Sandy Hook, Gateway NRA, NPS Oral History Interview with Peter Kennedy Signal Corps Civilian working on Radar SCR-268 and SCR-270 1940-41

Interviewed by Tom Hanley, Monmouth University student intern February 2, 2004

Transcribed by Mary Rasa
Editor's notes on parenthesis ( )



Peter Kennedy in 1940s. Photo courtesy of Peter Kennedy



Peter Kennedy in 2004 at Sandy Hook. Gateway NRA/NPS photo.



Photo SCGDL No. 469-S, 10-29-41.

## Figure 1.

## RADAR ANTENNA SHELTERS

Examples of externally-buttressed wooden antenna shelters whose non-metallic construction permitted adjustment and testing of Radio Set SCR-268 without exposure to the weather. The row of shelters shown here was built by Western Electric on the Signal Corps restricted reservation at Fort Hancock. The foreground illustrates terrain of Sandy Hook.

(See Chapter I, C, page 8.)

Antenna shelter built on South Beach, Fort Hancock. Photo courtesy of US Army-Communications-Electronics Museum

(Editor's note: The Signal Corps at Fort Monmouth had a field station at Sandy Hook on South Beach where radar was tested from 1933 to 1942. Today this area is known as the Fishing Beach. To learn more go to:

http://www.nps.gov/gate/historyculture/upload/S.H.%20Radar%20report%20final.pdf Mr. Kennedy passed away on April 12, 2009 at the age of 96)

TH: It is February 2, 2004. I am Tom Hanley and I here at Fort Hancock with Peter Kennedy. Good afternoon Peter.

PK: Good afternoon Tom.

TH: I've got a couple of quick questions for you.

PK: Sure.

TH: When and where were you born?

PK: I was born in Brooklyn in 1913. (March 17, 1913)

TH: What high school did you attend?

PK: I went to Boy's High, Evening High in Brooklyn from 1928 to 1932.

TH: So you graduated from there?

PK: I graduated from Boys High School.

TH: Was your Father or Grandfather in the military?

PK: My Father was in the military. He was a Spanish-American War veteran. And my Grandfather was, he was in the Civil War. He was in the Civil War.

TH: So they served roughly from the 1850s I would say?

PK: 1898 was the Spanish American War. It was only a short war, but it, I guess he was about 20 at that time. 1898. His name was Peter Kennedy too. He was named after me. (laughter)

TH: They were both involved in the military. How did you get involved at Fort Hancock?

PK: Well, the Depression was starting to get over. It started in about 1929 to 1939. And in 1939, I made an application for a job from the Army. I was an engineering draftsman. I was notified that I was accepted in 1939 and the job was down here and the other one was Pearl Harbor. I didn't know where Pearl Harbor was, but this was closer and I accepted that. Fortunately, shortly after that Pearl Harbor started in 1941.

TH: So you just missed being there on December 7<sup>th</sup>.

PK: I did. I had an appointment in both places, Fort Monmouth and Pearl Harbor. Pearl Harbor paid \$200 a month more. So, I accepted the position at Fort Monmouth. They needed people badly so I came down here. I reported to Fort Monmouth and then Colonel Corput and Paul Watson. Paul Watson was the chief civilian (inaudible). Colonel Corput was the head military. So they asked about 12 of us all over the country. They asked us if we wouldn't mind going out to Fort Hancock. So, we said, "Where is Fort Hancock?" And nobody had any objections so he said, "Fine." And they opened up those buildings on the beach. And we were there right up to Pearl Harbor. And we

developed the SCR-268, the first radar. We had a parade on the beach when it was finished. It was very top secret until it was finished and then it was still classified secret, the details of it was. So, we had a party on the beach and then we had a beach party was given later in the evening at a beach club in Long Branch, North Long Branch. I have pictures of that day too. And then we stayed here and then after Pearl Harbor, somebody, maybe security wise, they decided to move us down to Camp Evans (Wall Township, New Jersey). Then we went down to Camp Evans. I was there a couple of months after Pearl Harbor and everything. My Father had died. I decided that to look for something more secure. I would have stayed here, but being single I wouldn't probably get any deferments. I had four or five of them while I was out there, but now with Pearl Harbor they take anybody that wasn't married.

