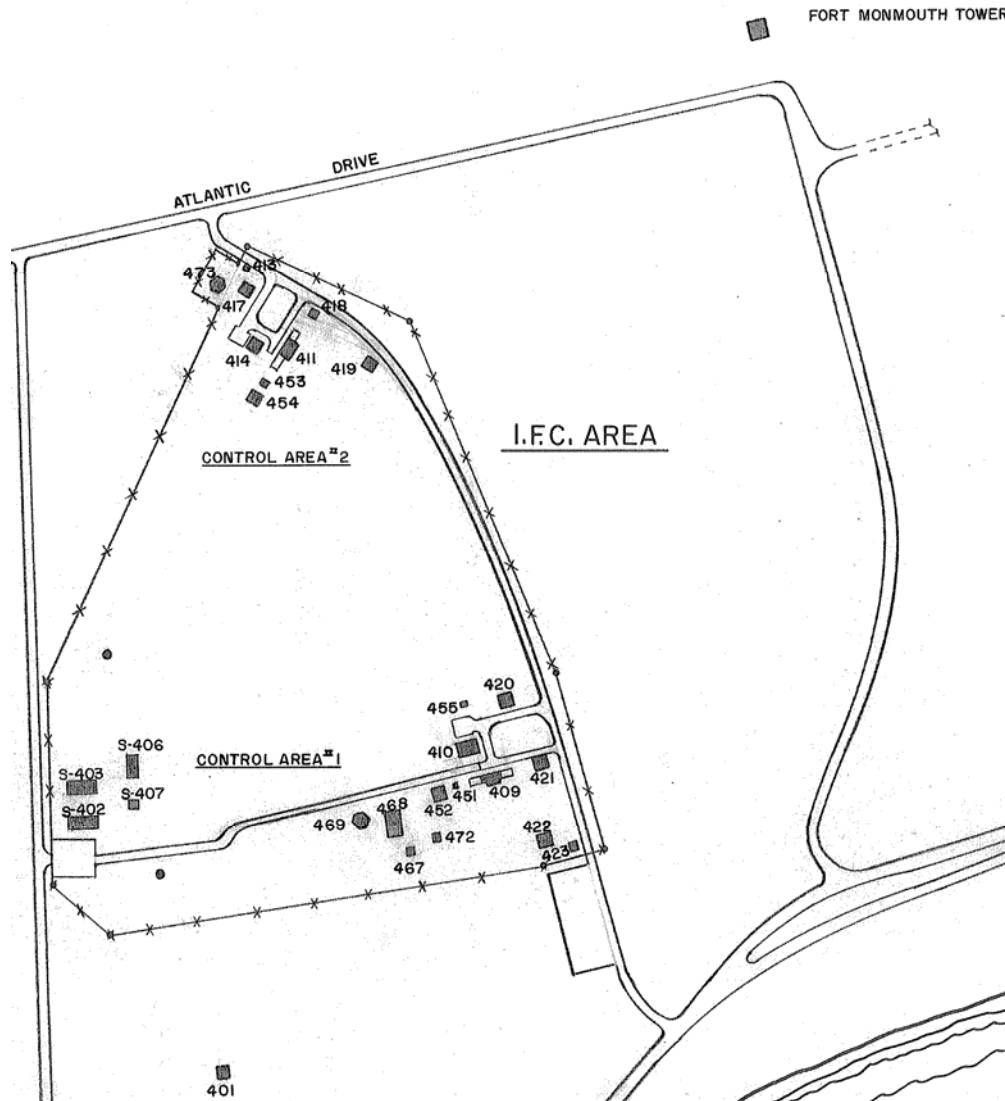


Sandy Hook, Gateway NRA, National Park Service
An Oral History Interview with Russell J. Marsh
Nike Launch Area Section Chief, 1971-74
Interviewed by Peter Dessauer and Tom Hoffman, NPS
Also a site condition assessment of the IFC Area by
Peter Dessauer, Historic Architect, NPS
August 23, 1979
Transcribed by Mary Rasa, 2011



Portion of a 1972 U.S. Army Map of IFC Area at Fort Hancock.
All images are courtesy NPS/Gateway NRA

Editor's notes are in parenthesis ()
(This portion of the interview is a site condition assessment with Peter Dessauer and Tom Hoffman. For more detailed information on the buildings of the IFC Area see the interview from October 24, 1979 with Ron Hyers and Ron Kascmar.)

PD: Today is Thursday August 23, 1979. Tom Hoffman, myself (Pete Dessauer), and Elaine (Harmon) from the Fort Hancock Museum are here at the Radar Site (IFC Area), Sandy Hook, Gateway National Recreation Area. Tom, what are your memories of seeing this Radar Site?

TH: Well, the most striking thing was the domes, the white fiberglass domes that used to be on the towers we are standing in front of and they were made of fiberglass to protect the radar equipment that was standing on these small towers. It was still in operation when I was here in the summer of 1974 housing the radar. Right where you are standing you would see when you passed up from the main road, you would see an armed soldier and M-16 rifle and a pistol on his pistol belt. And also right here at the main entrance on that fence gate was that metal sign just like down at the Missile Site, metal sign with the yellow background with black lettering of course giving you a warning that this was a high security area.

PD: And we are standing right here just on the south side of (Building) 423 and that was a Guardhouse.



Sentry Box (423) with Missile Tracking Radar Tower (422) in Background in 2003.

TH: Yes. Yeah the Sentry Box where the guard would be on duty right here.

PD: What is 422?

TH: 422 is the Missile Tracking Radar Tower.

PD: Missile Tracking Radar Tower. Okay. (Tape stops and restarts) We are now standing in front of Structure 421. What's that?

TH: Okay. 421 is Acquisition Radar Tower.



Structure 421, Acquisition Radar Tower in 2003.

PD: Acquisition Radar Tower. Okay.

TH: That jives with what we have got right here.

PD: What about this vision, line of sight between 421 and 422? They both look south towards the Nike Missile Site.

TH: Right, and according to the blueprint which we have in the Museum Collection, it's dated 1954. They had to cut down all vegetation so they had a visual sight from these radar towers here to the Missile Site. (It was) Probably for tracking with no obstructions in the way.

PD: The structure here is number 420.



Photo from 2003 of 420, Target Tracking Radar Tower.

TH: Target Tracking Radar Tower. (Tape stops and restarts.)

PD: We are now standing in front of 455. It looks like a small concrete shed.

TH: Right. It's marked here on the master list as a Tool Shed.

PD: Tool Shed. Not in the best of condition. (Tape stops and restarts.) What building is 410?

TH: 410 is listed as the Generator House.



Interior of Generator House 410 during cleanup in 2003.

PD: Generator House.

TH: Yeah. In case of emergencies, if the electric lines went out in an emergency they would have to generate their own power. So, of course, just like in the old gun batteries you also had generators on site to make electricity to run the operation here.

