Sandy Hook, Gateway NRA, NPS An Oral History Interview with Ed Biedermann 7th and 245th Coast Artillery, 1941-1945 Interviewed by Elaine Harmon, Tom Hoffman, Michael Thomas, and Kenneth Hensley, NPS, July 4, 1981 Transcribed by Jo Anne Carlson, NPS Volunteer, 2007 Editor's notes on parenthesis ()



Ed Biedermann

Elaine Harmon: (Introduction is partially cut off)..... of a Mr. George Hines of Kearney, New Jersey who happened to wander into the (Fort Hancock) Museum (Building 28) in May of 1981 and gave us a very nice donation of old photographs and a magazine article. In the course of handing us the magazine he pointed to the photograph and he said, "This is Ed Biedermann's office." Laughing, and what he was referring to was called the catacombs at Fort Hancock, otherwise known as the Mortar Battery. Later on, it occurred to us that we really ought to have Ed Biedermann walk us through the Mortar Battery, especially now since it's been newly cleared of brush and debris by a very conscientious group of young people.

Since the introduction became erased I'll again repeat. This is July 4, 1981. I'm Elaine Harmon of the Sandy Hook Museum and we are walking through the Mortar Battery with Veteran Ed Biedermann. Along with us are Park Historian, Michael Thomas, Park Technician Historian, Tom Hoffman, and Park Ranger Interpretation in Visitor Services, Kenneth L. Hensley.

We should mention that Sergeant Hines was stationed at the DC generating station opposite Battery Potter and he was with the 7th and the 245th Coast Artillery Divisions. He knew Ed Biedermann fairly well and Ed began at Fort Hancock in 1940 with the 7th Coast Artillery, which became the 5th Coast Artillery and later the 245th (C.A.). Ed was positioned in the Mortar Battery and also at Battery Lewis (in Highlands), at the Fire

Control Communication Center. Ed Biedermann's recollections will cover the years 1940 up through May 1945 at which point he left Fort Hancock.

EH: We are standing at the Northeast entrance to one of the mortar pits and Ed Biedermann remarked that this is really the way that the crew, who were assigned here, entered, whereas the other men entered the opening in the wall immediately opposite the Lighthouse which customarily our visitors approach through that opening in the wall whereas we are now at the Northeast corner.

EH: Why don't you describe a typical situation.

EB: When we arrived with our trucks we approached the open end and entered the Battery near the open end in the wall. We drove right up to the entrance of the Fire Control room.

EH: So actually driving right into the Mortar Battery.

EB: And parked behind it.

EH: And parked behind it? Parked in the opening of the pit and drove right up to the door.

TH: I'd like to know what kind of vehicles they were?

EB: A ten and a half truck or a van that have the canvas covers on.

KH: What kind of security did they have for the Battery?

EB: They didn't have anybody here. You couldn't get in that door without us opening it. The other end they had a guard.

TH: You mean right in this area from the end of the wall over here there was no guards or anything?

EB: No, no.

TH: You just came driving in and you could drive all the way back here. But they had a Sentry at the opening of the wall. We are walking right down I guess you could call it a passageway into the pit. What did it look like back then? Was it in this bad of shape?

EB: Oh no. It was nice and clean.

TH: Was that kept clean by the soldiers? Did the soldiers have details to...

EB: It didn't have a chance to grow. They may have sprayed it. This was all open. All concrete. No grass, no nothing.

EH: Vegetation now is heavily overgrown with all kinds of plants including poison ivy which is a very predominant plant we see right now.

EB: This door was always sealed.

EH: The door was always sealed?

EB: Is this on now.

EH: Yes.

EB: You rang a bell. Somebody from our place open the door. The only ones that were allowed in were us. Nobody else could come in. So once you opened the door, you came in and closed the door behind you. This was a de-gasser in here. Supposedly if they had dropped gas and you had it on your uniform, this was supposed to clean it up. Filter it, you know. Then you go into the next opening.

TH: Into the inner door. How would that work. In fact we are here right in front of an air-lock, I guess, with the de-gassing equipment and Ed mentioned that the bell you have to ring was here a couple of years ago. I think it was in November of 1978 when we had the scouts cleaning up in this pit here, the bell was intact and so was a little sign that said "Ring Bell" and has since been removed. Maybe Ed could tell us how this, the equipment here worked.

EB: When you closed that door it automatically came on and filtered your clothes. And then, I don't know, it maybe stayed on for so many seconds then shut off and you were allowed to open the other door.

EH: So it was timed.

EB: Yeah.

EH: By the way we are in a small chamber. A little ante-room before we actually get into the tunnel.

EB: The gas was let out into the open air out there and then it didn't discharged inside the building.

KH: Did the gas create a big breeze?

EB: No it was a vacuum.

TH: Just a vacuum. What was the length of time you would wait here, roughly?

EB: Thirty seconds.

TH: A half a minute, yeah. Then, there was nobody in here, but was somebody back here behind the inner door?

EB: Just the two persons, the person that opened the door and the person, or a group of people, bomb people. Maybe there was three, four, five or six men that had gone out to a job and returned and came in.

TH: You mentioned the guard. Where would he stand?

EB: Not at this end. Nobody could get in, except us. If an officer came, we sent him around the other way. We didn't have any authorization to clear him through here. We sent him away.

KH: Did you station somebody here to do that?

EB: No.

KH: 'Cause they could walk right in 'til you saw them.

EB: They couldn't open this door. There were no keys. They had to ring the bell.

EH: What was your team of men referred to as? Did you have a nickname or did you have an official name?

EB: Not really, no.

EH: Was it a particular Company or a Unit just designated for the Mortar Battery?

EB: Just the men who worked for Franken.

TH: So you all knew each other.

EB: Oh, yeah.

EH: How large was the number of people who worked with you here?

EB: I had eighteen men at one time.

EH: Eighteen men. And what was your rank?

EB: Tech Sergeant. I mean I started from Private.

EH: In 1940 here. And when you left.

EB: Tech Sergeant.

EH: In 1945 you were Tech Sergeant.

KH: Was there just one command here, the Fire Control Unit?

EB: Well, when we first came, yes, we were the only ones here. The back section was like it is now. (inaudible)

TH: This was an area with space back here that wasn't being used, and you were originally, the only ones down in here working.

KH: Was this the Headquarters for the Air/Sea Defense of all of New York Harbor?

EB: Eventually it was. We'll go into that. This was from 1940 when I first arrived to say around '42.

KH: Then that was just Fire Control for Sandy Hook.

EB: Right for the Gun Batteries.

KH: All the Gun Batteries?

EB: Right, all the Gun Batteries. Telephone communications.

KH: How were you linked with Battery Potter, the Fire Control Station there?

EB: Battery Potter, itself, was unmanned. There was nothing there except for the top. Temporary buildings up there. Oh, yeah. That's where Sal was stationed up there.

EH: Yeah, Sal Giovenco, right.

KH: That was your main eyes and ears for the Fire Control up on top of Potter?

EB: Not really.

KH: Where was it? Where did they actually look for the ...

EB: Each gun had its own, you know, at the end of the Post, you know that concrete building three stories high....

TH: At north beach.

EB: Yeah, it ran all the way down the shore. All the way down to Sea Girt.

TH: That's the Fire Control Towers did the actual sighting but where was the information relayed into? That's what's Ken is asking, from the Fire Control Towers?

EB: Each Gun had two base end stations. One would be down at Sea Girt and one would be north of the Battery would be another group. So when they sighted something they could pinpoint it this way and further out, if a ship came closer its hard to pinpoint on the tracking board so they got closer to a different base end station. Then when they "crossed hairs" they could pick up the ship.

EH: We are in the de-gassing area into the inner door and now what would happen?

EB: You'll notice there are two doors over on your right. They were Officers' and Enlisted mens' bathrooms. They separated the enlisted men's from the officers.

EH: Which was which? At the moment you really don't know.

EB: I'd say the one near the door. The one near the outside door was the enlisted men.

EH: The one nearest the outside door was the enlisted mens'. There's no smoking on it. The other allowed smoking.

TH: Ed, by the way, just looking in, to the best of your memory, is that the original picture?

EB: Oh yeah. Ahhh, not original. Let's go in and I'll explain. As we are coming through you'll notice there is a door on the left beyond the bathrooms. This was where we had our batteries, emergency power for the telephone communications. There were two rows of fifteen batteries each. Each cell was 2 volts. They were the old flash type Edison batteries. If you ever notice the old telephone offices that's what they had in there. The same type of set up.

EH: How many men would be positioned here? This was just equipment? Okay. We are walking now beyond that first doorway.