TH: So, you were here, your start date at Fort Hancock was 1941?

PK: 1940.

TH: 1940. What year were you at Fort Hancock until?

PK: 1940 to about late '41.

TH: Late '41.

PK: Late '41 after Pearl Harbor. Almost two years.

TH: No, you didn't know much, you didn't know anything about Fort Hancock when you first came here?

PK: I didn't even know where it was. Yeah. But it was wonderful...building of the Signal Corps. There wasn't a lot of military things at that time. Most of the training was done with wooden guns, things like that. So, '41 was Pearl Harbor and we moved to Camp Evans. Camp Evans and we did a lot of testing. We were testing, in those days we had tubes. We didn't have transistor things and things like that. That was all the Thermionics Branch out here, Hancock and then we went down to Camp Evans. We tested, we put it had to go through a satellite or something. Anything I spec'd on it we put it in a 57 mm container. They are about that big around and that long. We'd shoot them out of guns, when we'd aim them. And then 155 (mm) missiles. About that big along and that big there. We put (in) everything we wanted to fly. So everything we had had been tested.

TH: So that's how you guys built the radar using these shells?

PK: Oh, absolutely. Yeah. Of course, you know, make it flyable. We were flying most of these in satellites. We were very early in satellites. These were like the first satellites. I think we say here we had...(flipping though pages) SATCOM, COURIER, SCORE, ADVENT, TIROS, COURIER, SATCOM. All of them satellites.

TH: Those were all satellites used. What year was that that you were using these?

PK: That was in the 1960s when we set up the satellite and in many cases the '80s.

TH: Was that related to NASA at all?

PK: NASA didn't exist.

TH: Okay.

PK: NASA came up here and picked our brains. "How did you do this? How did you do this?" But we put up all these satellites before NASA. So NASA came we had SATCOM you know, would have been 18,000 miles out in space. It would be rotation with the earth.

TH: You started all that here at Fort Hancock, correct?

PK: No. The 268, the SCR radar 268 and the Score, the underwater radar.

TH: And from that you went on to develop satellites later on.

PK: Satellites, we did testing in Belmar and we did a lot of work on flying things. Somebody must have had a lot of vision that we were going to go into something because of different forces and we went into that. And then in 1968 or 1960 after I came back from Algiers, we started the satellite (inaudible). But, before that we had the drones. That was another one.

TH: Drones? Kind of like, similar to the...

PK: Airplanes without pilots.

TH: So, it's like what we are using today in IRAQ. Like the Predator II.

PK: Like the.. .it has no pilot.

TH: Yeah. I know what you are talking about, but I don't know the name for it.

PK: You shoot them off the ramp and then they let out a parachute. And that's where they (are) recovered.

TH: You had those in the '60s. You were developing those.

PK: Before, in '58. Yeah.

TH: In '58.

PK: I had the airplane with the (inaudible). General Thanes, he was down in Washington and he came out here. He had a drone program out of Washington. And then he came down here. And I don't know why but he got called out of Washington for something and I met the guy I had been with in Algiers, a friend of mine, a pilot and we started talking and that's where I first met Thanes. And then he insisted on getting people for the work with the satellite, the SATCOM program, satellite communications. So after the drone program, after about two years, then we went into to the satellite program, development of satellite communication aids.

TH: That's incredible.

PK: It's a tremendous deal.

TH: I'm backtracking a little bit because this is, you went onto... I'm really impressed with what you went on to do. But before that when you were here at Fort Hancock, developing Radar, did you know that you were going to be doing that before you came here?

PK: Well, I knew it was something to do with the Signal Corps. When I came down to Fort Monmouth, and looking around the Signal Corps, all I could see was soldiers climbing poles. That was too many cases with the Signal Corps. The guys were out there hooking up wires. (laughter)

TH: Did they have the big, I know they had giant radar antennas out here for a while, were those out here while you were here?

PK: Oh, no.

TH: Big black structures.

