Nevada Test Site Oral History Project
University of Nevada, Las Vegas

Interview with Philip Ulmer

January 11, 2005
Las Vegas, Nevada

Interview Conducted By
Suzanne Becker

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Suzanne Becker: *Let's begin.*

Phil Ulmer: My wife and I had decided to get married about 1958, I think it was. And we decided that we didn't want to live in the area of the country that we had been born and raised in, which was northwest Missouri. And we decided that the Southwest might present better opportunities for us. So I came out here by myself in January of 1959. I was in Phoenix for a few weeks and I couldn't find any suitable employment down there, and I had an opportunity to come up here. And I worked at different little things until I finally got a steady job here. Then I became interested in law enforcement and I joined what they call the reserve force on the North Las Vegas Police Department. I worked there for a couple years, I think, volunteered down there a couple, three shifts a week, and liked that work. In fact I had taken the test there at the North Las Vegas Police Department and I had taken the test with the Las Vegas Police Department. Metro didn't exist then. There was the Clark County Sheriff's Office, but I didn't apply there for reasons we won't go into here. That was the old days.

Anyway, there was an ad in the paper for security guards at the [Nevada] test site, as I recall, long about April or May of 1962. So I answered the ad, went down to the employment office at Sixth and Carson and had an interview down there and passed the questions they had. They gave me forms to fill out and I filled those out, and I didn't hear anything for a while. Then along about November, or maybe sometime before that, I got a letter asking me if I was still interested, and I replied that I was. Along about November of '62, I got a notice that I had been granted a security clearance and that I was eligible to be hired at the next opportunity for a class.

And they [Wackenhut Security] called me up one day in February of 1963, like Wednesday or Thursday and said, Come to work Monday.

And I said, Well, that's really not fair to my employer. I have a steady job and I need to give them notice.

And they said, It's the only choice you have.

So I went to my boss and told him what the deal was and he said, Don't worry about it, he said, Go ahead. I'm not going to give you a bad rap. Just go ahead. It's a better job. Go.

So I went. And we received a week's training at the time, firearms training and recognition of the badges, what the different symbols and so forth meant, and the various general activities that were going on at the different locations at the test site, and a familiarization tour of the test site. There's one very memorable thing that I want to bring up that occurred during that week of training. It impressed me then and it still impresses me now. And it's still in the DOE [Department of Energy] orders someplace [at the time, this would have been AEC.] I tried to find it a couple of weeks ago and I couldn't find the book that it's in. I can't quote it but I can paraphrase it, and it said that it will be impressed upon each new hire security inspector, which was the title at that time, the amount of trust that has been placed in them, and that we are giving them the **[00:05:00]** responsibility of protecting and custody of the country's most valuable assets—and that this will be impressed upon each new hire as strongly as possible. Now, those are not the exact words but that's the idea.

And was that part of your training?

And I thought, these guys are serious and this really is important and it is serious business. And I've never forgotten that. Next month it'll be forty-two years since I heard that.

Wow! Did you realize before you went out there exactly the magnitude of what you were going to be doing?

No, of course not. I'm a kid from a little town in Missouri and what do I know about atom bombs? Nothing. And back in those days, very few people did know anything about nuclear weapons.

Anyway, I worked in what they called the field force at the time. I worked on the guard stations. I worked on the motor patrols. We did different jobs. We had a ninety-day probation period and I had only been there a couple of months, or maybe even less than that, and they sent us to Tonopah a couple of times. They were having some tests up there in the [Operation] Roller Coaster series that involved alpha dispersion, and basically it was an explosive attached to some plutonium. They detonated an explosive and then studied the scatter of the plutonium and the different trans-plutonic elements. And those were not atmospheric tests *per se* because they did not go nuclear. There was no fission or fusion involved in those explosives, though, because it was just a dispersal test.

And that's what they—

I never actually witnessed an above ground nuclear test.

I was going to ask you that.

They stopped those just a few months before I went to work up there. I forget when the last one was, but it was sometime in 1962 [July 17, 1962, Little Feller 1] And I didn't go to work until early 1963, so I never saw an atmospheric test.

Also about that time, for some reason—you learned real quick not to ask questions. You learned to do the job and mind your own business. And for some reason, I was assigned to the most sensitive area that we had at the test site at the time and—

What area was that, or which was it?

We can't get into that.

OK. Just thought I'd try.

And anyway, it kind of irritated some of the old timers, that here's this new kid and they're sending him out there and it's considered a plum job. I was kind of the odd man out there for a while with the rest of the guys. But anyway, all that passed.

