the assignment was to work out of the Metuchen field office and I was interested in surveying, plus, the field office being near where I lived in Piscataway; I just chose to be assigned there. So, after the six-month training program, I worked at the Metuchen field office and our initial assignment there, I was out in the survey crew as a rodman, basically. It's almost like an entrance position. ... You didn't need to have a degree from Rutgers [laughter] to be able to be a rodman, but the party chiefs there were guys who ... [had] been working for the department thirty to forty years. ... Most of them weren't college educated, but they ... knew what they were doing. ... They trained us excellently. A couple other of my college friends also worked for the NJ SHD. One of them went into the bridge division and the other one was in the same survey office I saw him studying the one day for his NJ Engineering in training certificate. In order to become a professional engineer, I needed to have the engineer-in-training first. He convinced me to get the engineer-in-training certificate because that's the type of information you learned in engineering classes at college, "If you wait and take it after four years," when you're allowed to get your professional engineering license after four years of experience, "you forget a lot of that stuff from college." He steered me in the right direction and I was able to get the engineering training certificate while I still remembered the stuff. ... After my four years' work experience, I went for my PE [professional engineering] license and I took a review course

at Rutgers and my favorite professor was teaching it, Ralph Del Mastro. He made it easier for me to pass my professional engineer's license. ... Three years later, I went for my Surveying license. ... Again, I went through a review course there at Rutgers. ... Being able to get both NJ Professional Engineer and Land surveying licenses helped me get advanced at NJ DOT. I did a little outside work, but not that much, but it gave me credentials and, if I ever wanted to leave the DOT, it would have given me more opportunity for jobs in other places, but I made a career at DOT.

SI: What did you like about the DOT?

CE: Well, I enjoyed working in the field, and then, ... I got transferred into the Metuchen field office. I was involved with preparing right-of-way maps for acquisitions, of Right-of-Way purchases needed for highway improvements. ... Then, I became an engineering witness and testified at ... condemnation cases when the State condemned land against ... private owners or businesses, that they needed the land for [a highway]. I was the engineering expert witness to testify in courts in Middlesex, Somerset, Monmouth and Ocean Counties. I enjoyed it, but you could only go so far working in the field office. Eventually, if you want to get ahead, I made promotions as far as I could go, but, then, from that point on, then, you had to take Civil Service tests. I remember the one test I took was specification engineers; that's writing the specs for construction. I passed the test, but I didn't want to be writing specs. It was almost like [laughter] writing a book-type thing. ... I wasn't interested, so, I turned the job down and one of my bosses in Trenton got on the phone and told me: "You can't turn down any promotion opportunities. If you turn it down, they're going ... to think that you want to stay in the field forever,". Well, I didn't want to stay there forever, because I had two children by then and I knew I wanted to be able to get ahead. Then, he also told me, "They really don't want you." [laughter] ... He said, "Put in for it." So, I did not turn down the offer. Then, six months later in 1967, I had an opportunity to work in the right-of-way engineering office in NJ DOT Headquarters in Trenton. It wasn't a promotion, but it got me into headquarters then they wanted to put me in specs, because I was still on the promotion list, so, reluctantly, I went over there. [laughter] ... I said, "Boy, I don't want to be [here]," but guys were sitting there doing that job for thirty years, writing specs. I said [laughter] that wasn't too interesting, but, luckily, within three months, the guy who was in charge of condemnation maps left and I was selected to replace him and get promoted. If I had stayed in specs, I probably would have went looking for a job somewhere else. I would not have enjoyed doing it, even though it's an important item but it wasn't my cup of tea, basically. ...

SI: What were you doing from that point on?

CE: A few years later, I was promoted to supervising engineer II in an area engineer's office. In 1970, in order to avoid commuting to work, my wife Carol & I sold our home in Somerset and brought a new home in Ewing. I managed Highway Design Projects. The department didn't have enough designers. So, they hired consultants and we managed the consultants' work. I held two public hearings for our design projects. Projects: Metro Park Ramps to Garden State Parkway in Edison and for the completion of the Route 78 Interstate highway from Watchung Reservation up to Newark Airport, which was a major dual interstate highway. Major problem was getting Route 78 through the Watchung Reservation park land which was the ... five-mile