PK: No. That was later. For the first part of that I was bought, I was a contract engineer for Raytheon and early radiation with Lockheed back when we were going into satellite business. I had the mechanical part, the launching of the satellites, and all that. I would go to heat. You know, going into space 18,000 miles the thing would fall apart so we had to use solar cells. And they were fine. And I went all over the country, you know, my assignment. Lockheed and Whitney and I had to figure out what they were doing about solar energy. And there was a lot. You know, we had big antennas, a big antenna down in White Sands. It would get 4,000 degrees Fahrenheit. You had to have a forty foot ditch. The ground ditches went down around 40 feet. The early radar was portable. You folded that up and you went in vehicles and you moved it. But the big antennas, if you painted them black, they would collect the heat from the sun and even now, we should be doing something in satellites and energy collecting and wind tunnels. They say with the environment, "Oh, it's going to hurt the birds." It might kill a bird, but the philosophy...

TH: Of wind farms harvesting energy.

PK: Yeah. Generating it. Wind can produce energy to collect on batteries. You have that and just the heat. Collecting the heat and getting the most use out of it. But I had to do that before the satellite with the country's companies that were in this field and a lot of them had been doing a lot of things. But you couldn't get any money focused in that area.

TH: While you were out here at Fort Hancock, what was your rank and title?

PK: Out here?

TH: Yeah.

PK: I came here as a senior engineering draftsman. That was about \$1800 a year. That was very good. I'd say something about it. \$1800 was very good. It was the end of the Depression. The Depression was ending in 1939 and we were phasing into the War effort and that was a good salary. I was out here about two months and (Buge sp?), he had a good job in engineering and I worked with him. So, I didn't have a degree though. I had two years of college. So, he said, "Pete, I have one (inaudible) with an engineering degree. Would you accept a P2?" That was \$2600 a year. There was P2, P3, P4. They all went up under \$3000, but that was good money back then. So, I was P2. I went in the Army as a P2. When I came back (after serving in World War II) they insisted on me taking a P3. That was \$3200. And when I left there, I was at the top of my grade. I left there I was a senior draftsman.

TH: Did your rank change when you went to develop the satellite? Was it different?

PK: No. No. It was all engineering, engineering. I was mechanically oriented, but a couple of times they needed an aeronautical engineer. So, they said Pete, "Do you mind we change your grade to aeronautical engineer?" But there was a lot of common factors there with working on the drones so they changed me to a P5. Yeah, that's a P9 no 11.

TH: Now you have all the ranks and numbers go up, for someone who is listening to this tape at home or who is perhaps working on a project who is not sure of the ranking system, what is the P stand for?

PK: Professional.

TH: Professional. And you went up, what was the highest number? You went from 1 to...

PK: 15

TH: 1 to 15.

PK: And then after that you get a special appointment. It's in the civil service. A 15 was the highest professional. And then a draftsman was SP, Sub-professional.

TH: Would SP be what a regular enlisted man would get? (SP was a civilian civil service position not military)

PK: Sub-professional. No, if he just didn't have a degree. He had to have a drafting experience. SP started here and then a few of them wanted me to work in the engineering part of it. So he said, "If you get a P1 you had to have a degree." You get P2 with a partial degree and experience

TH: You had a partial degree?

PK: 2 years.

TH: So, two years of school. So that was pretty much your education before you came to Fort Hancock, you graduated from high school and you had two years of college.

PK: Right. But then while I was here, I continued on at Brooklyn Polytech and I got my degree in 1950. I had the GI bill. (I) went to Newark College of Engineering and got my Masters' Degree. I graduated in Engineering Management. So, it all worked out very well. But the night courses and the correspondence courses were great. You could get a degree by just, well, I was stationed in Algiers during the War and guys were taking correspondence courses over there.

TH: While serving their country?

PK: While serving there country. Right.

TH: I didn't know you could do that. That's great.

PK: Really. They give you papers. You do the problems and at the end of the month you take a test. You take a test at the Provost Marshal's office or some office where they certify that you weren't cheating. You take the test. You pass the test and you get credit for it.

TH: This seems to me to be what today's equivalent of internet courses are.

PK: Oh, yeah.

TH: Was this available to everyone or just servicemen?