EB: We had a coal firing hot water heat system in here. Sergeant Gooch, when he died, he was the Chief Warrant Officer.

EH: Homer Gooch.

EB: He was the only one here when I came over to help him and he explained all the set up that we had in the other room. I had to take care of the fire and had to bank it overnight. Keep the fire going so that we could have heat in there, keep the place dry. I had to take the ashes out and all. Keep the floors clean. And later on as we go further, they changed the system and they put hot air in.

(inaudible)

EH: We're walking through another doorway now beyond the heating system.

EB: This is an old set up where they had DC power. It's all been ripped out. It was ripped out years back.

EH: There's two concrete slabs and a panel of electrical wiring above it. We're walking beyond that now.

EB: The fresh air that they drew in from outside they mixed in with the air that we had down here. They had emergency power unit here too.

EH: There is a big metal duct overhead that is falling down that was used to introduce fresh air into the tunnels here. Now going beyond another doorway and making a sharp left turn and going through a passageway to make a sharp right turn.

EB: They also had a de-gasser back here but we never used this end but the air cooler had a man stationed here. I don't know how long he stayed by himself. They had three shifts eight hours a day sitting out here listening on phones and they would pick up messages all the way from Maine to Florida and they identified every plane that flew over. If they left La Guardia, ya know, any airport that flew over close to the coast, they followed it all the way down to Florida, whether it was a commercial or private plane or anything.

TH: Ed, where were the soldiers in this room right here?

EB: Air Force. It was connected with the Air Force. We had nothing to do with them.

TH: Oh, it was Army Force personnel, Army Air Corps personnel in this room. By the way on the blueprint map of the Mortar Battery, this room is called the Boiler Room, but at the time you were here they actually had soldiers in here doing that work.

KH: What pit are we in? What is the location?

TH: Okay, this is, we are in the front two pits. We walked from the west side over to the east side of Battery McCook. We are up in the front pits now. We're over on the far

EH: And we are at a doorway, a big heavy metal door leading out into the northeast pit of Battery McCook.

EB: In the Air Force, anyone that used this as an access door to go home, back to the barracks, they'd use the other entrance. They just sat out here on a chair and listened, or in here.

TH: What kind of equipment would be in here?

EB: Just a headset running through our telephone lines.

KH: Did they have any men stationed on top of the Battery to track these planes?

EB: No. We had a three inch anti-aircraft on top.

KH: So they couldn't see out of the pit beyond the angle of whatever the slope was.

EB: No. These people here? Just the information they received.

KH: All the information was coming from up and down the coast. Oh, okay.

EB: Right. They would identify, maybe there was 300 post, 299 would say the plane was heading south or east or west, whatever the direction, he could pick it up and he identify the same plane and pass it on to the next one.

KH: What if the plane was below the angle that you could see out of the pit, though?

EB: He just heard. He just listened.

TH: They just listened. They weren't looking up into the sky. They were just listening to see where these planes were going.

EB: Just following direction, that's all.

TH: How long did this go on here, to your recollection? How long were they here?

EB: I imagine all through the war. We really didn't have anything to do with them. Sometimes in bad weather like today, they could come in here and listen. They could leave the door open.

TH: Was this pit as well as the other pit, very clean?

EB: Oh yeah. I imagine that the ones assigned to this anti-aircraft battery, kept this clear. You really didn't know it was going on. If it was clear, it was clear. You'd go around picking up cigarette butts. At the same time they pulled up weeds.

TH: Fatigue detail. Okay.

EH: So there was virtually not a blade of grass coming out of anywhere.

EB: At that time, no.

EH: Yes, I can imagine.

EB: ...a bunk and chairs. They could write letters or whatever they wanted to as long as they had their earphones and were listening.

TH: Government issue for the equipment for the

EB: They could read a book and still be listening.

TH: Would the bunks be metal frame or....

EB: Army cots.

EH: We are going to be walking back now retracing our steps, back into the main corridor. As we pass the duct again, we are looking at a concrete slab. Ed just remarked that it was

EB: Some of the old equipment that they had during World War I.

EH: Emergency power is that what you...

EB: Everything was DC, years back. Then they converted to AC. Opposite the Battery room we enter another door which leads to the Fire Control Room Headquarters. As we enter there was panel boards on the left that was battery equipment recharging for the batteries in the Battery Room. And above that, we are looking at this panel right here. That's the door we just came through. The charging equipment is on the bottom. And on the top, this man here, Sphere (sp) I think, he monitors the equipment for the top the cables that used to go into the harbor, the bay. Ships used to come in at night. If the harbor was filled with ships, they would anchor off shore or in the bay until they were given permission to pull up to a berth. Or if it was foggy, they wouldn't go too far or if the submarine net was across the harbor, they couldn't come in. So, they would anchor until they would get permission to enter the harbor and they would pull up their anchor. Sometimes they would pull up our submarine cable and throw everything off. This fella, he was balancing so many lines from here to Fort Tilden and back again. So many ohms. Well, he would balance them with resistors. And when it was thrown off and it wasn't balanced anymore, the alarm would sound and that would warn us that we had troubles before someone else told us. So then we would have to get to work and re route stuff from here, if the cable from here to Fort Tilden was in bad condition. We had to re-route stuff between here and Fort Wadsworth, Staten Island, over to (Fort) Hamilton to their cable, submarine cable, to Fort Tilden. Or if it was reversed and something between here and Hamilton was bad we had telephone lines between here, Hoffman Island, you heard of Hoffman Island?

TH: Yes, right off Staten Island.

EB: Romer Shoals.

TH: Romer Shoals.

EB: We had our cables, too many of them there. So if we had trouble going into Wadsworth we'd go over to the islands and re-route it to Hamilton. Over to Tilden if the

cable from Romer Shoals or Hoffman Island or Hamilton was destroyed and we'd have to route everything to Wadsworth. They had a separate cable to Fort Tilden.

TH: So what you had in effect were emergency switching systems to keep switching in case something...

EB: We had to do it manual, by hand. Cross connecting or we had spare lines between here and Asbury Park. Say we had a hundred lines that the telephone company allowed us. Then from there it was connected from here to Asbury Park over to Wadsworth to Hamilton for all their telephones. It went all around by land and we could re-route it that way. We had the lines and all we had to do was re-route to the cross connections.

EH: Amazing network.

EB: Yeah. If everybody was sleeping at the time and, say, a gun battery went into operation and the cable was out, then it would be a hustle-bustle trying to re route all these things and the people wondering why they can't have communications between here and Fort Tilden or (Fort) Wadsworth. They didn't know the cable was out.

KH: I have one question. I noticed there was no duct in this picture that was before they put this hot air system in, huh?

EB: Oh yeah. Yeah.

EH: By the way the caption under the photograph on page six of the article donated by George Hines says the Fire Control Center in the catacombs at Fort Hancock at which point all the battery communications for the Fort are supervised. Sergeant P.N. Harker reading a map at the desk. He's at the left of the photograph, and Private W.H. Spur on the right side at the power panel in the background. At the right is a circuit patching board. Is all that information correct?

EB: That sounds right.

EH: Was it referred to as the catacombs?

EB: Yeah, right.

EH: The Mortar Battery?

TH: Is that what you referred to as the bombproof? I've heard the bombproof.

EH: Commonly called.

EB: That was afterwards. After Headquarters moved down.

EB: They were the catacombs. That's what you could say. He's the one that advised us.

EH: The power panel it says here.

EB: Emergency thing for offsetting the balance. It was here. He was about 48 years old.

EH: You knew Spur?

EB: Oh yeah. He was at that age one of the last ones to be drafted. They dropped down from 48 to 45. You don't remember that.

TH: Oh in age.

EB: Then from 45 to 38. He was an electrical engineer. He only stayed here maybe six months then he went to Washington, DC as a GI but in civilian clothes with the Signal Corps.

TH: I'd like to point out here in the concrete floor you've got this ditch where all this equipment stood over this. Was this for the power lines.

EB: Communication, telephone cables.

KH: In case anything went wrong they could get down in this crawl space ...

EB: Oh yeah. They did all the splicing of the cables down there.

TH: Ed, I'd like to ask you what was it like, a typical day. What barracks were you in out here and where would you leave from and how would you come in here and work? Could you tell us that?

EB: I was over at Headquarters 7th that first (barracks next to the) YMCA, Building 25.

TH: That big yellow building.

EH: The present day Army Reserve, 25.

EB: I'd just walk over. I could walk into the center opening and walk down this direction. This place wasn't manned at that time. We were the only ones here until '42. I'll tell you about that afterwards.

KH: Just a quick question....do you know what this material is covering the duct, is it asbestos?