During this time there was also an active nuclear reactor program going on over in what they now call Area 25. I believe it was the Rover project. It was a NASA [National Aeronautics and Space Administration] program and it was nuclear-powered space propulsion engines. There was another program to develop an air-breathing engine that would operate within the Earth's atmosphere, using the reactor for heat in a very similar way that a jet engine uses fuel to generate heat, and you suck cold air in the front and blow hot air out the back. The main problem being with this one that they were developing with the nuclear source, of course, was that what came out the back was pretty radioactive. It was unacceptable in that regard. Anyway, I worked around both of those programs some and I saw those engines run a number of times and actually witnessed that awesome **[00:10:00]** power that's associated with those things.

And these were the things that they were developing in the area that you were working in, or just out at the test site at the time?

No, that had nothing to do with that other story. This is just general—

Just what was going on at the time. OK.

And then of course all the time they were testing bombs. They had just started, due to the fact that with the treaty with the Russians at the time, they could no longer test in the atmosphere, they couldn't test in space, they couldn't test underwater. The only testing that was allowed was

underground. So they were just beginning to learn how to test underground, if you will, learn how deep to bury these things so no radioactivity escaped, learn how to put the diagnostic instruments that they needed, how to array them around the device and so forth, and how to get all that in in a package that they could get underground. So I didn't realize it at the time, but I got to witness all that as it happened. I didn't really understand at the time everything that was going on, but I got to see that. I've seen them drill holes as big as 144 inches across. That's twelve feet.

Wow. How deep?

I have seen holes drilled over three thousand feet deep. Now that was unusual.

Have you ever been down in one of those?

I've been more than a mile underground.

What's that like?

Well, it's really no different than being twenty feet underground, you know. If you're underground, you're underground. It's like being in an airplane. It doesn't matter whether you're fifty thousand feet or ten thousand feet. It's a similar thing.

That's true. That's just deep.

Working underground is a different thing. I spent a lot of time back in the tunnels. We had a lot of tests—military-related tests, military hardware-related tests—that were done underground in what they called horizontal line-of-sight pipes. I believe there's a section of pipe in the [Atomic Testing] museum down there. And there was an energy source at one end and they exposed the experiments along different points of the pipe and studied how the different things functioned, or whether they did function or not, and how the radiation affected them and so on and so forth. Some of those tests would take a year-and-a-half, two-and-a-half years from start to completion. They were very complex and very involved. And those tests, when you worked around one of

those, you were quite often a mile underground and maybe, I'm talking about horizontal, you were back a mile or more underground and maybe, eight, twelve, fifteen hundred feet below the surface.

And we had a couple of other locations where tests were made in vertical shafts. There was a couple of them done in granite up at the north end of the test site. As I recall, though, the deeper one of those was around fifteen hundred feet. And then there were drifts or tunnels, if you will, that were mined off from that at that depth. And they tested military equipment and things in those places, too.

That was all, of course, after they could no longer put the tanks and airplanes and whatever out there and see what the bombs did to them anymore; you couldn't do that outside. It all had to be done underground. It had to be done in some other way.

I spent about nine years working out in the field that way, working on the guard posts and the various stations. The shortest post we had was twelve hours. The longest post we had was fifteen-and-a-half hours. We worked a four-day week. That was the standard week. There was **[00:15:00]** always overtime if you wanted it. After a while, I didn't want it.

Those are long days.

Mrs. Ulmer: They are, especially when you have a family.

Yeah.

Phil Ulmer: Fifty to sixty hours a week was enough.

Did you stay out at the test site or did you commute?

I did both at different times, depending on what job I had at the time.

After that first eight or nine years, one of the management people came to me and talked to me one day, and wanted to know what plans I had for my future with the company. I said,

Well, gee, I don't know. You got any ideas? And he said, Well, I think you ought to work around these different units and get to know the entire operation better by working in it. And then he said, If you'd like we think we'd like to put you into management. So at that time I was an officer in the union and, of course, you know we were enemies, the company and the union. And I didn't really know how I felt about that. We talked about it, and my wife said something to me that I've never forgotten and I still thank her for it. She said, You know, you can do better than spending your life on a guard station. And I said, Well, OK. Maybe I can.

So anyway, I went into some of the different special units that we had. I spent a few years, or I spent a short time in the badge office where people come in to get their badges and so forth. I learned that operation. I spent a short time in the supply unit. But the main promotion that I got and the main job that I got that put my career on an upward path, if you will, was when I went into what they call the operations unit. That's where the orders for the different guard stations, the different jobs that were going on, all that was coordinated through there and programmed through that unit. And that unit also escorted the weapons. We received a lot of weapon parts and different things at various locations. Sometimes they were trucked in. Sometimes they were flown in. We would get them from the couriers. Sometimes the couriers would deliver them directly to the points where they were to be delivered. Sometimes the pilots, of course, couldn't do that. We would go to the various airport locations and pick up various components, sign for them and take custody of them, and then we would haul them or escort them. If they were too big for us to haul, they would be hauled in bigger trucks and they would go to the laboratories.