missing link through the Watchung Reservation. ... We finally got it resolved, we thought, except we were waiting for the Union County Park Commission's written approval and it got lost in the lawyer's office. ... By the time the park's approval came through, a new federal law was enacted for 4(f) land, [Section 4(f) of the Department of Transportation Act of 1966, pertaining to highway programs being built through historical or wildlife land], saying, "You can't take park land unless there's no other way of doing it." So, we had to go back and do an environmental impact statement and a 4(f) report. ... The project was delayed ten years. We got involved with bog turtles, deer crossings, and all kinds of environmental issues, and we ended up putting [in] special structures for deer crossings, where deer could go through a tunnel underneath. It turned out better for the park overall, but the completion of the highway's five mile link was delayed ten years. ... The cost went up from about twenty million to 120 million. Then, I got involved with the [railroad electrification]; they switched me over to railroad electrification. ... This was before there was New Jersey Transit, so the DOT was responsible for the re-electrification of the Erie Lackawanna Morristown line and order new railcars, and due to my management experience, they decided to make me project manager. ... I turned it down. I said, ... "I'm not an electrical engineer. I know nothing about railroad electrification," [laughter] and then, again, it got to a point where, "We need you there. If you say no, [laughter] you're going to be, you know, blackballed." So, reluctantly, I left a job that I ... knew everything about to [take] a job I knew nothing about, except how to manage. I managed the work of a New York consulting/engineering firm on the re-electrification. ... I was lost for about two months learning about the project, ... but, luckily, I was able to build up a staff that could help me, but, again, we were civil engineers. I tried to get some electrical engineers, but ... we just didn't have that many available in the department. ... It was a very difficult project, but we got through it. ... We also managed the railroad electrification project for the New York and Long Branch railroad line, which was renamed the North Jersey Coastline. ... Both projects got completed, but we had tremendous overruns, because the initial cost estimates were low and the projects were delayed with public hearings and environmental impact reports. We could have probably bought everybody a car and they could have commuted, [that] type thing, but, ... again, the air quality and everything else, the public transportation was the way to go on it, really. We obtained eighty percent funds from the Urban Mass Transportation Administrative to use on the projects, but it was a monumental task. ... My next assignment was to, then, manage the Hudson River Waterfront Light Rail project. We got into a conceptual engineering study on that and, again, it was a long, drawn-out process. ... We were just about finished with our conceptual engineering study project, when, I was promoted to Chief Engineer, Regional Design, and the light rail project was transferred to New Jersey Transit, which designed and constructed the light rail project in stages along the Hudson River waterfront. I was Chief Engineer in charge of Regional Design from 1988 to when I retired in July 1992.

SI: Which project did you find most interesting or challenging?

CE: I think, working on the Route I 78 projects in Newark and the Watchung Reservation was the most challenging. The Hudson River Waterfront Project, I enjoyed because we had to deal with many different agencies, the Port Authority of NY and NJ, the Hackensack Meadowland Commission, Hudson County, Jersey City, Hoboken, all the other towns along the Hudson River waterfront. We got involved with a lot of public meetings and I was commuting back and forth. Basically, I was on the road three days a week on it, trying to keep things moving. It was a big