PK: I think international correspondence classes were available to everybody. I think you had to arrange it through a company. But we have it in Brookdale (Community College) near here.

TH: Yes.

PK: It's wonderful. You go to Brookdale take two years of college, get a community college certificate and you decide you want to go to Stevens (Institute of Technology) or Monmouth College or Rutgers and take them (classes) right at Brookdale. And I guess they have screens and things that they teach them and you can get a degree in accounting or engineering. It's a great thing. Fred Carl was telling me about it. We had a guy come and talk about it. The money differences. I got a couple of grandkids. My son is an engineer. He worked at Fort Monmouth too, but he's got four kids. \$30,000 dollars a year is tuition and right now we are helping the kids out. \$22,000 a kid. We have the money and want to help. You have the harbor of New York factored in there and you take in your academic work and socialize outside that.

TH: And the academic work helped you out here with your original job. When you were developing the satellite, not the satellite, the radar, now how did your work with the radar aid you in your future work? I'm sure that was connected with satellite, how did that work together?

PK: Well, I was a draftsman and I remember working on those antennas, drawing them up. And we had testing. I wasn't doing the testing, but I recommended tests. So, I was familiar with drafting. And from there I went into production engineering. And there I was working on different products and development. So, it could be radar sites or whatever had to be done. I worked with contractors. So, it was drafting. I had worked for Reynolds Metal Company before. Reynolds Metal, they were a national organization. We did air conditioning. We were placing it all over the country. From the drawings we made heat calculations and everything else. Drawings for the layout and ship them out. That was my first job and it was a great tool to get into engineering. And when I came down here, they just grab you if you have curiosity and you know, argumentative type mind.

TH: I'm sorry go ahead.

PK: Testing was a great thing. That's when we did the ground work. We tested everything. I could have an opinion and he could have an opinion and we could be arguing all day and I'd say we could test it. We test it ten times and ten times it comes out one way and that's the answer.

TH: And was the satellite development down at Belmar?

PK: In Camp Evans. That's where we started. First radar was the (SCR-) 268 it was the big thing we did. You had those pictures of the party on the beach. Yeah, these. (looking at photos) These were taken here after we had the radar. This was Tom...Sam Pomerance (names mentioned are inaudible)

TH: You had a party while you were developing...

PK: No. After we did SCR-268 we had the party. And that was Doc (inaudible) he was Chief of Thermionics Department. And that's me. So, this was after we had hot dogs on the beach. (more names being mentioned)

TH: Do we have any shots of you?

PK: Oh, yeah. I was giving the party so I was taking...

TH: Oh, so you took the...

PK: Yeah we had a while. We had a parade on the beach because that was the government part of it. And after that we asked Paul Watson, someone said, "Why don't we give a party." And (inaudible name) and I organized the party at a beach club.

TH: This is while you were at Camp Evans?

PK: No. No, this is at Hancock.

TH: This is while you were at Fort Hancock. That brings me to one of the questions I wanted to ask you today. While the troops were out here there were social events. There were dances. Did you participate in any of those?

PK: Not when I was here.

TH: You had your own stuff going on.

PK: Yeah. Right after you passed the guard booth you come in here. There was a little right turn and you head to the beach and that was where it was. I couldn't see it today because... There was no dancing, no socializing here. (This is South Beach where the current fishing beach is today.)

TH: So you were here before the high point of Fort Monmouth's social activities.

PK: And we had some troops out at the end. They had a gunnery school and they'd shoot the big guns off. If you didn't open your windows you had glass all over the inside of the car. So they'd call us up and say, "There is going to be some shooting today. Open your windows."

TH: Speaking of the car, now I was told you had an interesting story about your car getting down here.