PD: Just west of 410 is another small building which has a concrete pad which appears to be a flagpole. What building was this?

TH: Okay, this was a building according to our map list here it is 409. On the master list it is a (Inter-) connecting Corridor Building. That's about all the information I have on it. Building 409, (Inter-) connecting Corridor Building.

PD: But its number is 409.

TH: Yeah.



Inside ICC Building 409 during renovations in 2003. Radar van can be seen through doorway.

PD: It has two, are those flagpoles we see on either side? What are these big metal...?

TH: It goes down like a road arm.

PD: We are standing on a concrete pad just north of 409. This is all that remains of the previous building labeled 451. Number 452 is...

TH: The Equipment and Operation Building made of concrete. (Tape stops and restarts)

PD: We are now at 472 and this looks like another tower. What does that read?



Target tracking Radar Tower in 2003.

TH: That's right. On the master list it is the Target Tracking Radar Tower and what is interesting here, Pete, is on the older '50s map this tower is not here but it suddenly appears on the November 1, 1963 Fort Hancock Building List. So, it was put up a little later after they first established the site.

PD: And just north of 472 is 467.

TH: Right.

PD: It's another tower.

TH: Another tower. It's a little different in construction, but once again it's listed as a Target Ranging Radar Tower. Its 467 and, of course, that again appears on the November 1, 1963 Building List.



Target Ranging Radar Tower 467 photographed in 2003.

PD: Alright, what is 468?

TH: 468 is the HIPAR Building. HIPAR radar, the way I understand it was the long range radar that would sweep out over the ocean to make the initial contact with anything flying out there.



HIPAR Building 468. Photograph from 2003.

PD: And it looks something like a garage. There are now boats stored in here.

TH: Yeah. This is lifeguard equipment right here. These are lifeguard surfboats, Pete.

PD: Now, what's it used for, just for that purpose?

TH: Yeah, a lot of the buildings down here at the Radar Site are used by the lifeguards for winter storage of their lifesaving equipment and I believe the concessionaire is further over to our left, the north and they also have their concession trailers stored here. (Tape stops and restarts.)

PD: 469 foundation stand, the foundations stand is still here. What was it?

TH: Well, it is interesting. It is listed on the 1963 building list as HIPAR base, steel. But of course, that is missing. We have a concrete base and the steel girders are all missing. You can see where they were in place at one point in time.

PD: We are now standing on a concrete platform which is just west of 469, the old tower and we are trying to figure out what this was. We can see some sort of opening hanging down for drainage of water. We believe this was a sewerage area. Tom, I can see that over by the high voltage transformers there are some lifeguard stands, beach lifeguard stands. What are they doing here?

TH: (Information not transcribed as it is not important to interview.)

PD: We are now moving from 469 north towards an enclosed trailer park. (Information not important.)

TH: These are the property of H.S. Concessions. (Information not important.)

PD: These trailers are stored in a semi surrounded asphalt pad compound that used to be an old basketball court, an open air basketball court. (Information not important.) You can still see the lines for basketball and badminton they used play on this asphalt court. There is even a rusty old basketball net up there, backboard.



Basketball court as photographed in 2003.

TH: Yeah. I think there is another one there too on the far side.

PD: We are now moving in a sort of northwesterly direction from the truck trailer park over to a truck ramp and besides that there is also a fire hydrant. Now what was this used for or would you know?

TH: Don't know. We don't have any information on it. It's not on the older map. That is for sure. We do have it on your map here showing all structures. Yeah. It is of Army construction and it has been here ever since they closed the Radar Site.

PD: What would they use this for this ramp? For repair of vehicles they would back up a vehicle and repair it underneath?

TH: You could certainly do that in here. Yet they might have used it for offloading equipment. There is no reason why they should put it all the way up here.

PD: I know there is no platform at the end for reception. Probably for repairs.

TH: As far as I can see we have no building number for it. It is not listed on any of the structures here on the master list.

PD: There appear to be some dark oil stains between the two sides, the two pieces of this truck loading ramp. It is probably a place for car reparations and changing oil in vehicles. There is no number for this truck loading ramp. We are now looking at a small concrete pad that is located between the truck loading ramp and Building T-402. It's just a concrete pad with four bolts sticking out. They are both rusty and an iron pipe. We will have to identify this later. We are now standing in front of 402. It is padlocked. There seems to be a glass grated covering over each window. What do you think this was once used for, Tom?



Alert Barracks 402 photographed in 2004.

TH: Well, we have it listed here on the master list as Alert Barracks.

PD: Alert Barracks. It looks like there are some lawn chairs in there.

TH: Yes. It certainly does look like it. (Information not important.)

PD: This barracks is the same construction as the 430 to 433 group over at the Nike Missile Site painted an off white color. Just east of 402 we have 403, which looks like another barracks building. 403 is open. The exterior condition is rusting. Interior painted blue, peeling. What do you think this was used for? There is still some linoleum on the floor.



Interior of Alert Barracks 403 photographed in 2003.

TH: That's right. We have it listed once again as an Alert Barracks and you walked in right here stenciled to the right of the front door, the words "Support Contact Team."

PD: Between 403 and 404 we have the remains of an aluminum telephone booth. All the windows have been smashed out of it. You might write that down on our map just right here. We note that in the telephone booth the telephone says to deposit 10 cents. That might be datable by that information. We are now walking east of 403.



Telephone booth photographed in 2004.

TH: The Army was using....

PD: Where there are two large concrete pad foundations for two former barracks, 404 and 405. (inaudible)

TH: Both were Alert Barracks. 404 and 405 were Alert Barracks.

PD: We do notice that throughout the site there are a lot of night lamp stands that are still standing intact although they no longer work. These and the telephone poles and their lines are not indicated on the map.



Light pole photographed in 2003.

TH: As an after thought looking at the light stanchions they seem to date from about the same time as the buildings went up here at the radar site which is probably around the late '50s or the lights might have been put in during the 1960s.

PD: Alright we are now standing in front of Building T-406.



Inside shower area of Latrine 406 as photographed in 2003.

TH: A latrine.

PD: This serviced the barracks.

TH: Right. Right across from the barracks. (Tape stops and restarts.)

PD: We are standing on a concrete pad which is between the latrine and T-403. Alright we will probably just note it as a concrete pad with bearing, bearing directional marks on it. Also it had an iron plate which was a manhole cover perhaps to sewer and drainage. None of the painted directional arrows on this concrete pad look original. They look like

they have been done by jokers. Now just west of 406 there is another building. It's number is T-407. What was this, Tom?



Boiler Room 407 as photographed in 2003.

TH: This was a Boiler Room. This is very similar to the Boiler Room down at the Missile Site.

PD: Right.

TH: In fact, it's got the company that made it.

PD: (inaudible) Manufacturing Company, Missouri.