And this is still within the security unit.

Yes. And I was promoted to sergeant in that unit after just a short time. And then I can't remember how long I was in there, but it was only a year or two, I think, and they promoted me to lieutenant. And I was one of the—I think we had a twenty-four-hour operation in that unit going at that time, so there were four of us that covered that. And we also had, at about that time, a special response team set up. That was shortly after the incident at the Munich Olympics when the Israeli athletes were murdered. Do you recall that? I don't recall the date, but I think it's around 1972.

I was going to say, I think that happened in the seventies.

Somewhere in that vicinity. And that kind of got everybody's eyes opened up a little bit about terrorism, and it got people thinking, well, gee, maybe somebody would really like to steal one of these bombs. And maybe they can make it go bang and maybe they can't. We don't know. It doesn't really matter. If they got it, they can blackmail us. So security was added. The physical layout of the facilities where these weapons [were] stored, **[00:20:00]** assembled and handled was beefed up considerably. And the amount of personnel protection was beefed up considerably. And there was a lot of money spent in that effort to better protect the weapons and the components. And I participated in all of that in some way, in a small sense, and sometimes maybe in larger ways, in helping come up with ideas about how to do these things and going to other facilities to see how they did things. Look at their equipment, look at what they had done, all that kind of stuff. So I was beginning to participate in a lot more interesting things than I had been when I was working as a guard.

And also at that time, I assumed the responsibilities of what they called the plans and events coordinator. And in that job, when there was a nuclear test—now there were two of us that did this job and we rotated. Anyway, whoever was on duty, when there was a test, we went

out two or three days ahead of time, talked to the operational people out there, found out what was going on, took a look at the plan for getting the area evacuated and getting everything set up for the test, and making sure that all the safety requirements were complied with, and so forth, and coordinate[d] a lot of things with the laboratories, with the DOE and with the other users to make sure that all this worked smoothly.

So it sounds like you really had to know all the different working aspects of the test site and all the different operations that were going on.

Absolutely. And the previous years of experience out in the field and working around these ground zeros, working around these assembly areas, working around the various places, had given me the exposure to know and understand how it all came together and how it worked; how the pieces came in the front door and they went someplace and they got put together and then they got taken out here and then they got put in the hole and the hole got filled back in and the test was conducted.

So anyway, on this job as plans and events coordinator, we would have a weather briefing on what we called D-minus-1. [Day-1] And they would look at the weather, look at the preparation. The scientific people would certify that the test was ready, that they were able to conduct it and that all their systems were up and running, and so on and so forth. The weather people would make their presentation and give us either the good news or the bad news or the maby news. And this would usually occur in the afternoon the day before the test, two or three o'clock in the afternoon. And then if they decided to go ahead and proceed for the test the next day, there would be another weather briefing scheduled. Let's assume that they wanted to conduct the test at seven a.m. Well, seven a.m. doesn't sound early unless you think about the

fact that 1,350 square miles of real estate has to be looked over. Not all of that, maybe only eight hundred square miles of it.

That's still significant.

It all has to be looked at. All the buildings have to be secured and they have to be assured that all the people are out of them, and we had to make sure everybody is moved out of the danger area. And the security force did that in cooperation or, came along after the user personnel **[00:25:00]** assured that their buildings were empty. Now if you got a motor pool operation, there's somebody in charge of that motor pool, and he goes through there at some scheduled time and says, yeah, all my mechanics and everybody are gone, the building's empty, I'm going to lock it up, and they put a seal on the door to assure that it's locked. Well, then the guard comes along later and sees the seal on the door and he says, OK, I know this building's empty. Well, that's done over hundreds of square miles and hundreds of buildings.

And you do that the morning—

That's done during the night.

OK. So that's a long night leading up that morning.

The night shift starts with that job and they start at six in the evening. They go out and they get their briefings and then they do their thing all night long to get all this done. So, assuming seven o'clock zero time, then you want to back that up about two or three hours for another weather briefing to make sure that the winds and whatever else is going on are all OK, and that the wind's not blowing toward some populated area and so forth. Then assuming that everything is OK, the captain of the guard would call me. I'm sitting on the console with the DOE test controller and his panel down here and I'm one of about twelve people sitting up here with various jobs, and the captain of the guard calls and he says the area's clear. And I pass the word

to the man that the area's clear. Then they give permission to arm the device, and then the arming party comes out, and they conduct the test either on time or close to it because maybe some little glitch or hitch or something—

So that's quite an operation leading up to one test.