EB: It's probably asbestos. Painted over.

KH: We're not allowed to use it.

EB: Forty years ago it was a little different.

EH: We are looking up at the ceiling at a huge covered box like structure he was remarking that it has a wire frame.

EB: Its asbestos painted. Sprayed on, you know.

EH: But this was not here originally when you first began? Were you here when it was installed?

EB: Oh yeah.

EH: About when was that?

EB: We had hot water heat in here. Baseboard old fashioned radiators hanging from the wall.

EH: Suspended from the walls.

TH: There's holes here in the wall. You see it? Bolted onto the wall.

KH: How warm did you keep it in here, usually?

EB: Pretty good. This was dry. This was perfectly dry. The floor was painted and we had a rubber mat on the floor, my painted floor.

EH: Painted what? Gray, battleship gray?

EB: Yeah, battleship gray.

TH: I was wondering what duty times could you pull, the shifts, what different shifts?

EB: When I first came here I was the only one here. I just worked the normal eight hours and went back. This was before World War II, don't forget. And the 245th was here, but they were in training. They weren't really manning the guns either. They were going through basics.

TH: Basic training.

EB: Along here, like you see in that photograph, were switchboards. When I first came, there was two boards with just flush panels on them that's where you made the cross connections. The cable coming in to the terminals here and the switchboards go that way (inaudible) To its own gun battery. I was here maybe a short time. Before I came, they had an appropriation and they added more boards. They added one more cross connecting board, which gave us three. We had three panels and added three more that gave us six. A civilian from Washington where the Signal Corps was installing these.

Being I was here all by myself, I worked with him. We done everything from scratch. From the first screw in till the final, the whole thing, soldering the wires on the switch and running the cables and all.

EH: Did this take months? This was a very complicated type of installation.

EB: Yeah. There was just two of us. There was no rush. The 245th was here and they were going through training. The 52nd was on their own. They had the railroad guns that had their own communication with the field phones at the base end station. If we got a telephone call, I'd answer it. If we had trouble, I trouble shot. An opened short, a ground, I corrected it and went back and helped the civilian.

KH: This was a "nerve center" a switching operation?

EB: Yes.

KH: People that made the decisions about how and where to point the guns were somewhere else.

EB: Oh yeah. This was just a telephone, that's all.

TH: Communications. I notice how quiet it is in here now. What was it like before World War II in 1940?

EB: Just as quiet.

TH: Were you allowed to play a radio?

EB: Oh yeah.

EH: These panels, were they heavy monsters? How did they arrive? I guess in parts and you assembled it? But eventually they were like floor to ceiling big massive panels and boards.

EB: Oh yeah.

TH: We're going down the corridor and Ed, there is still a narrow trench here. Is that for the wires still?

EB: We go back to the door.

EH: Walking back we see two massive blocks near the corner.

EB: On the right as we came in we had the generators sets fed by 110. The generator end of it gave out 30 volts. This was used to supply the (gun) batteries power for the

telephones. Say something happens to the power. We received battery power from the regular batteries. As long as we had Jersey Central Power, we used the generator sets.

EH: And they were on top of these concrete blocks.

EB: Right. And on one end of it we had a time interval clock with a big wheel on it and a lot of holes. You could put cleats in it and it rang a bell anywhere on the Post every five seconds which they used at the base end stations. When the bell rang we took a reading from the azimuth instrument that's pointing at a ship. We took a reading. Then that reading was sent to the plotting room which came through our switchboard. Down to the plotting room which was underground at the gun emplacements. At the next interval they would pinpoint it and do their work. They would have five seconds they would get an azimuth longitude mark where supposing the ship was at that time. Then they could send the information up to the gun commander and also the commanding officer of the gun, that concrete emplacement that sits right in between. That's where the commanding officer used to stand. The gun commander, the GI, was right at the gun. He got the same information as the commanding officer and as long as there was no corrections, he would give the information to the man that was operating the gun, to set the azimuth or elevations at these different intervals, from the bell. Then when the set time was then they could fire. That ship should be right there. Project the landing. They were always making corrections, you know.

TH: Yeah. To compensate for the movement.

EB: So maybe, say by the time that the information came from base end station, maybe it was a half a minute by the time that it went to the plotting room. Then they'd angle it out and send it to the gun commander. He in turn referred it to the man on the gun to set the azimuth and elevation was maybe a half a minute.

TH: I just wanted to ask when the bell rang, you know, the door bell, was the bell in here, in the corridor here or was it down in there?

EB: We had it in here.

TH: Oh, you had it in here. Where abouts was it?

EB: On the same panel board.

TH: Okay. I notice some gray paint here too in this corner here. Is that the type of color that was here on the floor?

EB: Right.

TH: Was this white? The color going on the ceiling?

EB: Yes.

EH: So the gray came up half the wall in various places?

EB: In this area, yeah.

EH: For the rest it was clear white arching up to the ceiling and arching back down to the other side wall. Was there a floor line here? About a foot up? Was there a black line?

EB: It was linoleum, inlaid.

TH: Yeah, linoleum, because you can see where its been chopped off.

EH: Just at the lower part though?

TH: Yeah, just at the lower edges.

EB: After awhile, they put battleship linoleum on the floor. That was brown color.

TH: We'll see that back here.

EB: When they put it in there they put it in here at the same time. When we walk further back toward the end of the Fire Control Room, on the right was a manual switchboard. It would be just like a small telephone office that they had years back just for emergency set up. We only had certain phones connected. People in their quarters couldn't call on these lines. Just emergency lines coming in and we also had telephone line communications to the gun emplacements. In case something happened, the phone didn't ring for them they couldn't use their line to get to us because we didn't have any communication. We only had communication for this telephone line. They'd call us and tell us gun #1, or whatever battery telephone wasn't working and we'd have the tester go in and check them.

EH: So it looked like an old fashioned telephone operator switchboard set up and that was the emergency lines.

EB: Opposite the switchboard was a small frame like they have in a telephone office. I don't know if they still have one up there in the old Headquarters.

TH: No that's gone.

EB: But the communications in the back, the communications for post telephone they would use our cables. They would come into here and we would cross connect and we would re route it so we would have communications between here and our boards and send them to the gun emplacements.

EH: So this frame would be on the left, just before we go through the doorway.

EB: Communications for the rear, rough connections.

TH: So, all together at one given time, how many soldiers would be on duty right in this corridor here?

EB: After World War II (began), and after the 245th got finished with their basic (training), approximately eighteen people.

TH: Right in here? But before that it rather, just a couple like yourself. Was Sergeant Gooch in here too?

EB: No, he spent his time up in the Headquarters.

TH: Okay. Is this the step down?

EH: We are going on a tile floor now.

EB: Just before World War II, they probably surmised at one time that they were going to have to move underground, Headquarters. They were working under here when World War II broke out, Pearl Harbor day. This is a brand new door hole they cut that through.

EH: To our left we are looking at a doorway.

EB: This is a solid wall. They chopped it out.

EH: And if you look carefully at it you will see that it was newly broken to the far left now. To our right is a short archway.

EB: There was a desk here where somebody who would want to go behind there, you would pass through. Like an information center. This is where the General sat back there. Out of the way.

KH: Is this what became....

EB: This was S1. S1 is intelligence.

EH: We are walking past the desk area....

EB: They would say intelligence, they would give out orders. At one end their phone was marked "intelligence." At the other end it was marked "order." They didn't give information here, they received information. They were given orders. So from the intelligence phone to an order phone the conversation went one way. They gave out information, intelligence, and they received it. They didn't give information in reverse. It was from the General, S1, out.

EH: Going through a short archway....

EB: This was for the people that worked for him. Clerks and what not.

KH: Were they all here when you first came?

EB: No. No.

TH: This was all after World War II (began).

EB: There was an old gate back there and it was just like it was when we moved it in here. It was just like it was. It was a mess. Rats and all. The back doors were open.

TH: You mentioned at that step down that's where it flooded. Very wet.

EB: Oh yeah. Just like this. It's probably a little more waterproof today than it was then.

TH: Really?

EB: I'd say from World War I to World War II.

TH: It just wasn't used. I see.

EB: No. No.

EH: We are facing two archways, one on our left and leaving a corner and one on our right. We are going through the right arch.

EB: This is where the General was. He had a lot of people under him. It went from a Private all the way to a General. So you went.... you didn't approach the General.

TH: The Chain of Command.

KH: He was protected way back then.

EH: Going through another doorway with a duct system above. And we're now in a rear room.

TH: Are we talking about General Gage?

EB: Yeah, that was our first General. Before that the commanding officer was a Colonel. When the Colonel was in charge, he would have been back there. The Commanding Officer at that time was Gage. So he would be back here. Then Ostrum after him.