TH: Kansas City, Missouri.

PD: The boiler is still here although it is a rusty mess.

TH: The wires and tubes have been cut. The thing has been vandalized. It has a hole in it.

PD: It's rusting away. (Tape stops and restarts.) We have arrived at what appears to be the eastern or northeastern section of the Radar Site. What building number is this, Tom?

TH: This should be Building 454.



Building 454 as photographed in 2003.

PD: 454?

TH: Yep, 454.

PD: And what was it used for?

TH: It is Equipment and Operations Building.

PD: Just to the east of 454, the equipment building has some electrical transformers in here surrounded by chain link fence and next to that is a concrete block building about four feet high. What used to be in that?

TH: It had something to do with the transformers. That concrete block structure is 453. The transformers once again do not have a building number.



Transformers next to Building 453.

PD: Or designation. We will have to just draw that in.

TH: We have four transformers here.

PD: Now moving north of the transformers we have come to another concrete block about forty inches by forty inches and painted yellow with black stripes and it seems to, pipes in the ground.

TH: Then there is also...

PD: A manhole cover.

TH: A manhole or maybe its more drainage here.

PD: Some more sewer.

TH: Yeah. Some more drainage. Right over here right behind us is some more pipes. There is another one up here.

PD: This is a septic tank system I think. In this area is abandoned windows are smashed. Metal rusting, the parking lot is full of old pieces it looked like railroad ties.

TH: Rails.

PD: Rails and there are some...

TH: There are old ties. You are right.

PD: Ties, rusting. You can see in the parking lot area here which is located around building, parking lot which is around Building 414. You see the initials Gen. for General's parking area. Now standing on the north side of Building 414 which has four different double door entrances. What was this used for, Tom?

TH: 414 on the master list is a Generator House again.



Inside the Generator House 414 as photographed in 2003.

PD: Here are the remains of at least a dozen switchboxes. The interior is a mess of broken glass, peeling paint and sagebrushes. Tom, what do you think this was on the floor?

TH: These are where the generators were.

PD: Alright, the generators have been taken away. The generators are missing. We are moving east and north of 414 toward two, the remains of two concrete based radar towers. The first one we are looking at is 417.



Target Tracking Radar Tower as photographed in 2003.

TH: That was the Target Tracking Radar Tower.

PD: Target Tracking Radar Tower. A large golf ball dome that used to be on top of this thing no longer exists. Then just north of 417 is 473.

TH: 473 was a later addition which appears on the 1963 building list and it was Target Tracking Radar Tower.

PD: And just to the east of 417 is a small concrete block building.

TH: That is Building 413, another Sentry Box right there.



Sentry Box 413 photographed in 2003.

PD: That is right at the northeast entrance to this little area.

TH: Yeah, right over here on the other side is Atlantic Drive.

PD: Right in the middle of this parking lot area there now stand a large blue trailer that must be 50 feet long.

TH: Most of these trailers are used by the lifeguard staff. (Not important to interview.)

PD: Why do you think that the old railroad ties and the old railroad rails are lying here?

TH: Well, it was back in November of 1978 that the park had Atlantic Drive, which was running right here to the south behind us, repaved. And at three separate points on the old roadway we discovered a number of old railroad rails and ties under the old road bed. This is the old Ordnance Proving Ground Railroad. They ripped up the rails and they transported them here with a number of rotted ties. They transported them here and left them laying here.

PD: Why the dog house?

TH: I don't know. That is interesting. Apparently some soldier had a pet dog out here. It looks like it is really homemade.

PD: (Conversation about a trailer not important to the interview.)

PD: Now just south of the trailer we have feature 412 which looks like another stand or tower stand. What does your list say?

TH: Okay. I am looking it over and I don't have it listed on the master list. Let's look at the old map.

PD: According to my plan I have it listed not as 412 but 418.



Acquisition Radar Tower photographed in 2003.

TH: And also on my map too that goes back to the mid '50s it's also 418 and 418 on the master list is Acquisition Radar Tower.

PD: Okay. That makes sense. Someone changed that 2. That 2 is not as large as the other numerals. Someone changed it at one time. It looks like they painted white over the original sign and then painted 412 for some reason. I don't know. We are now going

to move west of 418. Well, what we really determined was 418. It's Building 411. 411 is again noted as a (Inter-) connecting Corridor Building. What do you think that was?

TH: I have no idea. The phrase is foreign to me but once again at each Radar Site out here they have a similar building and it has something to do with the operation of the radar equipment here.

PD: Now between 411 and 414 there seems to be some sort of a trench which has small concrete walls. It's in the ground. It looks more like a drain or duct.

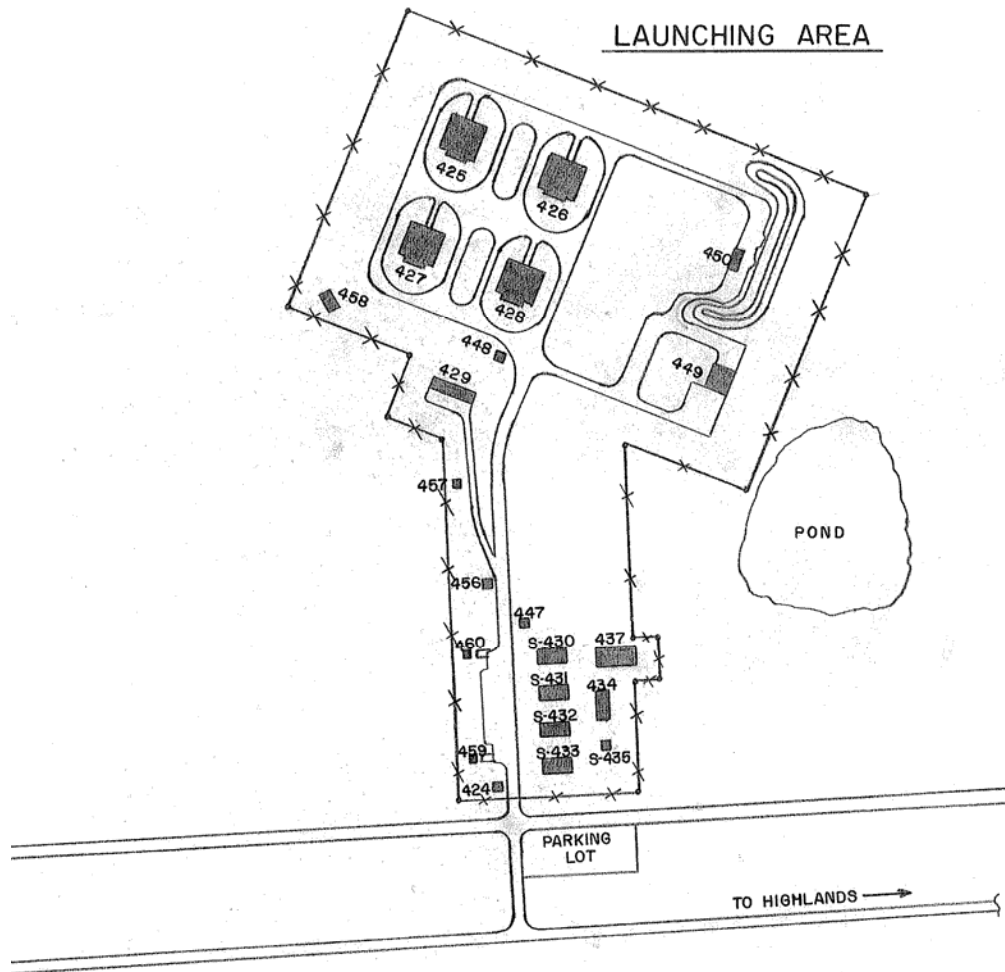
TH: Right Pete. I can see it right behind you coming off the Building 411. The rainwater can funnel right down this concrete trench all the way down and out that way going northward.