And now you've conducted a nuclear test, [and] you have to make sure that there's no radioactivity escaping into the atmosphere. So there's an array of radiation detectors that are put around that ground zero that can be remotely read. They look at those things and they say, well, OK, we don't see anything here. Usually within an hour or two hours, but there's absolutely no rule about this, but there's typically a collapse [that] occurs. They usually waited until that collapse had occurred and continued—

A collapse of the tunnels?

See, you usually didn't get a collapse of the tunnel but with a vertical shot down in the flats, you did. Here's what happened. You got a bomb buried; let's say it's buried a thousand feet underground. And it doesn't matter what size it is, it's going to make a big bang and the ground's going to rock and roll and shake. Well, that bomb creates a cavity and the temperatures and the pressures that are created by the fission and/or fission-fusion, depending on what type of a weapon it is, create a cavity. That cavity is directly proportional in size to the energy that's generated by the weapon. There are rules of thumbs on this but I don't want to get into that. You get a big cavity down there. If you got a big weapon, you get a really big cavity. There's a cavity out there, if you ever go out there on a tour sometime, there's a crater out there called Bilby.

I don't think we saw that one.

Have you seen Sedan?

Yes.

Sedan is pretty impressive.

Yeah. Huge.

Sedan was created by a nuclear weapon that had a yield of approximately one hundred kilotons, one hundred thousand tons of TNT. Now it came out of the ground. It's what they call an ejecta crater. These other craters are what they call subsidence craters because after this cavity grows, it can only grow so much until the energy and the pressure of the surrounding medium equalizes with the pressure that has been created by the explosion that quits growing. And **[00:30:00]** then as the gases cool and the medium around the cavity starts to absorb the heat from this thing, the cavity starts to cool and fall in from the top. As soon as it gets cool enough, that falling in from the top just keeps going to the surface. When you get to the surface and you have a collapse, there's typically a saucer-or-bowl-shaped subsidence.

Interesting. I did not know.

OK, so now the subsidence has occurred at some time after the event. They're still looking at the radiation monitors. They're showing nothing. So the test controller makes the decision to send a reentry team in. They go in and they do a hand survey around to make sure [there is] no malfunction with the instruments or anything. No, we don't have any gases coming out here or there, so forth. They check everything and they say it's OK. Then they open the area back up and people go back in and go back to work. That's basically what happens when they conduct a nuclear test.

So if I could just ask, I've heard a lot of people talk about witnessing the atmospheric tests, but I'm just wondering what it's like out there when they did the underground tests. You mentioned that the ground shakes.

That's true.

Is it pretty substantial?

The amount of ground motion is directly proportional to the energy of the weapon, and the distance that you are from the weapon, and the medium that you are standing on and/or the weapon is in. It's all interrelated.

How far were you usually from the site, from where they shot it off?

Well, I'll give you some extremes. I was in Hattiesburg, Mississippi in 1964 when they conducted a small shot down there. As I recall, it was 5 kilotons. And I was a mile-and-a-half away on a roadblock sitting in a pickup truck, OK? To make sure that the farmers don't stray in. I'm sitting on some little side road someplace. And they come on the radio and they say, you know, we're minus so-and-so and everybody get in their vehicle. Nobody standing on the ground. And I'm thinking, Hmm. I'm twenty-four years old and I'm a kid, you know, and I'm thinking, I wonder what that would feel like if I was outside. Kind of bend my knees, you know. And I'm thinking, no, because if I get hurt, then you know there's going to be trouble. So I thought, I'll just get in the truck. And am I ever glad I did. I have never had anything impact me in such a way that that did. It was just like [smacks hands together loudly] something hit the bottom of that truck just like that, only a lot harder. And the truck's jumping up and down. [Chuckling] And I'm thinking, I'm glad I got in the truck.

The other extreme that I can think of was when they shot off a 1.3 megaton device up in Area 20 called Boxcar. And I was probably fifteen miles away. And there was a tremendous amount of earth motion that went on. The power lines whipped back and forth until you were afraid they were going to snap.

Wow! And this was fifteen miles.

And it was not a single roll. It was a back-and-forth. We've been in a couple or three earthquakes since then and this was stronger than any earthquake that I have been in, been near, so far.

Amazing. That power is amazing.

Yeah. But those are extremes. Normally you would not be that close to a weapon. You would not be a mile-and-a-half, even, from a small weapon. And that soil in Mississippi is absolutely, **[00:35:00]** totally, 100 percent saturated with water, so it conducts shock just like rock does. There's no cushion. It just goes right through, *boom!* So you got all that energy even a mile away, mile-and-a-half away, whacking you. And of course, at the test site, the ground structure, the rock structure and so forth, is different. Then there's different types of medium, and they tend to attenuate the shock a little bit and it disperses in different directions and, funny things happen with seismic stuff, with seismic signals from the underground detonations. But anyway, those are two extremes. Normally we were further away.