PK: Oh, yeah. When we came down here, I had a '28 Ford with you know, a rumble seat. And the fuel was up, you know, higher than the engine. A gravitational feed into the car, nice car. And (name inaudible), he worked on Sonar, that's radar under water. So he did a lot of testing, this is at Sandy Hook too. This picture is not taken here, but he was one of the guys that worked on sonar with Marchetti. Marchetti, he was an engineer too. He

worked on the waterfront here. So he sold me the car for \$40. And after I got it I used to drive to New York and take it around Newark Airport. And my brake went right through the floorboard. It sounds stupid, but I used to change your own tires and everything. So then I sold it to a girl for \$10 and the battery went dead and the girl called me up. "You sold me that car for \$10." And then I had a leak of the gas tank and he said come on over and I'll take care of it. Yeah make sure it's filled up. So I got up there and he got down on his knees and I got about two blocks away. (laughter) Put a nice bead on it and sealed it in. To keep it filled up so it wasn't leaking. And then he and Marchetti were getting \$7,000 a year. That was about a P5 or something. So he and Marchetti went up to MIT and doubled their paychecks and then he came back. I saw him a few years ago. (inaudible sentences.)

TH: How much had this field advanced before you began working on it?

PK: Nothing.

TH: So you were at the forefront of this.

PK: Absolutely.

TH: In many ways a scientific revolution of itself.

PK: Absolutely. I was broadly educated. I had a lot of curiosity. We tested and there was nothing we could argue with. It works. The guy said, "You can't do that." At Camp Evans, Marconi's tower down there, he made analysis of it. A good structural engineer, he said, you know its all square. Structural engineer, but this was all squared off. But it's been down there since the 1920s. But this is what we did then. We test, test. We knew we were testing for space. That's a little later on, but with this we did our shooting at the Coney Island tower over here. You take it out the end of Fort Hancock and it's about 10, 13 miles across. They'd shoot on the radar and it'd give it back. And that was the beginning. Then (SCR-) 270 that was Al White. He was made the head of something, Twin Lights. And Twin Lights was made with 270. That's where it was originally placed. So it was the beginning of it all.

TH: Do you think any of that work would have gotten done hadn't the War broken out?

PK: I doubt it. I doubt it. Well, before the War we were working on radar.

TH: So, you were working on it in 1940.

PK: 1940, yeah. 1939, we were set up here. We were the first unit set up here in January of 1940.

TH: And you were here on December 7, 1941, correct?

PK: Yeah.

TH: What was it like? Was the Fort in lockdown? How did you react to that?

PK: Yeah. It got pretty critical. We had sand bunkers out here. And we got an alarm. We had to leave the building. We went into these sand bunkers. And there was a lot of military there. Those guys were calling the shots. We had to wait until things were all clear. The boardwalk along Asbury Park, they had big curtains, twenty feet high on the boardwalk so you couldn't see the lights. Twenty feet high. We could walk on the boardwalk and they couldn't see you from the ocean.

TH: They had special curtains set up on the boardwalk?

PK: On the boardwalk.

TH: To cover the lights that were on the boardwalk?

PK: To keep the lights from reflecting on to the ocean.

TH: Oh, that was during the blackout.

PK: Yes. They supposedly had submarines out there. Probably they may have had submarines but they never wanted to hit the Americans. When I flew over here in '44, beginning of '44 and we went to, at two o'clock in the morning from the field in New York, Mitchel Field, and we went to Newfoundland. We had stopped there for breakfast in a C54. Traveling about 215 miles an hour. It took us ten hours to go from Newfoundland to the Azores. We stopped there for another meal. We went into Casablanca. That was eight hours. We flew just above the clouds, about 10,000 feet.

TH: Were you flying the plane or were you just a passenger?

PK: No. I was a meteorologist. I didn't know, but that is what I became. And an air traffic controller and an area controller.

TH: When did you become a meteorologist?

PK: I went to the cadets and I graduated in 1942. December '42. I left here and I signed up for the Air Force (Army Air Corps). I did it. It wasn't 100% out of patriotism. My Father had died and my Mother had a pension. If I had gotten in the Infantry, \$21 a month is what I would have gotten paid. So, I signed up here and ended up getting \$75 a month plus subsistence. And when I got commissioned, I made more as a lieutenant then I was being paid as an engineer.

TH: So you became a lieutenant in the Air Force?

PK: A lieutenant yeah. And then I got to be first lieutenant and then if I signed up for another three months I would have made captain. But I (had) gone back here.

TH: When you did came back here to Camp Evans to work on satellites?