PD: We are walking towards feature 419 which is another tower stand concrete and steel beams. What was this used for?

TH: Okay, 419 was the Missile Tracking Radar Tower again. (Tape stops and restarts at the Nike Launch Area with Russell Marsh.)



Missile Tracking Radar Tower photographed in 2003.



Portion of a 1972 U.S. Army Map of the Nike Launch Area.

PD: This the afternoon of Thursday, August 23rd. Myself, Peter Dessauer with Tom Hoffman, Russell Marsh and Barney are here at the Nike Missile site on Sandy Hook, Gateway and we are going to talk about the Missile Silos and we are going to descend into one of them.

RM: This is the site of Alpha Section (428 on map). There are four sections. Alpha being the first section as soon as you come into the....To your left is Bravo. Across from Alpha is Charlie and cattycornered from that is Delta. Alpha section was probably the best section. Probably, I say that because it is the first section you came into. The first thing that would hit your eye right away. I was in my second tour of duty here. I was section chief here. I started with Bravo Section as an E-4. Well, actually as a private first class. Moved to become a Spec(alist)-4. Went to Korea and came back later to earn Spec-5 and I was given the rank of section chief. I had approximately 10-12 people working for me at that time and one of our main things, tours of duty was to insure the maintenance of the missiles, the maintenance of the launchers, the safety of the missile and the safety of the launchers in it and the work conditions of itself. This first little block here used to be a generator shack which would be the first thing you check in the morning. Every morning when you had your 24. The duty rosters would usually went 24

hours on, 24 hours off. 8 hours (on) and 8 hours (off). On your 24 hours on, after you got a few hours sleep you would be here at 5:30, 6:00 in the morning and you had to do daily checks on the missiles to insure the safety of them. And your first thing you would start with would be on this block over here. On this block over here there would be a generator and there would be safety check.



Main Hatch to Alpha Section also know as number 428. Photographed in 2003.

PD: Now we have an entrance hatch opened. This block you are talking about is just east of it, just east of it. It's called an inspection block?

RM: No. It was where the generator block was.

PD: The generator block.

RM: It's where the start of the inspections would go. Where you start for your missile safety checks. Okay. The hatch has I can look going before we even take a step down there I can see there is a large amount of water. Now anytime it rained we always had that problem of water. We always had to get the squeegees out and fill the water. This would be the mainstream where the action where everything happened. We actually lived down in these pits during times of war. If you can remember the Arab War, the Seven Day War between Israel and Egypt?

PD: '67

TH: Then they had the '73.

RM: The '73 one is the one that I am talking about.

TH: Right.

RM: Well, one day I slept late and I was driving into the base. And I am normally cruising on listening to Wolfman Jack in the morning or, it wasn't Wolfman Jack at the time it was one of the crazy radio announcers I was always listening. And as I turned to my right I saw all the missiles up and I immediately got scared. I knew it wasn't a drill so early in the morning. So, the next thing I knew I found out that they were trying to

call me all that night and they had a recall and I almost got into a lot of trouble for that because they had a recall system that no matter where you were you had to be on call at all times. They had to be able to get hold of you. As it worked out my phone was broke and they couldn't get through. It was just an odd thing. And we had to stay down here for approximately 5 days and live on C rations and K rations which were probably better than the cafeteria food. That is not really a joke. They are excellent food. If you ever get a hold of some C rations or K rations eat them. They are delicious. The security on this, this big metal pit that you see here, the latch, okay, they were electrical sensitizers. You can see the metal part over here, okay. Whenever this was opened where the first badge where we haven't critiqued that yet but there used to be a building outside which is down now which you would have to have another badge. And there was an electrical system there and there was an electrical system which we talked about earlier down at the sergeant of the guard. Whenever this was opened if the keys were not turned on over there it would be a light would go off and then the next thing you would know if you were looking up here you would see a bunch of soldiers running up with M-16s and dogs and the whole bit. It would not be a friendly sight if you had the fortune enough to sneak in or the unfortunate enough. One problem with this system was whenever it was windy and it is windy up here, it goes off almost all the time. So, there was a lot of false alarms but they had to treat every false alarm like it was the real thing. Okay. That little metal thing you see over there was where the cables were running. It was a constant...

PD: Its sort of ...

TH: Northwest.

PD: Northwest of the hatch that is open now.

RM: Right. There was a lot of cables, heavy cables. When we were talking about launchers and stuff we had a lot of cables and you had to run a lot of cables because you had your little, there was the launchers. Okay there was three launchers out here in the open that you could see. There was one over here and there was two over to the right. The other launcher was on the elevator itself as you come up. Okay. Now with the launchers outside. You had a panel, a panel operator which was outside adjacent to that. Each one to a launcher there was one downstairs. (The) interesting thing about this system was when you sent out the last missile they had a thing called a reload. When you pushed the missile out onto the launcher and the blast doors would be closed in the event of an attack. As soon as you pushed the button for a reload the missile would start coming up. The doors would open and the missile and the launcher would be coming up at the same time and it would be simultaneous that the launcher and the missile locked all at once. It was one of the most magnificent sights that you could see in weaponry with that system itself.

PD: I have a question Russ.

RM: Sure.

PD: Could you once again explain which one was Alpha, Bravo, Charlie according to, the one we are going to descend into is the southwest?

RM: Right.

PD: Alpha. Southwest was Alpha. Now southeast...



Elevator opening of Alpha Section, 428, photographed in 2003.

RM: On the poles, if you look at the poles, the light poles they have Alpha, Bravo, Charlie and Delta on them also. One of the last remaining things that they have.

PD: So that is B over there. So northwest is...

TH: Northwest corner.

PD: Is Bravo (427) and this one in the southeast was...



Elevator at Bravo Section, 427, as photographed in 2003.