TH: General Ostrum.

KH: When did they move in here?

EB: Well, say, when they were working on these orders just before World War II broke out so they anticipated moving them in here and making use of it. I guess, maybe, during World War I they used all these rooms for ammunition.

TH: From the original plan this was the ammunition rooms. These long wings, this one and the one on the other side, were for the storage of ammunition. That's what it says on the Army plan. I have to ask you, what was in here?

EB: A desk and a chair or a few extra chairs for a conference, I guess.

TH: Would that be a wooden desk?

EB: I think so. I don't think they had metal at that time.

TH: Yeah it was all heavy wooden. What would like General Gage be doing down here if he were here, what would he be doing?

EB: Doing what regular office people would do. Or if we were attacked or something or if Gage gave us any information we had control from here all the way down past Atlantic City all the way down to the other end of New Jersey.

TH: I see so this became, like if attacked, like a battlefield Command Post. This is where he would command from.

EB: Right.

TH: How often did he use it? Or the Colonel before Gage? There was a Colonel before Gage?

EB: Well, Gage came in just before World War II. After the beginning of '41 Gage came around here.

EB: Maybe once a week, when they had a drill or something. As long as he wasn't disturbed at Headquarters, he could come down here.

TH: Are there any stories you can tell about him coming down here or any recollections?

EB: Not really.

TH: Did he ever come to see your work?

EB: Well, he had to come through to go to the bathroom. (Laughter)

TH: He had to pass right through.

EB: He had to get permission from Mr. (inaudible).

TH: Really.

EB: He didn't have his own bathroom. So I imagine that's why they had that other bathroom. For him and the other officers. I mean they had the General, Colonel and Majors all the way down.

TH: How about right out here? Adjutant?

EB: Adjutant, or Lt. Colonel, Colonel or something. And his Aide. He probably had a Captain as an Aide.

TH: Right, he did.

EH: We're walking through the two wooden framed doorways again through the arch to where we were again and we are walking into the left hand archway and we have just stumbled upon a little box turtle greeting us in the doorway. He's found a happy home here. I wonder. We're in the left hand room here.

EB: Probably used this as another office.

(Inaudible talking)

KH: Where is the Headquarters for the Sea and Air for the Harbor?

TH: Harbor Entrance Command Post. The HDCP, is that what.....

KH: Was there a separate General or somebody who was in charge of that?

TH: That's Gage. Gage was in charge.

KH: In other words he coordinated all the Air and Sea Defense for the Harbor area right?

TH: Well for the Army.

KH: Including Fort Tilden?

TH: Yeah.

EB: Not air. Well, we had anti-aircraft so he would come under the air.

KH: But he didn't control the air fields?

EB: No. Fort Tilden, New York, Hamilton was the Signal Corps Supply. They had an army defense command there too. They really didn't have too much there. That's where the 5th Coast Artillery was. The Headquarters was stationed before they came over here, before they took us over. And then Wadsworth came under him and all the way down the coast to the south end of Cape May.

TH: And to Montauk Point.

KH: He controlled all the guns.

TH: All the soldiers, right. From Montauk Point at the tip of Long Island.

EB: We had the same type of set up down in Cape May as in here.

EH: A big district.

KH: I was wondering where the abandon areas were?

EB: Well, they had the janitorial services in there a few men stationed in there. Clean up if they made a mess, pick up the garbage and all.

KH: I mean did they use these corridors back here?

EB: Going out, this was the main corridor.

TH: Yeah, this is the main corridor.

EB: Then there was the control room. You couldn't get in without a pass. We had a pass for Harbor Defense.

EH: It's a small ID card.

EB: You couldn't get in.

EH: We are looking to our left going back in the direction to the entrance where we came in and we are going through a wood frame doorway again. Through arching tunneled rooms again. To another wood frame doorway which I guess were also trimmed with battleship gray paint.

EB: This was S2. This is where all information came from, came into. If a gun battle or a searchlight went into operation they were notified by phone or by an operating room panel board that lit up as soon as it went into operation. Sometimes they'd say, "We're going to go into operation" and they'd end up tying up the telephone. They had to use

the Post telephone or they would have to tell us to patch them through. But as long as they could use Post telephone, they used it, as long as there wasn't any invasion that would disband Post telephone.

EH: Tell us about that big plywood panel. Where would that have been? Right to our left here? And it had Lucite rods that lit up. You can see the wooden framework right above us. It's a long wooden bar here and it would have been suspended from the ceiling or connected below from the floor?

EB: Oh yeah cables running under there.

EH: It must have been pretty large? Fifteen or twenty feet long with Lucite rods?

EB: It covered quite a bit of territory. Fort Wadsworth, Fort Hancock and LongIsland Sound and all the surrounding area all the way down to Cape May. In some areas we had search lights and in some areas we had three inch anti-aircraft guns. They had code names for them. We didn't really know where they were.

EH: And this plywood panel had Lucite rods that lit up that you couldn't see from the side but only directly head on, could you see it lit up.

EB: No one was actually watching. It was just like a check point. If someone called in and said AA Battery number 3 went into operation, they looked to make sure that the light lit up. Then if they looked later on and the light was off they realized it went out of operation and they received a phone call later on. It was an interval in between. As soon as a gun battery went in they didn't get a phone call unless maybe they called through the Post or through NJ Telephone if it was on Red Hill they'd go through the telephone lines. We didn't have direct lines up there. So we depended on the telephone outside communications. That's why a lot of information or something they used outside communications telephone wires to contact with us. We'd run cables all day at Red Hill or down at South Jersey.

TH: About how many soldiers would be on duty in this room?

EB: Maybe 3,4,5 and an officer.

TH: Would they be watching those lights?

EB: Not really they had other assignments.

TH: What might those be, off hand, if you have another example?

EB: Just paperwork giving out passes or something, you know.

EH: We are walking through an archway into a room that has an archway to our left and archway in front of us and a doorway to our right.

EB: S 3 and S 4. Supplies ordering stuff and transportation would have been in here.

EH: S3 would be to our immediate left? In this area.

EB: Side by side and people working in the back here as clerks taking care of paperwork.

EH: S1 was Intelligence, S2 was Order, S3 Supply and S4 Transportation.

TH: So both S3 and S4 were both in this long corridor. I would like to mention – we're saying left and right. I don't think anyone will be able to follow this after a certain point. This long corridor here was, I believe, the East tunnel that was used for ammunition storage for the Mortar Batteries when they were in operation for Batteries McCook and Reynolds. So what you got here is a long tunnel but at the back is a small room and maybe Ed can fill us in. This was originally a long tunnel once again they partitioned it. This one has a small room at the end. Do you know what that was used for?

EB: Not really. Just supplies and stored supplies.

TH: Any office work done in here too Ed?

EB: Oh yeah.

TH: Office work. What would be stored down here? You mentioned storage. What possibly might they have tucked away in here?

EB: Information maps, maybe, and all, for the gun emplacements. This may have been a safe.

TH: Somebody has been in here and knocked the door down.

EH: We're going through a pretty narrow doorway.

EB: This may have been a safe.

TH: Oh yes, I see it has two small metal doors. One is laying on the ground.

EH: So it was specially protected to be a safe. That certainly looks that way. And there's a trap door, square door at the upper ceiling level and it's a vent.

EB: all the way up to the top about 30 or 40 feet concrete burster combination

EH: So the vent would lead to outside air 30 or 40 feet above us. Amazing.

EB: They were always locked so no fresh air would really come in here. They used the vents.

EH: Right.

EB: This was locked too. This was probably used as a safe.

EH: Above the door is another sort of iron or metal plate and at the lower floor levels on either side of the door are two square openings in the walls. There is a duct work equipment right above our heads going through the main axis of this room .

TH: I'd like to ask Ed, was this for bringing in fresh air or was it for dehumidification?

EB: Fresh air and heat from the heating system.

TH: Ed, during the World War II years did being underground at this one post for World War II, correct? Did anything exciting ever happen? Did anything out of the ordinary routine of communication work and watching the Harbor defenses, ever happen?

EB: I'll explain that on our way back out.

EH: We're retracing our steps now.

TH: You were mentioning it was comfortable in here. It was warm and dry.

EB: This whole area. It was like this before they started and with the heat they brought into it.

TH: That would be the 245^{th} , right, in World War II? Or was that for your section? You know, when they refurbished all this, this back section, as you called it? From the area that you worked in back here, was this 245^{th} Coast Artillery soldiers on duty in this section? Or 7^{th} (C.A.)?

EB: It was 7th. It was Headquarters. You know, the officers, they were all mixed and they worked for the same General.