PK: Yeah.

TH: Was that still military related?

PK: Civilian.

TH: So, you were civilian military personnel?

PK: Yeah. I was military when I went in the Air Force.

TH: What was your title as a civilian?

PK: Oh, I was one of the 12 people of the SATCOM, Satellite communications. Of course I don't look more than a lot of the other people because I did the testing. But I had that section and in the drone program I was head of the air frame. I was in the electronics, testing airplanes and solving mechanical problems.

TH: When you were here, originally at Fort Hancock you were military personnel though, correct?

PK: When I worked at Hancock?

TH: Yes.

PK: No. At Hancock I was civilian.

TH: You were civilian as well. And you were working with military personnel though?

PK: Oh yeah.

TH: So it was civilians and military working together.

PK: Oh, Yeah. Absolutely. Well, it was that way in Europe. I was in Algiers. The Arabs over there were farmers. We had some of them working for us. We had the French, we had the people from South Africa, very nice people, a good mix of people besides having to differentiate between military. It was war. So everybody was working the same rules. (inaudible female voice in background.)

PK: Oh yeah, yeah. After Pearl Harbor, Pete (inaudible last name) you may come across his name in here someplace, he had a wife so he was married so he was worried about being drafted so he stayed here. And Pearl Harbor happened. It was December 7<sup>th</sup> so all our Christmas leave was cancelled. We had to stay down here. We didn't get any leave for a couple of months.

TH: So it was all through, straight through winter you were stuck here?

PK: No. Past the New Years. New Years there was a blackout.

TH: Just long enough to ruin you holiday.

PK: Yeah. We went to the Mayflower Theater in Asbury Park. They had good shows there.

TH: So, you were allowed to go to Asbury Park?

PK: Oh yeah yeah. When we would go home it would be for the weekend or the night. We didn't have leave. We got 10 days of leave a year. About 30 days of annual leave and 10 days of sick. You weren't expected to take it. Well, they didn't have a military. The guys up there in Massachusetts were practicing with wooden guns. Fort Monmouth was a small place, just the Signal Corps. See all these other things, SATCOM, that came later. The surveillance and the drone, that started in Washington and other things too. We came down here, we had the chapel at Fort Monmouth. With the first SATCOM agency. I was the first satellite official. The beginning, they took 12 names. My name was in the airplane propulsion section. The 12 of us were set up as the people representing the agency.

TH: When you were out here at Fort Hancock, what building did you live in? Did you remember?

PK: Yeah. Right on the beach. As you come in, there is a booth there, an office.

TH: Yeah, the park ranger booth.

PK: About a ¼ mile down that road and off to the right. Right on the beach. (Mr. Kennedy worked in the Signal Corps area on today's fishing beach, but did not live there.)

TH: Is that before where we are at here?

PK: Oh yeah.

TH: How far, for anyone who is coming into Fort Monmouth (Hancock) where the gate is where that huge Nike Missile is. Is it before that as well?

PK: Oh yeah.

TH: It's down there.

PK: Oh way out.

TH: When you were down there, was a lot of the stuff, like officers row, the yellow brick houses, were those here?

PK: Yeah. That was here. We used to get through on Friday night and we used to go out to the end of the pier and some soldiers, they used to have some troops out here too. They were free to take the ferry from the end of Sandy Hook to Battery Park. And we had similar rights to go over there and come back to Sandy Hook from Battery Park.

TH: Where did you eat while you were here?

PK: I stayed in Long Branch with a guy named (inaudible) he was an engineer. And he had a wife and family. I lived there about six months and then I moved to Asbury Park, which was a rooming house. And this place in Long Branch was called the green something. 85 cents get you a wonderful supper. It was right near the post office. But we ate out.

TH: So you didn't eat anywhere on the fort? Did they provide you with anything?

PK: Oh yeah. At Fort Monmouth we ate there a lot. Fort Monmouth at the Officers' Club there. And Squire Hall is where the engineering was done. Squire Hall is right in the middle. That was what was there in the beginning of it all. (Inaudible as background sounds drown out talking) That's where I was hired. They had a desk in the hall like this. We were there about three days and then they sent us to Fort Hancock.