TH: Charlie (426).



Charlie Section, 426, elevator as photographed in 2003.

PD: And northeast was..

TH: Delta (425).

RM: Delta Dawn we used to call it. That was when that song came out, “Delta Dawn, what have the flowers gone.” We used to sing a song, “Delta Dawn where have your missiles gone wrong.”

PD: Were they the worst?

RM: Well, we tried to kid them. It looked like the most run down system of all of them paint-wise because there was an excellent sergeant running them and he kept his missiles in shape but he left the maybe the walls and the outer interior didn't look as good. And there was a lot of trick secrets that you could use to like say painting a launcher. Like we used to add maybe a little alcohol in with the paint or so and it thinned it out a little but it made it shiny and it always impressed a general when he came in. they wanted to see it shiny because even if you painted it and made it last longer it didn't matter. They were still going to make you paint it in three months and say, “Hey, its time to paint your launchers. Do it anyway.” So, you might as well do it for a short period of time and make it look good. That is one of the keys to an inspection. It's what the generals would look for because they would come up with a surprise inspection. You never knew when. This elevator door you will see it's had yellow line around it. They always wanted to keep you away from it at all times. There was a warning luckily that say you were walking on the elevator doors the bell would ring. There was a bell that would ring for approximately like 10 seconds before the doors started to open. So, if you were walking on that and we heard the bells ring its time to get off quickly. And that was always one of the main beefs on security. The back hatch you will see over there in the back is basically an escape hatch in case of a fire, okay because we are dealing with a lot of explosives and stuff and the site ports over here are basically vents. Now the vents had two full purposes. If in the event that someone had got in and as we go down I will talk more about the security doors down there but if someone got past and locked you out so we could not get a guard or a dog down there we would lower a dog down there. If you couldn't do that you could smoke them out. And they would close off the vent from the top and send it out. That was a vent also.

PD: So we were talking about three vents, an emergency hatch, the elevator doors, the main hatchway, the generator stand and what was over there?

TH: That was for cables.

PD: Cables.

RM: Cables running over here and we had our water.

PD: Water. I will photograph those things when we come up.

RM: Let's take a descent. (Tape stops and restarts inside.) Right over here on the top you will see four lights, locking bar lights. What they were was for the elevator, okay. Whenever the elevator went up and down it had to be lit. Okay and one of the things there was always a man on the panel room and his job would have to be locking bar light illuminated. And you would have to state that these lights were on. If these lights were not on no one could get onto the elevator because the elevator could drop and you have to stay in place. Whenever we were transporting a big wig, a general or someone, they had to be lit. This is basically starts your reload system. Okay. That's the automatic system that put the launcher up, okay. This room right in here was probably the most important room. It was the panel. After you had near the panel here which was the communication between the radar and the missile site. Now as soon as the status, you had different light status. You had amber, blue, red, okay. Whenever blue when we had a drill or so we would give a status and it would be given out and the section chief would be out here. There was a section chief, four workers and a panel operator. And you would try to take the cream of the crop, okay. Now the section chief would be checking up on everybody's job. He would have the keys around his neck and there would be a little safe inside which would be arming it. And as you are arming it any information or any change of status the panel operator would be giving out to the section chief and the section chief there is an intercom would be yelling back to make sure there is a verification. As the drill proceeded, the section chief came in here. And after all the missiles were ready and on their way up, they would be running down here. Everybody comes down here and the crewmen have to count off to ensure that everybody is down here and all the blast doors are closed. And here is where the actual firing of the missile would be and in case of a communications breakdown between IFC. The IFC Battery Commander would be the one to shoot the missile. Quite often there might be a communication breakdown and the panel operator himself would shoot the missile and usually the panel operator was almost on the same forward as section chief because he had to know his job quite well and it was important to have a good one okay. (Sound of walking in standing water.) Moving along in here. You will notice you have a large blast door and behind the blast door if we can open it which is always difficult and probably closed.



Inside Alpha Section.

Sign states "Do Not Operate Elevator When Light is On." Photographed in 2003.

TH: It's jammed in there.

RM: Well, in back of that you can see a big closet. I don't know if we have anything in there or if you can see anything in there. It remains to be seen. Okay this was, we had tools and stuff.

TH: The closet right behind this blast door.



Blast door photographed in 2003.

RM: Now, we always tried to hide things back there like paint and stuff because the paint was supposed to go all the way down to the other end but there was it was a big hassle so a lot of times we tried to hide it behind there. But you could get into a lot of trouble if they found it back there. We always would try to look for a hiding spot back here. And it was also a big poster in back of this door which used to state in case of a nuclear attack and the final saying was put your head between your legs and kiss your backside goodbye.

TH: You are down here for a reason now. Was this for storage and also for other reason for other reasons besides storing the missiles down here or is it for protection, camouflage?

RM: A little bit of both. The camouflage, it wasn't great camouflage but it did afford good protection in case of a barrage. Machine gun fire, gun fire, mortar fire would not be all that effective against it. Against the wall over here you will see a pin board right over here which would be the duty rosters of everybody and more or less gave safety procedures. It would show you your fire procedures and different procedures like that. (Walking through water) It's not too bad in here. It was always worse in here.

TH: Yeah, there is the water there.

RM: Right here is the panel for the elevator. You had the elevator operator over in this part. Right here would be the safe. There used to be a safe that would have arming devices for the missiles, okay because the missiles weren't armed. They used to have a pin. A little round pin, they had different pins that would fit in symmetrically into the warhead itself and the section chief would check it and there would be one man arming it. The section chief would be right behind him. Meanwhile, they had the elevator which was run off 440 power. So, they used to pull 440. Later, they converted it but I, the Missile Site, it was the 440. This is pretty self explanatory, okay. They had it would be in a locked position and this was the water hose. The ceiling lights, the power lights, the main lights okay. 416, it used to be 440. There is the 440 right there. And you can see the size of the cables we basically dealt with. They were large cables with the head that were a pin index right in there. Basically in the dark so if someone was coming down here and they had a flashlight and were just looking this would be basically about where the missile would stop. It would give you an idea so you wouldn't walk into it.



Electrical panel next to elevator as photographed in 2003.

PD: How many missiles were down here at one time?