challenge. ... We didn't know where the money was ever going to come from to do it, but we knew what needed to be done, basically along the "gold coast," [laughter] as far as we could see. ... I enjoyed being chief engineer. In fact, that got me to the next level-type thing. It was very enjoyable, but my hours I was putting in were so long and the family [time] was more difficult. ... So, when I got an early retirement opportunity in '92, I decided to retire, because I didn't think there would ever be another early retirement where you got an extra five years on your pension. ... I was burned out at that point, basically. So, I took early retirement. Best decision I ever made, because I also had a health problem, that, back in '78, when I was on the rail electrification project, I had a severe pain in my chest area and fainted. ... They took me to the hospital and they thought I had some kind of a cyst or something. [I] went through all kinds of tests, went down to Philadelphia Presbyterian Hospital for an operation that removed a cyst, I thought. It ended up being a tumor on the outside of my stomach, seven pounds, the size of a football. ... I was always skinny like that, but they were able to remove the tumor, but they took three-quarters of my stomach. ... I ended up having twenty-two percent [of a] stomach left. It was cancerous, but they caught it early enough. If I hadn't had the pain and if it had exploded into my vital organs, I probably [laughter] wouldn't have been around much longer. ... At any rate, the surgeon in Philadelphia did a super job. He told me I didn't have to do any chemotherapy or radiation or anything, which would be unheard of as far as if you had cancer, [laughter] and the nutritionist said I had to eat little and often. Well, that's what it amounted to, ... that from that point on, I carried my satchel so I could eat little meals. If I overeat then I would get sick and ... what it amounts to is, I pass out or get very, very severe pains on it, because my stomach never stretched back to the normal size. It's almost like what people do to lose weight. ... The combination of that and, plus, my family, ... early retirement was my best solution. I am now involved with my fiftieth reunion for New Brunswick High School [and] the fiftieth reunion at Rutgers. I play senior softball. I was elected into the New Brunswick High School Athletic Hall of Fame and I'm now on the committee. ... Coach John Ragone and Coach Joe Marino originated in 1995 the Athletic Hall of Fame at New Brunswick High School and they were on the committee. Coach Ragone recently passed away and Coach Joe Marino is still a consultant, but he doesn't get too involved now, because he's ninety-five years old, [laughter] but ... I was involved [in] going to the meetings. ... I've slowed down, so, now, I've replaced Coach John [Ragone] as a consultant, but I maintain all the nomination lists on my computer and do a lot of checking, trying to find missing people, because we had a lot of great athletes, [but] we still can't find some of them.

SI: That is good. Did you ever go into consulting after you retired?

CE: No. Most of my friends did, but I just really was burned out. ... I had enough money, between my pension and deferred compensation, and then, when I became sixty-two, I took early Social Security benefits, and, [with] our standard of living, I could afford to do it. I just felt that I didn't know how many years ... I'm going to live, but I'm going to enjoy them.

SI: After you left active duty in January 1959, you were in the Reserves for about ten years afterwards.

CE: Yes, about a total of eight-and-a-half, nine years, I'd say. ... Let me just look through my records here. Yes, initially, I was just in a standby Reserve and the one year, back in ... 1962, I

got called up and I went to two weeks of summer camp at Camp Drum, [New York]. I was attached to the 77th Division from New York and I took a bus up there. The week in-between, I was going to go visit a cousin that lived in Fulton, New York, but since I was attached to the Company, they needed an officer of the day for the weekend. [laughter] ... I got stuck on base all weekend, so, I couldn't go to Fulton. One issue that came up ... when I was up there was, the Missile Crisis in Cuba came up at that time. [Editor's Note: The Cuban Missile Crisis unfolded in October 1962.] ... President [John F.] Kennedy was going to be on TV to discuss the possible call [up] of reserve forces. There were inspectors out there checking the state of training of the New York 77th Division. ... We were concerned that the 77th Division may be called up to active duty. ... Since I was attached to the 77th, I didn't know if I would also get called up. ... Just about three or four days before the end of my two-week tour of duty, the President got on TV and said, well, he'll make his decision in two weeks. [laughter] Things did quiet down afterwards, but it was a very, very serious problem back at that time, with Russia and the missiles. ... I also remember being an officer on the rifle range, when one time someone fired a rifle out of their assigned walking column on the range on it, and it was just lucky someone didn't get hurt or killed. ... We had all the right training, to keep in columns but something went wrong and, luckily, no one got hurt. It was a good experience. ... Later on, in '63, I decided to get into the active Reserves. So, I joined the 78th Regiment, 78th Division out of Nixon, [a section of Edison, New Jersey], and they assigned me to Detachment Seven, which was a Cook [laughter] detachment. This was a training regiment. ... If they got activated, they would be, like Fort Dix, ... training new recruits. So, they had seven different attachments for different disciplines. The Cook unit is the one that would be in charge of preparing meals at the camp. [laughter] It was a funny experience, but we had to do training for it. At that time, we just had two-hour evening meetings and two-week summer camp at Fort Dix.

SI: Before that, did you have to go to any meetings?