You still feel a shock but it's not like any of those.

No, I can recall being in the CP [control point] building doing that job on that panel that I spoke of and feeling the building shake and you hear it creak a little bit. It's not enough to be scary. Of course, you're expecting it. Not as strong as a couple of earthquakes that we've felt here, for the most part. There may be an exception or two to that. But you know it's primarily matter of distance, medium, size of the energy source.

Mrs. Ulmer: Well, we felt some down here, too.

Phil Ulmer: Oh yeah, they were felt here.

Mrs. Ulmer: I remember one time Doug was drinking a cup of coffee or something and he was talking about the tidal wave going across his cup of coffee.

Phil Ulmer: Yeah, if you watch the chandelier, or you get in a doorway and brace yourself against the door then you can feel that little bit of motion, you know, things like that.

So anyway, I worked in that job for about 10 or 12 years, and that section had different duties and that was one of the duties that I had when I worked in that section. And then another duty was escorting the weapons from the assembly areas out to the ground zeros.

And you drove them or drove along with them? How did that—?

We escorted them. Way back when I was just a baby security guard, I remember I worked for that section for a few days one time when somebody was sick or something, and this was before things had really tightened down. And I can recall going to a bunker and I'd been told, Go to bunker so-and-so, and so-and-so's going to meet you out there and he is going to give you a couple of pigs, and take them down to the airport and the plane's coming in at, and sign them over to the pilot. And I said, OK, what am I giving him? He said, Well, a couple of pits. And so I went out to bunker so-and-so and we loaded these two little what they called lead pigs. They had handles on them and they probably weighed a hundred, hundred-and-twenty-five pounds apiece. Set them in the floorboard of the front of the pickup truck. And I drove them down to the airport.

"Pigs," like pigs?

No, lead pigs. It was a just a nickname for a container. The thing was this big [indicating size], square—

Like a foot or so, maybe?

And maybe this tall, you know, and it had a couple of handles on it. And it was a lead shielded container, is what it was. But inside were the innards for a couple of bombs. And, that's just the way things were done way back when.

I recall the first time I went to Tonopah, I'd only been working about maybe six weeks at the time. They told us to report to a certain place out there on the range.

And we went out there and the lieutenant, who I had never seen before, he's looking around and he says, You.

[And I said], Yes, sir.

He said, You ever work a ground zero before?

And I said, Yes, sir.

He said, Come here. You see over there on the other side of the valley where all those arcs come together, you see that point over there?

And I said, Yes, sir.

He says, You go over there and at – I don't know, some time, you know, four o'clock or something – they're going to have a dry run and if the dry run is **[00:40:00]** good, then they're going to put the lid on the box–what they call the "red shack." It was the arming and firing equipment for the weapon. They're going to put the lid on it and they'll lock it up and they'll tell you who can have access to it in the morning, and you write that down and pass it on to the guy that relieves you for the night shift.

[And I said], Yes, sir.

So I jumped in my pickup truck, drove over there, and these guys are fooling around in this little pit they got there in the ground. They got these little things they call "sugar loads," which they hook up to the various signal devices to make sure that the signal gets through, and they sound like a firecracker when they go off, I mean they're kind of loud. I'm sitting there and these guys are counting this thing down, and they get to zero and these things go *bang!* Well, I don't know what's going on. I'm looking around there. So anyway, nobody seems to think

anything about it, so I thought, Well, I'd better not think anything about it either, or let on like I do. So I get in my pickup truck and I'm sitting there. These guys put the lid on that thing and lock it up and they leave, and a couple of other guys come driving up and they got a little barrel in the back of the pickup truck. They opened the tailgate and they grabbed the barrel and they set it out on the ground and they started to drive off.

And I say, Hey, what's that?

They said, Oh, that's the bomb.

In the barrel?

In the barrel.

And I said, Oh.

They said, Don't let anybody have it.

And I said, You got it.

And here I am [chuckling], I've got a revolver with six rounds of ammunition in it and I've got, I don't know, six or twelve rounds of ammunition on my belt, and an A bomb. Anyway, we didn't do business like that very long. Things changed a lot.

Things changed, yeah.

Yeah, things changed a lot. Anyway, to get back past some of this anecdotal stuff—

It's great stuff, though.

I think it was about 1983, I had been a lieutenant in this operations unit for about ten years, I guess, and an opening came up for a captain's job and I got promoted to that. In that position I was in charge of safety and plans and I was still in charge of the operations unit, although I didn't really spend a lot of time on that. I had some other duties, too, but I can't recall now what all that entailed. I was in that job for a year or two.