RM: Well, you had I believe six missiles. Okay, three on each side. You had four launchers. Some may have had five because you always had one going down to maintenance for work on it in some case or another. There was always one out. One had

a LCA, Launcher Control Indicator. It use to be called in boxes upstairs and I was talking about and you might run checks on the missiles with. You'd periodically took a missile up and just check out on it. We would send a missile up and they would check to see the azimuth, the yaw, the pitch, they would have like an imaginary flight of it. And we would be sending in commands and we would be reading back what it is doing. Is there a pitch? Is there a yaw in it? How long it is? Which direction is the missile rolling? Which direction is the missile going? The good thing about the protection on it whenever you walk in here in the dark on the nuclear missiles they had the red cover for the vein because it had a very sharp and thin vein that you could put your eye out very easy. But that was the heart of the guidance system. It would tell the direction of the wind is and okay the missiles had to have proper heating okay. The elevator was run off of hydraulic fluid, okay. You had to come here and I see there still is fluid here. There is still in semi pretty good condition. This one would have to be run periodic checks on. As a matter of fact, there was daily checks but as far as the maintenance it was periodic. And probably one of the worst jobs of the Nike Hercules men would be maintenance on an elevator because it was grease and everybody would just you know you come in looking nice and pretty and then all of sudden bang you are all greased up. And underneath the pits there was a space. The missile off of the elevator onto the rail you have to grab a clothes line and pull the pork chop down so that the elevator so that it would go past. Each little rail had its stopping point.



View of the area below the elevators where the Nike Missiles were once stored. Photographed in 2003.

TH: Yeah. They were transferred over.

RM: Right.

TH: They were on what would you call them?

RM: You mean on the rail?

TH: Yeah on the rail. Was there a term?

RM: No. You would just call them on the rail. The stoppers they would have to grab would be a rope and a pork chop we used to call them, okay. Because the pork chop was just a swinging device and if you didn't pull it down it would stay in the up position and

it would stop the missile, so a pork chop, it looked like a pork chop. It looked like a little round pork chop.

TH: This elevator now is in water. I wonder if it would work because it is under water there just underneath it.

RM: There is a drain down below. Apparently it must be clogged.

TH: How deep is it under the elevator platform?

RM: It's over your head.

PD: There is a stair going...

TH: Yeah. I can see the stairs on either side here.

RM: Yeah, there are stairs but then you could get, if someone was underneath the elevator if there were standing up they wouldn't be able to stand up. You could get underneath this elevator in a low crawl. I think it was probably basically designed if somebody fell asleep or of someone was underneath there they could protection and not get crushed. (Tape stops and restarts outside.)

TH: Yeah we were just talking about some of the facets of serving here at the missile site with Russ and one of the things that intrigued us yesterday was that down over at the warhead ready building there. There is just outside the building is the concrete flooring there. The sidewalk is...

PD: Undulating.

TH: Undulating, yes. I was asking Russ the reason for that.

RM: Basically when moving the missiles or whatever you keep steady. You wouldn't go in one direction or the other direction. It was quite windy here at times and something like this kept it quite steady. That was probably the worst duty is by the missile assembly building and the back there, the berms around it because you always had to have guards there. Two guards walking the top. There would be a gentleman on the stationary position. They had the badge system there also. And being that there was warrant officers working in there and they were working on a warhead they would take their time. But you would be in out in the cold freezing your backside off and you would be cursing them out under your breath wondering, "What the hell are they doing? When are they going to come?" So the worst duty you could probably pull was berm duties. And the Missile Assembly Section, the building you see straight down there that was the little Pentagon. That was where all the officers, warrant officers, misters would be in there. And on my average duty day, I would inspect men and barracks to make sure they had the bunks made because this platoon sergeant was to check them and he might say something to them but it would definitely get back to me. So, I'd make sure that they

were okay. I would come back down here to do the daily checks with my men and then I would take a walk down to Missile Assembly and all these sergeants would be down there drinking coffee. (It was) the basic place that is the nucleus for any information around here. What was what had to be done? Who was coming? Who was what, where? When the maintenance was due on it, the missile every missile had a serial number and every launcher had a serial number. And I would copy down what was due for today so I needed to know exactly what I had to do.

TH: You put in a lot of time here. Any standout event? Any important, you know, vips ever visit or anything that you really had to look sharp or...?

RM: Well, the funny thing about that is there was a show on "MASH" one time that covered it perfect. A big general was coming, a four star general, three star general. I don't quite remember his name. And we had a G.I. party and it was like maybe five days and five nights nothing but cleaning, cleaning, cleaning and cleaning. And he came here and I think he was here maybe a half hour. And I think he left and I don't think he looked at anything. But I don't think he really cared. And it took me it was so funny because everybody was speechless after it was all over and they reported he was gone and everybody looked at each other saying, "What? What?"

TH: He was here already.

RM: In Korea, when I was in Korea we had a similar situation happen. We were painting fences. It was funny. Like one guy would be on the outside spray painting. The other guy would be on the inside painting. The guy would spray paint each other. We were running out of paint. We had a Ready Room over there. We didn't have much paint so what we did was painted the front portion of it and the back portion wasn't painted and we hoped that he didn't go in the back. The general did the same thing. He drove through, waved and that was it. Sometimes I think it's the Army's way or reason to get ready for an inspection.

TH: Russ, we were talking about the security system about the guard dogs. How did that work again?

RM: Well, the security system probably you would have to start back at the battery system which goes to the front gate and then you have the second gate which we will be talking about a little bit later. And there was different duress codes that they had. And that was a funny event we are talking about security. They had a thing called a duress code. Like say there was a big wig coming in with the battery commander or something but now say it wasn't somebody. So, he would be under duress. Say there was a gun pointed and say, "I'm going to kill you." There would be a word that he would say to one of the guards at the key house. He would say, "Gee how are the wife and kids doing?" or "Did you buy any bananas today?" Well, one day the word was "rose" and the battery commander, his wife bought him roses. He said, "Hey is it your wife's birthday?" He said, "Yeah, she bought me a rose today," and he had a big smile. He forgot about the duress code, right. And he is up there with a big wig from Washington

and they are coming up there. He completely forgot about it and all of a sudden you see 10-20 troops coming up with M-16s locked and loaded and the guys getting ready to get the dogs out. It was just a funny sight. It was just really funny.

TH: We are also mentioning about the guard dogs and their trainers would be outside the perimeter of the whole missile site?

RM: Well, they never really went outside of the fence here. It was just in this immediate area.

TH: Area. Okay outside from where....

RM: And they went outside of the fences around here. A lot of times they would bring them in. We did mention it was cold here. A lot of times they were inside the guard house with them and they were excellent warmth. Usually they would let a dog out and they would let them roam free. They weren't supposed to but they did anyway. And there was also a guard dog, Zonkers, which wasn't a guard dog but he would always went around and would warn anybody of any big wig coming. But the Sheppard's each had a guard handler and everyone had a dog and were assigned to a dog. And they would roam around with it. There was approximately six dogs, seven, eight dogs. They had a listing of them. And whenever a dog got too crazy or something they would have to destroy him. If somebody couldn't handle him or if somebody was leaving a lot of times they might not be able to rehabilitate the dog, change the dog. And the same thing would hold true if the dog was too friendly which probably was more the case than not because I could think of a couple of dogs that guard dogs that I became friendly with that I wasn't supposed to. As far as you know, when you see a German Sheppard wagging its tail and coming up to you its hard not to pet the dog but if you look at his teeth he can hurt.