TH: Yeah, for Gage.

EH: Do we have to refer to any of these photographs?

EB: You're asking about certain events. Here, we had a Coca Cola machine. At one time it was out of operation and the Coke man was here. This was summertime. The Coke man had GI suntans on.

CD1 ends here and CD2 Begins

(Talking about tape)

EB: We had mentioned that the Coca Cola repairman had a summer uniform on similar to a GI summer uniform. He was repairing the machine and someone politely tapped him on the shoulder to move out of the way that he wanted a Coke. So the man said, "Wait, I'm working on the machine." The man behind him said, "Move, I want a Coke." So he didn't move. So the man behind him said, "Do you realize that I'm Colonel so-and-so. I want you to move out of my way so I can get a Coke". So just about that time the repairman, had a big Coca Cola sign on him says, "I'm repairing the machine. It isn't working. Wait your turn." (Laughter)

TH: I just want to mention that this is the long corridor going back towards Battery Reynolds. We're right about in the middle of the Mortar Battery and we're looking at these partitioned rooms which you mentioned, Ed, were used for storage at that time. Once again, do you know, off hand, what would be stored in them?

EB: I imagine it would be like if you had a bomb shelter today, you would store a lot of stuff.

TH: Food, water, yeah.

EB: In case of....

TH: Emergency.

EB: Yeah.

EH: We are walking down a long corridor which is really half of an archway. If you look at it.

TH: Less than half.

EH: To our left we are coming to a wooden framed door.

TH: A lot of graffiti on the inside of the room. But originally this was one big huge gallery. They just partitioned it down.

EB: It was. Right.

EH: And there is still tile work below us. And we're coming to a wooden skeletal frame showing how the tunnel, the archway was cut in half.

EB: These other rooms were plastered.

TH: Yeah, plastered over.

EH: You can really see the construction here which was partly damaged.

EB: This area was wide open. They just made a lot of rooms here.

TH: Would you meet many soldiers going down these corridors, Ed, or was it rather quiet. I mean, men just sticking to their desks?

EB: Oh yeah. They came and stayed their time and they worked on their paperwork and left when they were finished. The only ones that would come in would be outsiders looking for information and then leaving again. Like gun commanders or something looking for information.

EH: Going through a doorway.

EB: This was an entrance coming in from the other end.

TH: We're now down between the firing pits of Battery Reynolds now in the other degasser air lock.

EB: There was probably a guard standing out here at the gate to let someone in. After he came in he had to ring a bell. But he had to pass through the guard first to authorize him into the building. He would have to have a pass.

TH: Would that guard be right outside this door here? A Sentry?

EB: Umm. With a gun.

TH: What period are we talking about now when a sentry was here?

EB: After Pearl Harbor. After it was remodeled here. They didn't finish this until after World War II (began). They were working on it.

TH: The work went right on through World War II remodeling in here?

EB: At the beginning. Pearl Harbor Day and maybe six months afterwards.

TH: I see. What type of weapon would he be armed with?

EB: Maybe an '03.

TH: An '03 Springfield?

EB: That's about all we had at that time. He may have had a .45 pistol too. Or both. It all depends on what he was issued at the time and qualified.

TH: You were here for the entire World War II period. What was it like, morale wise? I mean, you probably saw soldiers coming in here in peace time. I mean there was trouble in Europe. World War II was on over in Europe, but then we got into it with Pearl

Harbor. I am wondering what morale was like. Did you really feel like you were part of a defense system? That you were the first line of defense as compared to say like 1944 – 1945. What was morale like, did the soldiers feel important? Did they feel that all of this was necessary?

EB: I would say so, yes.

TH: Did you ever talk about it. Take yourself back to 1942. How did you feel after Pearl Harbor? The US Navy was shot up and....did you feel important....

EB: Everybody felt like they had an important job.

TH: Did you feel that it was all necessary.

EB: Oh yeah.

TH: You know, we were never attacked. I'd like to ask a hypothetical question but I like to ask it of a veteran like yourself. Do you think that the Harbor Defenses of New York could have repelled you know, say an invasion, in your estimation? It's a hypothetical question, but looking back now.

EB: Well, we did have submarines come up. Some of them went up into New York Harbor.

TH: Do you know that for a fact?

EB: Before they had a chance to close the submarine gates. Then when they left New York Harbor and were out into the ocean, say they blew up a ship and they picked up survivors. They were telling what was happening in New York City. Ya know, Rockefeller Center was running a certain show. Say somebody got shot in the arm or something. When they picked up survivors from the boat that had left New York Harbor they would tell them and sure enough the sailor that picked up the survivor would be able to verify that that happened or that that show was on Broadway. They weren't that close to shore that we would fire on it, 30, 40 or 50 miles out. Our guns would go 30.

TH: Yeah at the most.

EB: They wouldn't go 40 or 50 and that's where the submarines were.

TH: You made an interesting statement that you said that the submarines actually came into the Harbor. Do you know that to be factual? Do you know that to be true? Because I myself find it hard to believe. People want to believe this. Visitors come in and want to believe that German U-boats early in World War II managed to get into the Harbor. But I as a historian, find it hard to believe because of the shallow depth of New York Harbor. What's your feelings on that?

EB: Before World War II when they were working on radar ...

TH: Here in 1937, '38, '39...

EB: They were working on radar right off here at Arrowsmith, supposedly, its probably been filled in. You know with the changing of the tide, supposedly, while they were using the radar out here, a German submarine came up almost to the boat that they were using the radar in. That Fort Hancock wasn't supervising it, Fort Monmouth was supervising the radar.

TH: Yeah, the Signal Corps.

EB: That's what they claim.

EH: Was this ever in the newspaper?

EB: I doubt it. I imagine everything was kept quiet.

EH: Was it known among local people?

EB: Signal Corps at Fort Monmouth. They picked it up on their scope, their radar.

TH: How about, you, per se, working here, this was the nerve center literally of the New York Harbor Defenses in World War II. Did you ever hear of anything about German U-boats trying to get into New York Harbor or attacks off the coast?

EB: Oh yeah. Different days, when nobody was on the alert and I was down here alone say on a Sunday. Lakehurst had zeppelins out here and they were following. We heard it right on the radio.

TH: Navy blimps making sub contacts?

EB: Oh yeah. They were following German submarines off the coast of New Jersey.

TH: To your knowledge any actions take place? Probably just a lot of sightings and tracking.

EB: Just sightings. Kept an eye on them, that's all. But supposedly they did land a crew on Long Island.

TH: Oh they did, they definitely did.

EB: And buried stuff in the sand. I don't know what it was.

TH: That's true. I was just wondering if your had heard anything happening off of Sandy Hook?

EB: Just whatever happened in Long Island.

TH: You know, what gets me is that they were wise enough they stayed out of the range of the guns what you were discussing earlier.

EB: Correct.

TH: How did the soldiers feel about that at the time? Here you have all these defenses. How did you feel at that time that they stayed outside the range of the guns?

EB: Not that I know of. They were prepared if anything came in close. They were always on the alert. They were always manned. After World War II started, guns were manned 24 hours a day.

TH: I'm sure this was too.

EB: Yeah. The base end stations and all were on alert. The searchlight and all, two or three times a night they would go into action and the sky would light up with searchlights. And we had to keep the curtains closed on the commercial planes. If someone happened to be sleeping when commercial planes went by, the search lights would light up the whole plane.

TH: Do these anti aircraft gun batteries, by the way, you had a couple of 3" guns up on top of the old Mortar Battery, did they ever practice fire from here?

EB: Oh yeah. The plane used to pull a target.

TH: Oh yeah, okay. They'd tow a target. What was that like down here?

EB: You really couldn't hear.

TH: Really? That's pretty thick.

EB: In World War II the first Pearl Harbor Day all of these anti-aircraft guns were down in the machine shop getting re-bored.

EH: Being re-bored. Really?

EB: When Pearl Harbor was attacked when we first entered the war the gun batteries above here, the anti-aircraft guns, they were disassembling them down at the machine shop. We had a Master Sergeant, Headquarters Company. He was a crackerjack machinist. He knew how to field strip and assemble the anti aircraft guns. They depended on him to assemble the guns, which he did and they were put back in operation again.

TH: I was wondering, after Pearl Harbor, the great worry about of attacked, being invaded. Not only New York Harbor but anywhere along the coast east or west and I'm sure harbor defenses 1942 into 1943 were probably really built up. I wanted to ask you if you were here, right here at the old Mortar Battery on the day when Pearl Harbor was attacked?