And the boss called me into his office one day and he said, We are reorganizing.

And I said, Oh, that's interesting, because I figured, you know, something's coming.

So he said, We're going to put a twenty-four-hour captain on duty over the field force—we had had one captain for day shift and one captain for night shift, and they only worked four days a week, so that was not full coverage. And we didn't feel like we had the supervision and management coverage that was necessary to do the job the client wanted done.

So he said, We're going to put on twenty-four-hour captains, we're going to divide the area up a little different than we have been, we're going to assign lieutenants to different zones and areas, and put them in charge of smaller groups so we have better supervision over the field inspectors. And then he said, And I'm going to put a major in charge of all that.

And he said, And that's going to be you.

I said, Well, I really don't know if I want that job or not. He said, I didn't ask you if you wanted it. He said, You're going to go over there and run the place.

[00:45:00] And I said, Do you mind if I ask what you mean when you say I'm going to run the field force?

He said, No, I don't mind at all. He said, I'm telling you, *you* are going to *run* the field force, and you are going to straighten out any problems that we might have, and I don't care how you do it, but I want it done.

So I saluted smartly and walked out the door and figured, how am I going to get this done? So anyway, I assumed that position, and we had some problems.

What types of problems?

We had some personnel that weren't doing their job as they should.

And so what did that mean?

We were under contract to the government to provide a service, and we were obligated under that contract to perform that service at a certain level. The money that we were awarded as profit was based on the level of service that we provided. And without going into any detail, any unnecessary detail anyway, or to embarrass anybody, I made quite a few changes. And there were several people who resented the changes and there were people who resented the way the changes were made. I may not have done it the best that it could've been done, but I did what I did and I did it the best I knew how at the time.

So what did that mean, running the field force, specifically?

Well, at that time there were 350 uniformed armed personnel. That meant that I was the alpha male.

Good way to put it.

And you know I was in charge of all those people. I was responsible from the captains on down to the trainees.

And various operations?

Everything that went on out there in the field. Now I didn't have anything more to do with the operations section, I didn't have any jurisdiction over the training section, and there were other small units that were not mine. They didn't fall under my jurisdiction. But I had 350 [people], about. It varied from week to week with people quitting and people getting hired and so forth. But that was 1985 and like I say, I had those 350 people. We had what was called a CPAF. That's a Contract Performance Award Fee—a contract with the government at that time. We

improved that Contract Performance Award Fee noticeably over the next while. I was in that job for five years and it damn near killed me.

Really.

Lot of stress. Lot of stress.

I bet. That's a lot of people.

Lot of responsibility. Lot of people. The phone's ringing in the middle of the night, you know, somebody wrecked a truck someplace, somebody hit a deer, somebody had an accidental discharge with their weapon—something all the time and I'm in the middle. I'm the guy that's responsible for doing the bad guy job. I got to do the discipline. I didn't fire people who had been there a while, but I did fire new hires that weren't meeting the standards. That's never a pleasant thing. I don't care how bad somebody needs to be fired, it's no fun.

Oh, no. Always difficult.

It's no fun to fire somebody. So there was a lot of unpleasant things about that job. Of course, there was a lot of good things about it.

[00:50:00] I think it was about after around five years, we had an exercise program for several years and we had had a protest. This was in the spring, and we'd been working just a tremendous amount of hours and I was really tired. I was on the treadmill exercising one day and I didn't feel good and I'm just feeling crummy and crappy and my arms are hurting. So I quit and told the fitness instructor what was going on and he said, `You get to the medics. Now.` Well anyway, it wound up, I had a coronary artery blockage that was 95 percent occluded and I had to have an angioplasty. At that point in time, any kind of a click or tick or flutter with your heart and you were gone. And I knew this because I'd been in all this stuff and this physical fitness program and everything, and I figure, I'm out on the street.

So I told the cardiologist, I told him what was going on and I said, What's the deal here? Am I going to be OK? Am I going to be able to continue to run? Is it something I should do?

He said, Absolutely. He said, You can start as soon as your incision heals up. Not only can you, you should start doing what you were doing to exercise.

Well, I'd been running three miles a day for five, six days a week prior to this happening. And I said, Could you give me a letter saying all this and saying that this is your considered opinion and that–you know, blah, blah, blah, blah, blah.

He said, Yeah, sure, I got no problem with that. He said, That's the way it is. Tell me what you want.

So I basically told him what I wanted and he wrote it out for me.

I went to see the company doctor and I walked in and I had this letter in my hand. I handed it to him and he didn't even look at it, he laid it down on the desk and he said, You know I can't put you back to work. He said, I've got to let you go on a medical.