PD: We are standing in front of building S-449. What was this used to for?



Missile Assembly Building S-449 photographed in 2003.

RM: This was the Missile Assembly. This is where they took the missile out. Say we had to do work on the missile. They would take it into the Missile Assembly. They would take the warhead out okay. Then they would transport a warhead back into the pit, into

the missile section itself. Let's say we have work to be done on the missile it would be done here. And the security didn't need to be that tight if it was just the missile without the warhead. The fail safe we are talking about that we had to worry about. The little room over to your right is just a bathroom, okay. Inside here onto the left of the wall would be the duty rosters. The rosters of what I was talking about of the maintenance of the missiles itself. What had to be done? The serial number and whatever had to be performed on it. These doors are different. We used to have heavy chained doors. They would come down on a heavy chain. It's pretty much the same though. You can see a missile could fit in here quite comfortably. Over in the far right corner, that would be the coffee city. I think we kept Columbia in business. Juan Valdez must have loved us. There was a lot of coffee that used to be drunk here. Up in the top section we used to have different types of supplies. There was grease. There was lights, just minor supplies would kept on the top there. Okay, T-hooks, assemblies a lot of metals. Whenever there was something needed okay there was a parts clerk that was here. And like I say every missile had to have screw on it had to be torqued 150 foot pounds which was quite a lot. If you had a big gorilla doing it quite often they might strip them. So when you come down here you had to order it and there was a parts clerk down here that you would have to look up the exact number and give you the exact part that you needed.

PD: We are now looking at Building S-450 and we are on the west berm surrounding that.



Hoist system inside the Warhead Building S-450 photographed in 2003.

RM: This is your hated duty. The old berm guard in the warhead section where the warheads would have to be pulled in. You had a guard down there where the guard would have to change badge with everybody that came in. They ran a field phone. A field wire with phone would be right here to the little key house which isn't here no more. When we go back I will talk about. That was a form of communications because he would have to tell who is coming and what his purpose was and he would have to state it to the guard here. The two guards would be walking. They couldn't stand and chat. Like I couldn't walk down here and talk with the guard over here. I would have to keep moving and they would look for that. And they would be inside. The warrant officer would be inside and it was pretty good security in there because they locked the door and

they wouldn't let you see what was going on too much. It was just the warrant officers and the parts clerk might be there, a technician of some sort.

PD: Why the lights?

RM: Why the lights? Okay.

PD: Flood lights, night flood lights.



Flood light inside the Launching Area as photographed in 2003.

RM: Two fold purpose. In case it was ever done at night and besides being at night if there was ever an infiltrator they could turn the lights on them and they could find them pretty easy. You notice this is done on the inside. It is mostly for transporting. They wanted to make sure it was safe because say they put it in and all of a sudden a complication had happened, right, they may still want to work on it. You really couldn't leave it in here overnight not without keeping guards on constantly and that will drive a guard up the wall being out here in the cold so you might work on them when you need to pull it out there to keep the lights on. Just as there are lights up in the other section. Now they did have war games also. We played war games here. There would be evaluator would come here and use that as a headquarters or so and we used to play war games like, "Bang. You are dead." A guy would come in and give you a note, Bang you are dead. Things like that. You know the war games were the interesting portion. It was pretty fun.

PD: What is the difference between S -450 and the other building 449?

RM: Okay. S-450 was your Warhead Building. That's where actually the whole missile would be brought in. You would take the warhead out, okay. Now if we had to work on the warhead we would do the work right then and there and the guard would have to be here all day and that's a pain. Now if you need to work on the missile they would pull the missile in. They take the warhead out. Bring the warhead back to the pits okay to whatever section it was taken out of. And then the missile would go to the Assembly Section in the other building, okay. 450 was basically for the nuclear working, okay. Taking out the warhead.

TH: I am interested in knowing how the warhead was transferred, the transportation of it from here to there.

RM: Carefully.

TH: Carefully. Was it in a small truck or trailer or..?

RM: It had its own little canister. It had a simple canister approximately six feet wide. Approximately four feet high and it had its own little wheels which was put in. It was airtight and it was sealed and it had a wire seal so you could see if somebody was tampering with the seal so in the morning if you went to do your daily checks and check the warhead and everything you make sure that that seal hasn't been tampered with or somebody has got a price to pay.

TH: And it was under armed guard?

RM: At all times. All times. (Tape stops and restarts.)

PD: We are looking at the undulating concrete pavement here at 450. That still mystifies me as to what this was used for.

TH: Okay, Russ.

RM: Maintenance and working on a missile you didn't want it to move around too much. Okay. As you look you see the two platforms over there. There was a little thing inside the warhead. On a daily check called M-30s or M-80s. When you opened it up it had two little screws you opened up and it was like a glass door and it had a white window or a red window. Hopefully you said a white window. If you saw a red window you are in trouble. In the back of it, it had almost like a .22. If you pulled it out and jarred it too long it would shoot out which was one of the arming devices of the missile. It would shoot out into the warhead okay. Now they had a little stand over here, a metal stand a four legged stand and it would have a top to it and you would reach in and have a dent in there and you would look in and check it over in these little section, okay. But over here you didn't want if it was quite windy and you had something on wheels or something it might move around. Having it in this section here eliminated the need for blocks or whatever. It kept it pretty stationary. It was wheeled on. It had it is hard to explain. It would be almost impossible to try and explain because they had different types of large cranes which was....

PD: In other words, what we see here cannot be explained but only graphically.

RM: Right. Right.

PD: In other words, these undulations are the place where the front and back wheels of the trailer which carried the missile would rest so it won't roll away. (Tape stops and restarts.)

TH: You mean the guard dogs?

RM: Yeah. The guard dogs would in back of the hooch, the guard dog trailers. They had a big area over there and the guards would have the dogs well trained to do whatever they want and they had certain training programs that they would give the dogs and they would have to be checked out by the duty officer, the security guard and everything. Every so often you would see them out there and there was some interesting shows they would put on. You know certain jumps just like in the circus almost.

TH: Yeah. That fenced off area just behind the kennel cages right?

RM: Right.

PD: What's that little concrete block building right next to the kennels? What was that used for?

RM: That was a feed room for the dogs food and different, they had a lot of flack vests. Whenever they were putting a show on, there were different demonstrations they put on for the public. And dogs were trained to go for certain parts of a persons body, the arm being one of them if the guy had a gun. Now one of the soldiers would volunteer. He would put on a heavy vest jacket on and he would stand there and be attacked by the dog and the dog would grab the padded area and the guy would be okay. He was heavily padded but it would demonstrate to the public that this dog means business. He was not to joke with. Then they had full attack wear incase somebody was...

PD: They would demonstrate right out here?