EB: Well, Sunday, when Pearl Harbor was attacked, I was here by myself. I would come down and do my eight hours even on Saturday and Sunday. I didn't have any place to go so I used to hang around, in case. I didn't know anything about Pearl Harbor being attacked until I went back to the barracks. I guess they were verifying all this in Washington. Then after five o'clock in the afternoon we went out on the alert and then I came back down here. It seemed like everybody was running around with their heads chopped off because they really didn't know what to do or what was going on.

TH: When you said you put in an eight hour day, did you come here at eight o'clock in the morning then go back at five o'clock back to Building 25 the barracks, that's when everybody was running around.

EB: Right.

TH: I guess you were getting your information by radio?

EB: Right. I just didn't happen to have the radio on that day.

EH: So you thought it was just an ordinary day.

EB: I was just reading manuals or papers or books or something.

TH: How were the men taking it? How were their reactions to Pearl Harbor? What was your reaction, say?

EB: Just excited, like everyone else.

TH: Did anyone stop and say "hey, we're the first line of defense." Did anybody feel that way? Can you remember?

EB: I think the enlisted personnel were more at ease than the Officers. They were really running around looking for information, and they didn't have it. They didn't know what to do. They didn't want to give out commands because they didn't know really what to do. The enlisted men were ready to receive them and he was more or less, calm.

TH: You were here at that time, all that time which was amazing and saw the build up. What was the build up like? This place was, of course, put to full use. And a lot of troops came in. What was that like? About how many, do you think, were brought into the Post?

EB: At one time we had approximately 10,000 troops. And on a Sunday when the Service Club was used, we had maybe fifty buses that came from New York with families to visit them. They came from all over: Jersey City.... All around.

TH: Yeah they came from all over the metropolitan area. Sundays were visiting days.

EB: They would come in with cars.

TH: Were they restricted, I'm sure, to the Post, to the yellow brick building area?

EB: To the Service Club area. Some of them would walk down to the barracks. But that's it.

TH: Were soldiers apprehensive at that time? 1942 was a dark year, Midway, Guadalcanal, you know, things were hanging in the balance as America got ready for war. How did Coast Artillery Corps personnel feel at that time, 1942?

EB: They were building some of the Coast Artillery up and sending them to Greenland and Iceland and they were asking for volunteers. That's where Tent City came in.

TH: Down here, at the Coast Guard trailer park, yeah.

EB: They collected them there, that was the collection area. From there they would get their orders and they would ship them out.

TH: I'm trying to think like right here at Sandy Hook, were soldiers worried and apprehensive or concerned about an invasion? Was it to you, and the soldiers you served with, a reality at that time?

EB: Why not. Over in the California area they used to have communications running along the coast. We had men walking Post. Maybe every mile there was a man. He would walk half a mile one way and meet a man coming from the other direction. That was GI's. Then after awhile, the Coast Guard did it. But out in the California area, people would come and cut the field line and communication lines and they lost communications. That's why they moved, most of the Japanese people I imagine, from the coast, in. They didn't know if they were involved or not. That was a hard thing to do to move the families, you know. That's why they moved them away from the coast.

TH: You know, we can look back at it now but we know that 1943 started to be the turning point. When the Russians won at Stalingrad and the German armies were defeated in North Africa. Things started turning in allies favor. I've read that things were shifting here where troops were put into the front lines. I talked to 52nd Coast Artillery vets were moved out and put on the front line units.

EB: They moved out fairly early, fast. You know early on.

TH: This is what I'm getting at. Was there a change in morale as we started to win World War II as the allies started to win in Europe, did soldiers here feel left out of the fighting?

EB: No, no, I don't think so.

TH: They probably happier. (laughter)

EB: They were probably more relaxed as they went through training and all. They weren't on edge trying to figure out if they were doing things right or wrong. If they were doing things wrong if someone's life depended on them if they were giving wrong information on gun emplacements, and all, you know for azimuth instruments. They had a chance to make corrections. The other way they had to make snap decisions.

TH: Were there more draftees? I'm sure. 'Cause you mentioned one man who was advanced in age.

EB: The 245th was the only one that was here. The National Guard. Everybody after that was a draftee. About 500 or 700 men from the National Guard came in. The rest, eight or nine thousand men, were draftees.

TH: That's an awful lot of people pressed into service immediately.

EB: This is a small area. Imagine how many people were stationed at Fort Dix.

TH: Yeah, that's right. A training station a training fort. What I wanted to ask you about black soldiers during World War II, did you have any out here to your knowledge? Were there any black soldiers?

EB: Not too many. A few.

TH: Did they serve, were the ranks integrated or were they segregated at that time still?

EB: No, no. They were integrated.

TH: Did any serve right here in the Mortar Battery with you?

EB: None of them in my tunnel, no. We had a few draftees but most of them were from the 245th, the National Guard. Supposedly they knew all about communications when they were in the National Guard in New York. They were supposed to come right down and take right over, which they didn't. Or couldn't. Before World War II they walked around with wooden guns and all.

TH: Yeah, I've seen the old movies. Same thing with World War I.

EB: Simulated tanks made out of cardboard. They really didn't have the training. After they arrived on the Post then..... When they first came down here, I had a Master Sergeant, a Tech Sergeant, I had Staff Sergeants all the way down to Privates. I was a PFC then, at the beginning and I was giving them orders. Sending them out to different jobs...

TH: Because you had all the experience, you knew the system, yeah.

EB: I was Regular Army then. I signed up for a year at that time. You were considered Regular Army then, you weren't a draftee.

TH: By the way, its funny, you mentioned Officers came in through this way?

EB: Oh yeah. That was strictly an entrance way.

TH: Your entrance was back up front at Battery McCook but down here at Battery Reynolds this was....

EB: The General and all came in this way. They came in here with a Staff car and parked it right out here.

EB: The message would be sent here through telephones, field phones would be lined up and there would be men operating them. Say we went into an alert or something, everyone would be receiving information from outside. This was like a message center. You would write everything down. If it was important it was passed on, if it wasn't important it would just be filed.

EH: Let's look at that photograph of the message center, how can we best describe this location Tom, if we can? We're looking at a photograph transfer from Ed Bearss, number 403.4. Its Signal Corps photo 119007 and we have the caption "Telephone Message Receiving Station in the Bombproof working under simulated war conditions. Lanterns are the only source of illumination". Photograph taken by US Army photographer transferred from Ed Bearrs. Caption taken from the rear of photograph, which was actually imprinted onto the back. Looking back at this photograph, we're trying to get some idea of the location.

TH: This doesn't give the year it was taken but it's just about around the year 1942 or '43.

EH: We have here six men and two standing behind them at a long wooden table. It looks like there's a typewriter in the foreground with one soldier. Behind him is a sign with something "SH", Sandy Hook, would that be?

EB: Harbor Defense of Sandy Hook.

EH: Harbor Defense of Sandy Hook with "Message Center straight ahead" with an arrow.

TH: That room I don't think that is in here because you notice the square doors? And they have a round door in the background. I'm trying to get our bearings here.

EH: We're trying to pinpoint this photograph. With Ed's help we've deciphered that it's Harbor Defense of Sandy Hook

TH: I think its right over here on the other side, this way. Right over here.

EB: They probably set up something over here for photographs.

EH: This was probably a pretty portable type of arrangement to have a Message Center so to pinpoint it exactly right now – we noticed in the photograph there is a rounded doorway in the background with a secondary arch almost at the end of that table. So, it's kind of not exact to say where it is located but Ed just did decipher the sign behind it. It does say Harbor Defense of Sandy Hook Message Center straight ahead with an arrow.

EH: You'd say that these three photographs date from around 1942 to 1943.

EB: Right, when the 7th was here then after that they transferred to the 5th and then we had the 7th insignia. Then we got transferred to the 245th we had to change insignia again. It looks like a square door in the background with a slide or something. Like you said lanterns they had a temporary light above the door.

TH: Let's see, so what did it say again? "Message Center straight ahead."

EB: They could have set it up anywhere for the photograph.

EH: Back to the donation of George Hines the article showing the photograph. Ed Biedermann wanted to make some commentary now.

EB: On our switchboards, take a look at the photographs, you'll notice the "patch cords". A lot of the stuff is temporary hook-ups where say, the Commanding Officer and the photographer "John Doe" wanted to talk to "John so-and-so". So we patched him through. But if we ever wanted to go back to the original all we had to do was pull a cord and the connection was made by the jack behind. In some of the photographs where you see that we invaded Fort Tilden....

TH: Yes, the war gaming.