TH: Did you attend any religious services at Fort Hancock? I know there was a Chapel here, but I'm not sure it was here during your time though.

PK: Religious services? No. I guess Long Branch. Long Branch, we...I'm Catholic by faith. I went to church in Long Branch and then Asbury Park near the place where I lived. It was a great period.

TH: And you had lived on the beach and obviously as I can see in many of the pictures that you brought with you, you enjoyed the beach. Did you go to the beach a lot when you were first up here?

PK: Yeah. I was a beach nut. I like the beach. That was before I came down here, Coney Island, I used to go out and I used to run cross country. You know, five miles on Sunday. You got to work and then you go to school Tuesday nights and Sundays. I'd run five miles on Sunday and two miles on Tuesday and Thursday. (laughter) I don't know where we got the energy from.

TH: And you lived, you were from Brooklyn and you came down here. Did you go to the Battery a couple of times on the ferry?

PK: Oh, yeah. I worked for the...see I went to evening school, evening classes for high school. I had jobs. Gasket Association, I ran an elevator in (inaudible) department store. I came in a taxi cab before here.

TH: You were up in the city a lot then.

PK: So when I came down here, this was a big job for me. SP8. In Manhattan, I could walk from Battery Park all the way up to Harlem, 150<sup>th</sup> street. Turn around and come down collecting money for the gas company. The Gasket Association. Did you ever hear of that?

TH: No. I don't know that.

PK: It was a company...Are you interested?

TH: Sure go ahead.

PK: It was a company that kept the pressure constant. You know people used gas big restaurants, Latin quarters and places like that. They used the gas. And when there is nobody using the gas, the gas price gets very high. A lot of people use it when it's very low. So while it's like that, you burn a lot more gas than you would to sustain the pressure. So they put pressure control on the gas and you could show a difference in twice the meter reading. So we had on in the Latin quarters. And I put it on and show the gas was half what it was without. It was an easy thing to sell, but I had to go around collecting. This was the Depression so you took whatever....

TH: This was before you were at Fort Hancock?

PK: Yeah.

TH: When you were here, I was just wondering because times have changed a lot since the 1930s. Did you work with any minorities or women while you were out here?

PK: Oh, yeah. I had one guy Bob Forrell. He was in my section and a very nice guy. He lived down where I do now. We had people from all over. A very diverse group of people.

TH: I just want to ask you, I think I know the answer because you were really at the forefront of incredible stuff. Was this a fun or boring place to work?

PK: It's fun now. It was tough then. It wasn't boring, never boring.

TH: A lot of hard work.

PK: Very stimulating. And we liked a challenge. It was a challenge. People were so (inaudible) I worked with the nicest people.

TH: It was a good group. You were very close.

PK: Yeah. And this bunch was from all different parts of the United States. It was just challenging I would say. And when the War started you had to look for your own security. By going into the service it was best for me at the time, you know. I just had the right things at the right time. Fred Carl, he's writing a thing down at Evans. In fact, he came to this thing here. I think that's why he wanted to make a copy of it. But he's doing work down at Camp Evans. He's doing a good job too. Some of the things I developed, you know, I gave him copies.

TH: While you were here at Fort Hancock, just one of the more fun questions we have to ask you, did anything particularly humorous ever occur while you were out here working on radar.

PK: Yeah, there was. A friend of mine was named Pete Deriodies. And Pete Deriodies was working with Zahl, Dr. Zahl. So, one day, Paul Watson, he was the head civilian he said, "Peter," he was a young engineer, had just graduated from college. He was about 20, 21 years old. He said, "Pete, go on to Dr Zahl". "I want to have make a (inaudible)". He makes a little sketch. He said, "Yes sir". So he did a drawing and said, "Dr. Zahl, Watson wants a tube. Can I do that?" He said, "Yeah, yeah, yeah. It'll be ready for you in about two days". So two days and he gets back. He says, "Here you are Pete. Here's your tube." And he has a drawing of it and everything. So Pete says, "So what do you call the tube?" He said, "fallopian tube." And he said, "Oh, yeah." He was young and he didn't know what that was. (laughter)

TH: So they played a trick on him.