RM: They gave them out there and I saw one given out in front of the gate out here. They didn't, the only persons who had demonstrations over here was the big wigs. I think that there was a public one given in '73 or so at the gated area just before the front. The people out in front here. (Tape stops and restarts.)

PD: Okay we are looking at our map here for us and looking at the concrete block which is a floor foundation of a structure number 448. Tell us about 448 or what this little thing right next to the entrance for the Nike silo compound is?

RM: Probably most important because it was just before you got in the gated area. You got another your final exchange of badge. And the badge and everything. Everyone knew the gate guards and everybody knew everybody here. And there was a badge system set up in here that everybody had a holder with their name in it and the gate guard would come out and give you your badge and change and open the gate for you when you were coming or leaving. There was the electrical system set up here that they had the idea of who was in what pit and where. And one interesting story that I can tell you about this one time they had an electrical heater there that I saw a friend of mine was sitting on. We had an electrical storm and it hit a pole nearby and it charged that baby. He went flying.

It definitely gave him a good shock. Anyway, these tiles I remember putting in myself because we used to have just a concrete floor then the general or colonel decided that he wanted it looking a little bit nicer. It really looks good today.

PD: It's a mess.

RM: It's a mess but this was more or less the key to a lot of activities. You found out what was coming on and coming off and you would wait for anybody that would be coming into the site or going out to the site. It would be a lookout for a lot of spots because over here you could see all the activities that were going on. You could see what was going on at the IFC. You could see what was going on at the missile assembly. Who was in the section so if ever you wanted to find somebody in the site here is where you would be. It would tell you where to go because the guards would know if they are down at the missile assembly or if they are here they would call the gate guard and its where card games were played at night.

TH: Really?

RM: Illegally card games.

TH: Yeah.

RM: And Zonkers would always hang out here, the mascot.

TH: By the way, was it just a mutt or was it a...

RM: It was a Heinz. 57 variety. (laughter)

TH: By the way we were looking at our master list. The building is listed as concrete but you could see it wasn't. was it metal or...

RM: Yeah. It was basically metal. Basic metal, wood, there was a lot of wood to it. It looks like it tore down pretty easy. It was a large Plexiglas windows out the side. We had Plexiglas because if we did fire it would shatter every window there was. Okay, so you had to have it for that reason plus for visibility you had. You needed visibility. You needed protection. It would be plastic. They did have drills that they would simulate taping the windows in the event that if there was going to be a blast that they did had time to be here taping and then they would eventually leave the premise just before the blast because this would probably get a little scorched. Get a little hot in the vicinity. (Tape stops and restarts.) Okay all this grown here was never here before. This was smooth. It was smooth.

TH: Like down there? On that flat surface?

RM: Even down there, like there. It was flat. It was nicely trimmed. Everything was mowed at all times and they definitely did take good care of this.

TH: By the way, who did the mowing? Was it once again your...

RM: My crew, Bravo Crew, Charlie Crew, Delta Crew, whoever was on the shit list for the day. Quite often I would eliminate it down to a couple of people and I would ask trivia questions of people in my section. If someone couldn't come up with a trivia question they were the man picked because it was fair. I was serving duty for cutting the grass. I was watching Hollywood Squares I believe and one of the question was you call a female dog a bitch, what is a male dog called? And he said a bastard. Well, the answer was just plain dog. So, he wound up cutting the grass for the day and he will never forget that a male dog is called a dog and not a bastard. He might have called me one but...

PD: Now we are in front of T-429. What do you remember this as?

RM: This is the generator, okay. This is where your basic power to the site lied right here. If we had, we were both commercial and by private by ourselves. In the event of a commercial drop we could pick up power just by ourselves and if you go inside you see there used to be large machinery in there. I really didn't know that much about generators. I worked with them around me in Korea a lot. I can tell you used to have to wear big Mickey Mouse ears you used to have to wear because you start using your hearing quickly. I can tell you that.

TH: From all the noise generated by the generator.

RM: Definitely.

TH: So, this would make electricity right here. Is this like a backup system?

RM: Exactly. It was a backup system. Periodically we would have to run drills and make sure that the system is okay. It would be checked weekly at least.

TH: And once again, it was men of your battery that would be in charge of it.

RM: Right. Exactly.

TH: What would the rating be for someone who would be in charge of something like that? Did they have a special rating?

RM: No. It was a staff sergeant, E-6, E-5 or spec-5. What was interesting here was the ratings was basically in specialists, okay. They tried doing away with the sergeant and corporal. They tried making everybody spec-5s, spec-4, staff sergeant. But you know spec-5 and sergeant being one in the same. At the time they tried doing it. (Tape stops and restarts.)



Building 447 as photographed in 2003.

S-447 was basically oil and paint, well mostly grease, okay. There was another paint shack. I don't think it is right here right now. It was destroyed. It was right on the outside.

PD: Right on the outside of what, Russ?

RM: Right on the outside of the fenced area there should be another like shack.

PD: Where would that be on the map?

RM: 447, here is the Ready Room.

PD: That's our little guardhouse. The one that doesn't exist anymore. That is crossed out.

RM: That's it. That's where the paint was.

PD: It was a little paint...

RM: It was a paint house.

PD: And it looked just like 447.

RM: No. It was larger. It was quite larger and it had a lot of paint, a lot of different types of paint. Mostly yellow paint, red paint, black paint and OD, Olive drab.

TH: That would be way down along the fence down there.

RM: Right.

TH: Because I just know what I am pointing to here is a concrete foundation which I don't think we have either here.

PD: It's about a hundred feet from 429. What was that for? Do you remember, Russ?

RM: This one I don't really remember what it was for. It might have been a little generator shack. 447 was mostly for grease. I used to come in here and there was another substance that was like a tar that you could use it like undercoating your car. That we used to use it for any parts of metals that would be exposed that wouldn't be painted. It was like an undercoating, okay and that was basically what it was used for. S-456, the little guardhouse where the persons would come in and you get your first badge. You would come in and the guard would give you your badge and it would be for this. The duress code would be first probably given here unless it would be given at the fence but more than likely it would probably be given here because if it was given in the beginning the officer would probably not have as good a chance as up here. Usually they were told to give the duress code here. And they would have a little heater in here. At night time no one would be guarding this. This is only a daytime shift for the people that would be working here. Okay. Against the wall you can see that is where the badge system was. And it went from ranking and sections. The sergeants would be on the top and privates would be going on the bottom. This was pretty cold here in winter. The heater didn't work too good as everything and this brings back a lot of bitter memories. No. It brings back a lot of memories.

TH: Boring memories, right?

RM: Boring memories. But this, a lot of people liked this duty because they didn't have to face anybody. They were here by themselves. You bring a little radio and as long as you kept it on low you know you could listen to music at least. It wasn't too bad a duty right here at least being in this guard house as being in a lot of the other ones.

END OF INTERVIEW