EB: Right. We turned their guns on New York City and after that they bombproofed them. They invaded us. We didn't know anything about it. The Signal Officer that was in charge of the Fire Control Room there was a Colonel Dreyfus then, he, was with the bad guys. He left them. He kept walking. It was during the night 2 or 3 o'clock in the

morning, he kept walking back and forth, he was duty officer here. He made sure that that back door was open when Fort Tilden was to invade us that they could get in that back door, which they did. And supposedly, when they did get in, they held everybody captive and they came in the Fire Control Room and we had a man stationed there, a Sergeant Sansone, he could be fit to be tied because they pulled all those pass cords out which they shouldn't have. I wasn't on that night. I was back sleeping and didn't even know what was going on. So the next day I had to figure out, we had records of all this stuff, I had to figure out all that stuff and put the patch cord back. That was my job. There was over a hundred of them in the outlets from six foot to two foot in length. All those cords, I had to put them all back again. If we had an armed gun, he would have shot him, for pulling all those cords out. They could have just taken over the room and let it be at that.

EH: What a jumble, huh?

EB: Say we were invaded by the real troops all the communications would have been out. Then maybe they would have gone back to the old. Maybe some base end station that they weren't controlling that was in operation and there was nobody manning it. So the patch cord was patched to a new temporary one which was manned and they didn't know what was going on. It was a mess, that job. You can see there was quite a few there.

TH: Yes. (Laughter)

EH: I guess they carried their war games a little too far. (Laughter)

EB: They were blessed the next day for sure. I guess they were blessed after they pulled the first one out. They had their guns and they kept them at bay and they pulled them out. The Signal Corps officer that was representing us, instead of him stopping them, he let them do whatever they wanted. The Navy had him back but the others, no.

EH: It wasn't such good judgment.

EB: No. No.

TH: Ed, when you weren't busy down here with the men, what would you do? Would you read or could you talk informally.

EB: I lived in 101 Ranch. Bachelors Quarters, ripped down now.

EH: 101 Ranch.

EB: Ranch.

EH: It's a great name.

TH: By the Rodman Gun,

EH: Right.

EB: As you turn down to the Coast Guard Station there was two buildings there, quarters.

TH: The yellow brick buildings?

EB: 101 Ranch right across from the mine commanding building, the Headquarters (of the 7th Coast Artillery, Building 102). It was a long ranch-type house, bachelor quarters.

TH: A big wooden building. It was a couple of stories or one story?

EB: Two stories.

TH: Two stories, yeah, it's torn down now.

EB: In the center, was Bachelors quarters, but at each end, and down below, it was quarters for enlisted personnel.

TH: I'd like to try to ask Ed again, the typical day, remember you said when we got back here. You mentioned some of the communications systems were subterranean, underground. Is there anything underground here or any communications tunnels connecting like Battery Potter say over to the Mortar Battery, to your knowledge, Ed?

EB: Just through the cable huts, A, B, C, D. They're all cable huts. There'd be maybe 100 pairs of cable leading to the cable hut. The cable hut goes to another cable hut there and to another and then to another and maybe comes in here. Communications leaving here would go out to a cable hut then from there it would go into a cable leading to a gun emplacement then internally wired there it would go to the guns and all.

TH: I know a number of people have asked me what are cable huts? What are those little concrete huts for and what would you answer? Just for the record.

EB: Termination points for underground cable.

EH: You mentioned that you would typically skip breakfast and come into here and get work started and get things rolling and by 10 o'clock start sending out shifts for coffee. Because you weren't allowed in the PX, you said?

EB: Yeah, the PX or the Service Club during working hours. No.

EH: So the men would typically go out to Sea Bright or Highlands for coffee and on their way in they would check a few, you said C-Hut or D-Hut.

EB: Right. Or if we had something up in the hill, they would continue right up the hill. I knew where they were as long as they checked in and if they started to work up on Highland hill, because the 16" gun Battery was up there, and I assigned the next crew to go out. So maybe they would start cross connections from F-Hut out to the gate and they met the other people with their cross connections and then we had communications all the way through, once they completed it. They had to supply a phone at the other end. It was a metal phone. It wasn't like Post telephone, it was water proofed and sometimes they were like at the gun batteries, did you ever see those waterproof boxes, was there any in there?

TH: Yeah telephones inside there.

EB: But most of them were on the guns. And headsets too. They didn't just stand there with a handset or a headset. There was a long cord. When they stood at the gun phone it was a regular headset they were using.

TH: I would like to ask you, because before you mentioned being up on the hill where Battery Lewis and Battery 219 are, what did you do up there, Ed?

EB: I set up the whole communications outfit up there. Identical, a system such as this.

TH: Wow, up there.

EB: We had everything tied right down to this one operation until they built A lot of cross connecting to do and we'd stripped things and the other place took right over.

TH: I'm interested in knowing something, did by any chance were you here when the war in Europe ended, VE Day? Were you here on duty at that time too, by any chance? Or were you still here at Fort Hancock when that happened?

EB: That was in June of ...

TH: It was in May of 1945.

EB: That's when I left in May. So maybe I left right afterwards.

TH: Do you remember leaving here for the last time? And by the way, is this your first time back right here to the tunnel?

EB: A couple of times I sneaked in here and looked around. (Laughter)

TH: I mean since like World War II. I should ask the first time you came back since World War II?

EB: Maybe a month ago I checked back here. I knew one of these days you were going to ask me questions. (laughter)

TH: So all that time you've never been back? Since 1945 until not too long ago did you come back. So it's certainly changed for you, huh.

EB: That was back like it was before when we first started. And this room is completely stripped.

EH: But what a remarkable memory to associate what was here to an absolutely barren structure now with just remnants of things. It astounds me, really.

TH: Yeah, this helps.

EB: If I can tell you something that you don't know and this helps you, the patch cords and all is what I'm talking about.

EH: Certainly, it helps to visualize.

EH: You mentioned that you did your homework and wrote some notes. Would you mind reading them for us?

EB: I first arrived at Sandy Hook, Fort Monmouth, Fort Hancock, on September 20, 1940 and I was assigned to 7th (Coast Artillery) Headquarters, which was a good deal. I spent the next two months going through Basic Training and I learned how to field strip a .30 caliber machine gun blindfolded. Named all the parts. Putting it back together again and fire it. By doing that I made PFC which gave me six dollars more a month.

EH: Six dollars more, what was it?

EB: It was thirty (dollars), basic and PFC gave you six dollars more to thirty six that was before the holidays in autumn. On Monday nights, we used to take a march from the end of the Hook all the way to Sea Bright and back again.

EH: How many miles would that be, would you say?

EB: Seven miles.

EH: Fourteen miles. That was the Monday night constitutional?

EB: Almost everybody would be there. If you'd leave a little earlier you'd meet someone on the way back. Then I was assigned to command the phones down at the Mine Command on Monday night instead of taking our march we'd answer phones down there on submarine control. We would get information on submarines out in the bay and patch the information on to the Mine Command which had control of mines out in the bay. Then one night the Officer in Charge asked me if I would be interested in going to answer phones in the Fire Control switchboard room. I said yes, so I was assigned to Fire Control. My boss down there, when I first went down there, was Staff Sergeant Gooch who then became Technical Sergeant Gooch then Master Sergeant Gooch then Warrant Officer Gooch. First Grade, Second Grade, Third and Fourth which was Chief Warrant Officer.

EH: So Homer Gooch really went up.

EB: That's when they started opening up.

EH: All this happened in what time span for Mr. Gooch? Approximately five years that you were here?

EB: Within a year. Then we had one Chief Warrant Officer that made Major while these openings were here so they gave it to the best personnel that they thought was the best to qualify.

EH: Can you describe what a base end station is and also pin point where all these huts are? How do you call them, Hut-A and Hut-B, give us an idea?

EB: They used the base end stations, say a ship approached New York Harbor, and was out within 25 or 30 miles. We had base end stations that were a three story concrete building. We had six or eight of them along Long Island and along the East Coast. When a ship came in they used an azimuth instrument to pin point it. They would get the azimuth from that and send it to the plotting room and they knew exactly where the ship was. And if the ship came closer, the base end stations almost lined up with each other. And they had to go to the next base end station where they were at angles to each other so that they could pick up a new azimuth reading. Each time that the time interval bell went off, they would take a reading. And when the second or third bell went off they knew just where that ship would be at the next bell. Base end station sent their information to the plotting room. The plotting room sent their information to the gun and the next time when the gun fired at the interval, it should have hit the ship.

EH: Also could you mention where each hut was? You were talking about Hut-A and Hut-B. You said Hut-A was at the very north end?

EB: Yeah, toward the Coast Guard Station within the area of Potter emplacement. That was the only one in that area.

EH: Near Battery Potter, uh huh.