CE: No. When I was inactive, I was just in a Control Group and I only went in the Summer of 1962 to Camp Drum. In '63, I decided to do join the Reserves. We had had our first daughter, Kimberly, ... born in '62, and my second daughter, Kathleen, was [born] in '64. ... We needed a little extra income and the Army Reserves, I figured I'd make a little extra money. After a year, they set up a new unit called the NCO [noncommissioned officer] Academy, and I was promoted to first lieutenant in the NCO Academy unit. To be able to get ahead in the Reserves, you had to take different extension courses, and I took what courses were necessary and got promoted to captain in '66. ... I was the Assistant S-3 [operations and training officer], in Headquarters Company, and I was there for about a year and, all of a sudden, I got transferred to Trenton, from the Metuchen field office to Trenton State Highway Department Headquarters in Ewing. ... [With] the commute back and forth to Trenton and the longer hours, I decided I'd have to give up on the Reserves. So, in ... April of '67, I was transferred back to the Standby Reserves, and then, in '68, I got an honorable discharge, because I didn't continue taking required extension courses. At that point, if you wanted to stay in the Army Reserves, you had to take so many points, and I wasn't on the active duty, as far as active Reserves, and I wasn't taking any extension courses. So, I decided just to get a discharge and my eight-year obligation was completed. Subsequently, I've heard now, with the problems they were calling up all the Reserves, National Guard units, some of the officers being called up thought they had completed their military obligation, that, apparently, when you get your discharge, you're still an officer for

life, [laughter] and can be called back to active duty. I know that once I got discharged, ... one of the friends in the Metuchen field office was a lieutenant colonel in the active Reserves. ... He asked me what I was going to do with my military uniforms. I gave them to him to give to somebody else, ... but, if I had known I ... could have been called up at any of that time, I shouldn't have really gotten rid of those uniforms. [laughter] ... They never told us that you were an officer for life, [laughter] as far as I knew, that type of thing, but it probably makes sense, up to a certain age, but I would assume, somewhere along the way, there would be a cut off. ... I'm saying it could have happened back in Vietnam time. ... Just before I got out of the Reserves, in '66, they did switch it to four-hour evening meetings and one weekend a month. So we had better training at the end, ... when I got out of the Reserves, than when I first went in.

SI: Were you ever afraid that you would be called up for Vietnam?

CE: No. Back in those days, no, it didn't seem to be a problem. ... In [the wars in Iraq and Afghanistan], they [did not] reinstate the draft, so there was no other recourse; then to activate the Reserves. ... They really are taking advantage of a lot of the Reserve /National Guard units that are going back and forth on two or three tours of duty. The reserves now include wives that have families back home. In World War II, if you had a family, you could get a 4-F-type deferment. In this case here, once you have made a Reserve military obligation, it seems like it's a lot more of a hardship on some of the families on it. ... I don't know how people do it today, really, and then, ... everything is discouraging some are coming back, beat up, by these bombs, ... being blasted along the roads. [Editor's Note: Mr. Ellis is referring to improvised explosive devices (IEDs) used against Coalition Armed Forces in Iraq.] They come back injured and they don't get the right medical treatment. It's heartbreaking, you know, it's just [heartbreaking]. Our local Congressman, in Mercer County, he used to be the chairman on the Veterans committee trying to get money for medical treatment for the injured veterans. He put in for extra money in past years. He was turned down, and then, he wasn't put back on the committee, because he wasn't getting along with the administration, [laughter] and, now, all of a sudden, they find out ... how bad it is, at Walter Reed Hospital and the rest of them, to take care of the veterans. [Editor's Note: Neglect and poor conditions at Walter Reed Army Medical Center had been brought to light by the news media in February 2007.] It's just unbelievable how ... they've forgotten how to take care of [the injured returning veterans], when they really committed more to the war effort.

SI: Yes, that is very true. Is there anything else that you would like to add about your military service?

CE: I think that was basically it, that I can remember. As I say, with only having six months of active duty, ... a lot of my friends had a lot more military experience. Coach Joe Marino, you're going to get a wealth of military war experience from him. I had gotten an e-mail about the Vietnam Memorial in Washington, DC, I emailed it to a New Brunswick High School friend who was a fighter pilot in the Vietnam War. He emailed me back that he was really touched by the Vietnam Memorial because he had lost two of his buddies in Vietnam. The Vietnam War wasn't supported Stateside. ... Now, with the memorial, a tremendous thing for them, no question about it. ... A lot of my classmates have a lot more experience than me. That's why I'm hoping they will go, [through] with their oral history interviews.

SI: I think we have already seen some success from your efforts to reach out to other members of the Class of 1958. We have drawn out a lot of good information in this interview as well.