And I'm thinking. Well, I said, Doctor, would you mind reading the letter that the cardiologist wrote?

He picked it up and he reads it and he looks up and he says, I'll be darned. And he said, Well, this is amazing. He said, and besides that it takes me off the hook. He said, Yeah, you can go back to work.

Good thing you got the letter.

So I got my job back. I was fired. I mean that's all there was to it. I was gone. Anyway, that was 1989? Nineteen eighty-nine, about a week after my fiftieth birthday. And so I went back to work. Well, it wasn't much time after that, just a matter of maybe two or three months, the deputy chief

got sick and had to leave. And my boss knows that one little flutter and the doctor's got me going down the road and he don't want that. He wants to keep me around. So he made me his deputy. That was a non-uniform position and I didn't have to do all the exercising and all that stuff. So that I stayed in that deputy's job, then, for five or six years, seven years or so, I can't remember. And then we quit testing in 1992 and the downsizing started, and I'm just sitting there. I got my time in. I could only accumulate thirty years of pension credit and I'm sitting there with that thirty years and a little bit more. And they come along with a buyout offer and I took it. I had thirty-one years and four months when I left.

That's pretty significant.

We talked about it a lot and gave it due consideration and I said, you know, it's just time to do something else. So that's what happened. I retired in June 1994.

[00:55:00] Do you have any questions or anything you want to know?

Well, a couple things.

I'll answer anything I can.

OK. Well actually you, just a few minutes ago, mentioned something about a protest. I know there was a lot of action, protest action, at the test site, and I was wondering how much involvement you had in that on the security end?

I was the alpha male.

Mrs. Ulmer: At least part of the time.

Phil Ulmer: When all of that was going on.

What was that like?

Well, it was a combination of two things. It was hours of extreme boredom and hours of really hard work. I respect people's opinion to disagree. I don't believe in civil disobedience. That's a

personal thing with me. I just don't think you should break the law because you're opposed to something. I know that a lot of people don't see it that way but that just happens to be my point of view on it. But, when you're in law enforcement or when you're in the security business that we were in, it doesn't matter what you think. We have a job to do and the job is to enforce the law and to keep the peace. And we were deputized by Nye County, and during the protests our people down on the protest line, if you will—have you ever been to the cattle guard? You know any of the history of any of that stuff?

Yes.

They were in charge but we had agreements about who covered what, who did what, and so on and so forth. And if I recall right, and I may have the year wrong but I think it was in 1988 [American Peace Test, March 12-20, 1988], we were told by the protest organizers that there was going to be the largest protest in history at the test site and that they anticipated, I forget what numbers they were throwing around but the number of fifteen thousand sticks in my head.

Quite large.

Yes. We had had small protests with small—hundreds of numbers of people, or scores of numbers of people, you know, small groups. We'd had a lot of those previous to that. Anyway, the organizers came to us, and we got a rapport going with them and found out that was to everybody's benefit.

Definitely.

They basically told us, in general terms, what was going to happen. And we sat down and started planning. And I'm going to take credit for coming up with the idea of forming arrest teams. Now it's not an original idea. I got it from a trade magazine that I was reading about how the FBI [Federal Bureau of Investigation] handled certain incidents. Different type of incidents entirely

but I thought, “arrest teams.” That makes a lot of sense, you know. If we can get four or five or eight people in a van and we can assign them to certain sectors beforehand, we’ll say this piece of real estate belongs to 8, this one belongs to 7, this one belongs to 5, you guys in the dune buggies, you know, you get this and you get that. Nye County always took the cattle guard because that was the easy job. You can quote me on that, too, if you want. By the way, we had a captain by the name of Jim Merlino, one of the finest gentlemen that I’ve ever known in my entire life. He was a true gentleman.

Yeah, I met with him about a month ago.

And a fine, fine law enforcement officer.

Did you work a lot with him?

I worked directly with Jim for years. Yeah, Jim and I are old friends. Got a lot of respect for him.

Anyway, we come up with this scheme and we talked it around, ran it up and down the flagpole. We got to the motor pool and we got the vans we needed, and we **[01:00:00]** had another resource to provide everybody with a handheld radio. We assigned different groups different radio frequencies. We put all this together. We had a written plan. Protest came off without a hitch. We maintained control. It got a little dicey a time or two, but we maintained control. We arrested over twelve hundred people that day, and as far as I know, that’s still a standing record.

Wow. That’s huge for one day.

I believe that it is, for one day, yes. Over twelve hundred people went to jail that day. And that’s another story in itself, but anyway. The protesters estimated their crowd at fifteen thousand. At the time I swore up and down it wasn’t more than twelve, but I really believed them. I think there were fifteen thousand people.

Either way, that's a large number.