PK: Yeah. Watson and (Dr.) Zahl were the organizers of this. So he said, "Oh, thank you." The fallopian tube. And that's it, word gets out.

TH: That sounds like a very fun ruse.

PK: Yeah. He had sketches and everything. He was a young fellow. He didn't know what it was all about.

TH: Did he end up writing it in a report or anything? The fallopian tube from the lab.

PK: I told him, I think when his wife died at the funeral I told the joke.

TH: Have you kept in touch with him?

PK: Oh, he's dead.

TH: Unfortunately before that.

PK: Oh yeah.

TH: Did you keep touch with a lot of people from the Fort?

PK: Oh yeah. Yeah, we visited.

TH: You went on trips together too?

PK: Oh yeah. Greece, Athens we went to England

TH: So you really stayed in touch with people you worked with?

PK: Oh. Yeah. You had so much in common. You just went along with the things that interested you. Oh, this guy is still alive. I got the theater in Red Bank and I see him every once in a while.

TH: The Count Basie.

PK: The Count Basie, yeah. Sam Pomerance. He's from New York too.

(Mrs. Kennedy): He died.

PK: He died. Oh, what did he want to do that for?

TH: Sorry to hear that. Well, what stands out in your mind the most about Fort Hancock?

PK: Fort Hancock? Well, I guess starting the SCR-268. Setting up the organization on the beach. And experience the War. They made a lot of alerts here. People were running to the bunkers. And then making it and demonstrating its ability to work. The rest, geographically I remember a lot about it. But the main thing was the producing of 268. And then (SCR) 270 with the help of Twin Lights and some officers up there. I'd say that was the main thing here. That's the big thing that's what I wanted to help.

TH: During the War, you stood at the forefront of technology. It pretty much revolutionized warfare and everything that is used today. It's still being used today. Its still one of the most effective tools the U.S. military has. Now being a person who was practically a pioneer. As of right now, new technologies are being developed what advise would you have to the pioneers of tomorrow that are putting together technology that we will have for the future? What would you like to say to them as a pioneer with such incredible stuff?

PK: Well, first of all, you have to have a need for it. If you are doing something nobody needs, nobody wants it you are spinning your wheels. So you have to learn something where there is a need for it. And then you have to organize. I took a course in school called, Operations Research. My son just wrote a book. He calls it why some companies fail and others succeed. He worked with a company, Cisco. So he wrote this book. The

first thing is you have a focus on something and it has to be something that is needed. And then you see what impact it affected. And then you analysis each one of these things. If you are not getting any solutions, you change it. Change designs and you change the people. But keep a focus on where you are going. Demonstrate the ability to the company needs. It might be too big or too much competition. Something like that. You change it. Eliminate the other guy. Its operation research and he just wrote the book. Have a goal, set up a plan, solve the problem. Evaluate it to see if you are solving the problem. If you are not, make corrections, if you are follow through. And what we did here with satellites was testing. In Belmar, we didn't do much testing here, but we would visit the sites like White Sands wherever they had the missiles down there. And Braun, that was the guy, he was on my committee with the drone program. He's a German with the V2. V2s were German...

TH: Cruise missiles that Hitler developed.

PK: Yeah. Of course they had radar too. We had one at Evans, we started putting it up down there. But this was our first thing we based it on, the radar.

TH: Is there anything you would like to say to anyone who will be listening to this tape in the future? Working on perhaps a historical presentation.

PK: I'd say, you gotta learn from the past and plan well for the future. And I think it was a wonderful period and accidentally we had at Sandy Hook a great program here. And this is a result of the life we had. We went right on and this is where it all started here. Camp Evans was the people from here. When we moved down there all the phones were black. There was nobody there. So, learn from the past and plan well for the future.

TH: Peter, thank you very much for coming down today. And thank you very much for your contribution to the United States of America.

PK: Thank you very much. I'm really glad.

TH: Same here. I'm Tom Hanley with Peter Kennedy at Fort Hancock, Sandy Hook, New Jersey. It's February 2, 2004.

End of Interview