EB: The other ones headed towards the south. The first one was just past the hospital as you head towards Highlands. I think that was (hut) B. Then there was another one down the line, F, then there was another one heading south, E, that was near Kingman and Mills. So if we were going to run a line from the Fire Control room to Kingman and Mills, we had to go through the huts. As we entered, E, we would pick the cable up that lead to Kingman and Mills in order to route our telephone communications in that direction. We also had, heading further south, all the way down to Sea Girt. Once we got

to the southern end of Sandy Hook, we had to go out to the ocean by submarine cable or down to Monmouth Beach we went up the Shrewsbury River and we stopped at Sea Bright. We had a cable hut there along the towers. Then Monmouth Beach (located at the former USLSS station, currently the Monmouth Beach Cultural Center) the tower there the marine police use that now. That was the end of that one. The one that went out into the ocean headed down to these other places and also headed all the way down to Belmar. Sea Girt was the last one, the National Guard emplacement. It's now the State Police Academy. That was one of the furthest base end stations for the sixteen inch guns. Fort Tilden they used that more than we did for the small guns. Then when they built the guns up on top of the Highlands hill then we had the chance to use them as base end stations here at Sea Girt and the ones over Long Island around Fort Tilden area.

EH: Can you describe what was your connection with the guns emplaced up at the top of the hill at Highlands? You mentioned you installed all of that equipment? How many men were involved in that? Can you remember?

EB: Two or three.

EH: Two or three men.

EB: Two or three men.

EH: You witnessed the guns being emplaced. What was it like? You said that the road was so steep so how did they manage to get them up there?

EB: Well, a lot of people in Highlands realized that they were building a fortress up there on Highlands hill because all the work was being done past the stone church in Locust through Hartsgrove Road, they came in the back way. Everyone in Highlands knew that something was going on. One day the barrel of the sixteen inch gun arrived at the railroad station.

EH: The barrel arrived at the railroad station? Did you say it was thirty eight feet? For a sixteen inch gun, incredible.

EB: It had to use two flat cars so that they could manipulate around the curves. They couldn't put it on one 'cause it would stick out beyond the railroad, so they used two so that when it went around a curve it went around with it.

EH: Astounding. And this was the beginning of 1943?

EB: That's right.

EH: How long did it take you to get all the equipment ready up there? Can you give me an idea, was it months or weeks or.....

EB: Yeah, it was months. First we used all the equipment we had down here at the Fire Control Room down here at Sandy Hook until we finished the Fire Control Room up there in the hills of Highlands. Once we had it all set up, all it took was the changing of the cross connections at Fort Hancock and up on the hill there at Highlands hill to reroute from the switchboard up at Highlands hill right to the guns. So they used the power of the telephones right from the hill instead of the power from the telephones from Sandy Hook. It all came under the same command.

EH: How did they refer to that, by the way, Highlands Defense? What was the official title? Do you recall?

EB: It was in Navesink so I imagine everyone had a different title. One say Highlands hills some say Navesink hills. I don't know really what they had down on paper. But that was the first time up there that they used a computer.

EH: Really? In 1943?

EB: I forget, when it first came out, like a calculator or something. I guess it was about twelve foot long. Say six or eight foot wide and maybe six foot high. They used it once for calculating and firing the sixteen inch guns and they never used it anymore.

EH: Was it just an experiment? Wow, amazing!

EB: Around \$50,000.

EH: So where did this computer go to later on?

EB: After World War II finished, they scrapped everything. The guns up on the hill, the sixteen and the six inch guns plus the ones on the Hook here plus all the equipment that was in the Fire Control Room and all.

EH: How many guns were up on the hill?

EB: Four. Two sixteen inch guns and two six inch guns. They all came off of ships. They weren't really Coast Artillery disappearing guns. They were stationary.

EH: So they were removed from ships, they were removed from vessels?

EB: Umhum.

EH: That's interesting.

EB: Either ones that were commissioned or ones that hadn't been commissioned yet. They just came out of the shops and they installed them.

EH: How long was that active up on the hill, Highlands?

EB: From '43 til the end of the War '45.

EH: That's a short time, really. When you think of all the effort put into that, devoted to that, for two years its an extremely short time.

EB: The money involved....It took two years to build it up there working twenty four hours a day.

EH: Wow, really? That's amazing!

EB: Once they found out that they had to bombproof the guns on the Post and at Fort Tilden they had to bombproof them too so that they couldn't hit New York City so that meant encasing the whole thing. They would just sit down on the concrete base and then they had to bombproof them. So they had to do the same thing with the ones up on Highlands hill, first, before they could put them in operation.

EH: Before you were talking with Tom and you happened to mentioned that the building on the Parade Grounds on the North Parade grounds, which we know as the Athletic Field had a particular function, that's building S-46 and at one point it was T-369 the Post library. What do you remember it?

EB: The Post Signal Office.

EH: It was the Signal Office? And did you say Homer Gooch was quite distinctly connected?

EB: Colonel Dreyfus was there. He was our Signal Officer. And then Gooch worked under him and then Sal....

EH: Giovenco, right.

EB: Worked in the Plotting Room, I mean the Gunners' Room, which was in the same office. You went to Master Gunners School, you took up surveying, you took up manual drawing, how to read blueprints and map reading and general drafting. That's what they did there, not just gun emplacements or the base end stations were there. They drew all the drawings for the Post. That kept them busy.

EH: So that building, some of the ideas was that it was the Post Library, that it was a place for equipment or a storage building but I had never heard of it being used for so many functions as you mentioned, you know?

EB: So up until about around '44 then they moved down to the Quartermaster building where you keep your salvaged stuff there is a building just opposite that.

EH: Right the Quartermaster building, that building 31 I think.

EB: They moved into there.

EH: Excuse me that's building 32.

EB: I don't know who took over the building here, maybe the engineers.

EH: Talk about where you lived and all that. You didn't talk much about it. You were in Barracks 25?

EB: When I first came?

EH: Yeah, what was the interior like? Can you remember much about it?

EB: Two big rooms on the second story.

EH: Second floor, right. And roughly how many men were living there? I hear reports of 100.

EB: I'd say 100, fifty on either side, single beds.

EH: And the first floor was all offices?

EB: There was a shower room.

EH: Right, which is still there.

EB: And the office of the Commanding Officer of the Barracks and the First Sergeant. And across the hall would be the Day Room or Rec Room.

EH: It's a very big building.

EB: In the basement, was Supply where they kept the guns under lock and key. Once a week you change your linen.

EH: And the Mess Hall immediately behind it which I think is 55 (58) corresponding to Barracks 25. Did you have a daily routine like a bugler getting you up in the morning?

EB: They probably did but you know, you don't pay any attention to it. Just like an alarm. It goes off and you get up you don't know if the alarm went off or not.

EH: We're looking at a Certificate of Completion for Ed Biedermann for attending Electrical Training course at Fort Monroe, Virginia, the Coast Artillery School. And he was remarking that originally it was a nine month course but it got very condensed into three months which he attended, says on the Certificate from November 1943 to the end of January 1944. It also gives his grades on the back of it. On the reverse side. He says he remembers studying hard for tests and all, and remarking that it really wasn't easy in those days. So you made a brief detour from Fort Hancock to Fort Monroe for the training?

EB: It's the same thing that Sergeant Gooch went through when he first...

EH: Do you remember much about it?

EB: He lived down there for nine months and his family lived down there when he went to school.

EH: At Fort Monroe, umhuh. Did a number of people from Fort Hancock go there together in a group? Or you were singled out? That's amazing.

EB: Well, they came from all over, all Coast Artilleries on the East Coast.

EH: That I've heard.

EB: There's also OCS classes going on at the same time.

EH: OCS, Officers Candidate School. Well, that was a main education center down at Fort Monroe, I've heard that many times

EB: Still the same, I think. Command General school is down there.

EH: I was also looking at these ID cards which is quite interesting. It's Non-Commissioned Officers Club Identification Cards which are signed by Ed Biederman at various times, also, a Permanent Pass and a Signal Corps Radar Laboratory card and a Temporary Pass with permission to enter the Harbor Defense Command Post at any time. Was there anything special about these cards? Any comment you would like to make about the ID cards?

EB: That's where the Telephone Switchboard room was. Everything's temporary, anyhow.

EH: Oh, I see the Temporary Headquarters permission to enter the Harbor Defense Command Post was to get you entry into the Fire Control Room. Did the men really have to show this every day?

EB: No, not really us, but if we had to go into the other door, we would.

EH: So they kept it pretty restricted?

EB: Restricted.

EH: Right. What was the name of the Sergeant you were talking about before, Sergeant Saddleburn?

EB: Sergeant Saddleburn.

End of Interview