CE: Well, Coach Ragone wasn't in the Army, but when I read his interview, I learned a lot about him that I didn't know. It was fascinating, really. ... My wife kept saying, "Why are you going for the oral history interview?" I told her, "Well, I'm the class historian." [laughter] ... "I'm trying to set an example to my classmates to get as many to sign up for the oral history interviews." I support it one hundred percent.

SI: Good. It is very interesting to hear about growing up in the area, particularly next to ...

CE: Camp Kilmer.

SI: Yes, Camp Kilmer. Do any of the meets or rivalries stand out in your memory from your days of running track at Rutgers?

CE: I'm trying to think on it. ... I remember, we used to be involved with the Middle Three, Rutgers, Lehigh and Lafayette. ... One of the guys I ran cross-country with, Ray Burson, now lives in Missouri and he came to our thirtieth Rutgers University reunion and I just got an e-mail from him. He's helping me contact some of our classmates about our fiftieth reunion. Athletically-wise, I think that's probably the only one left that I am in contact with. ... You know, but we usually get a hard core back [of] around forty or fifty classmates coming back. ... For our fiftieth reunion, we had an eight-man committee, but I've got it up to nineteen members now, because the more people are on the committee to make phone calls out to try to get more classmates to attend our 50th! We're trying to get over hundred classmates to attend our fiftieth. I'm trying to drum up the business on it, to see if it can be done on it, but one of the big problems right now is Rutgers cutting back of sports. A lot of classmates are uptight on that type of situation.

SI: Yes, the crew.

CE: Yes. ... One of my classmates is on the Board of Trustees and he's explained what the total picture is on it, but ... no matter what it is, we recognize there's a reason behind everything and there always has to be cutbacks somewhere, when you've got tight budget conditions. ... These Olympic sports that were cut out, I know that if I was at Rutgers and if track and cross-country had gotten eliminated, I would have been very disappointed. I would have stayed here, because I wouldn't have had much other choice, but ... many of the others would want to go somewhere else, where they had the opportunity to continue competing, especially if you're world-class. Rutgers has had a lot of Olympians in crew, fencing and swimming. ... There's a lot of money being donated to these causes, but they're still not resurrecting it. Now, what they're explaining is, they will still have [them on] a club basis and they still have an opportunity to have some club meets, but it's not the same as ... doing it on the intercollegiate level. So, it's a very [large] hardship especially since a lot of money is being put out for football and basketball. I enjoy watching them, but, to see the minor sports being dropped, it's very difficult, and some people may be a little concerned, wanting to come back to the campus, knowing that, "Hey, I used to

participate in these sports and, now, all of a sudden, you just throw them to the wind." It's tough decisions, really. I just hope it works out okay and people don't hold that against Rutgers, being that there will still be a club-type thing, they'll still have the opportunity to compete, but not at the same level, really. I think that's it.

SI: All right. Is there anything else you would like to add?

CE: I think ... I have everything. Let me see if I missed anything. One other thing I did, too, one of the things when ... I was at NJ DOT. I went in 1970 to the Highway Management Institute at the University of Mississippi. I enjoyed it. There were two different sessions. One session for four weeks, and then, another for three weeks. About the time when Archie Manning was the star All-American quarterback at Ole Miss. ... It was a great experience.

SI: Did you get the chance to see a game?

CE: I went to a basketball game. ... We were there in January and April. ... Archie was in his senior year. ... Now, of course his sons, Peyton [laughter] and Eli, are doing great in the NFL level.

SI: You have two daughters.

CE: Two daughters, Kim and Kathy, yes, and one granddaughter, Joanna.

SI: Good.

CE: Yes. ... The trouble is, my granddaughter, Joanna, lives in California, so, I only see her about once a year. That's the hard part, but she plays basketball, runs track, and cross-country. She's only in the sixth grade but she plays the cello and the piano. I hope to see her ... later this year.

SI: Thank you very much, and thank you for all your help in getting your class involved.

CE: Very good, thank you.

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Reviewed by Anthony Arcaro 2/20/08
Reviewed by Matthew Doherty 2/18/09
Reviewed by Shaun Illingworth 6/23/09
Reviewed by Sandra Stewart Holyoak 6/27/09
Reviewed by Clifford A. Ellis 4/13/10 & 7/2/10