Yeah, what's the difference, you know? And basically what they did was several hundred of them jumped over the fence at the same time.

And that's where you guys were.

And started running out through the desert.

And so that's where your teams were. OK.

That's where the teams went, that's where they got them rounded up, and that's how that team thing works. And we used that from then on and it worked quite well. As I recall, we had a large number of people from other sites, other DOE sites. And as I recall, the total law enforcement resource that day, with the Nye County sheriff and the DOE contingent, was somewhere around three hundred uniformed people. And that's the largest protest we had. We had protests into the thousands after that, but not that number.

That's significant.

In my opinion, what happened with the protest group was that they attracted a large number of people that Mom and Pop down the street here who are against protesting didn't want to be around. These people were, shall I say, undesirable by most people's standards. And I think it turned a lot of people off. And what happened was they lost the support of Mom and Pop down the street that was against nuclear testing. And after a few years, they wound up with the professional Dumpster-diving protesters. And it still goes on today in small numbers.

Yeah. Well, I know the Nevada Desert Experience is one of the groups in town, and I know they still do things but—

Yeah. And you know I have talked to a lot of those people. Most of them were very congenial. Some were not. I've been told to my face by people who were serious that when they, whoever

they were, got in charge, that we would be tried just like the Nazi war criminals were. And that we would be held accountable, and the fact that we were acting under orders would not be a good defense, and that we had better quit our jobs. They were trying to create dissension and so forth. And I have had softball-sized rocks go this far [indicating distance] past the end of my nose at a rather high velocity. So a peaceful protest was a misnomer.

Sounds like it.

A lot of our people were injured by people fighting, being arrested, kicking, throwing rocks, you know, all kind of stuff. Most of the people were peaceful, but many, many, many of them weren't. There was an incident where somebody scattered a construction-sized box of roofing nails on the main highway, and there were eighteen-wheelers that—I mean they're going up the road, they got nothing to do with anything **[01:05:00]** that's going on there and they're winding up with nine flat tires. But anyway.

So that was a lot to deal with. It sounds like a—

That was the protests. It was a lot of boredom, a lot of hard work. Because if you have a few tens or a few hundreds of people that lay down in the road, refuse to walk and insist on being carried, yeah, that's hard work.

That's a lot of physical labor.

That's hard work. It really is. The guys get tired, the women get tired. We had a couple of what I termed as holding facilities constructed up there that were basically eight-foot chain link fences with three rows of barbed wire across the top of them.

Those are the pens, right after you cross over?

After the people would be arrested, then we would put them in these holding facilities until we could get buses to take them to the—you have to take people to the nearest magistrate after

they've been arrested. You have a certain length of time to get that done, and then it's up to the magistrate to what happens. Of course they ORed [own recognizance] most of them and most of them paid no fines. Some did but most didn't. And that went on for several years, just people expressing their right to free speech. And like I say, I don't agree with the way they did it but I certainly don't disagree with their right to do it. In years gone by, when people would ask me what I was doing, I would say I'm making the world a safe place for liberals to protest.

Very well put. Interesting.

So. It's your nickel now.

Well, I definitely appreciate you taking the time. We've got just a few minutes left on the disc.

I'm willing to talk with you.

Well, I'm just going to switch out the disc—

[01:07:38] End Track 4, Disc 1.

[00:00:00] Begin Track 2, Disc 2.

OK, go ahead with that thought.

OK, I think that the worst or the most disturbing experience that I had during my career was when we had a helicopter crash and we lost five people. We lost two EG&G [Edgerton, Germeshausen, and Grier] pilots and we lost three security people.

Yeah, I think I remember hearing about that.

They were flying at night and they hit a power line that was stretched over a canyon. And that was a terrible thing. And I'm not saying this because it happened to me, because I know that the tragedy for the families was terrible. That morning after that incident happened, I was given the assignment of taking some money to each one of those families. And that was hard.

That's got to be really difficult.

That was hard.

And were you out there on the site when that happened?

No. No, I wasn't. I was home. I think it's while I was deputy chief when that occurred. I'm not exactly sure what the year was on that [July 1991]. But we had people get hurt over the years and we had people have accidents and we had people die on the way home, on the road. We had a World War II veteran who had survived the Bataan Death March who worked night shift and fell asleep on the way home and died in a car accident. Those are the kind of things that happen when you work around big jobs where there's a lot of people. You see things similar to that. And I think losing those five guys was the worst thing.

Overall, what are your recollections of the test site? It sounds like there's a pretty good sense of camaraderie.

The test site was a wonderful place to work. You know, you didn't have a life when you were working. You only had a life on your days off. But to me it was always an interesting and exciting place to work, and I always had a sense of participating in something important. Especially in the beginning and for most of the years I worked there, we had a sense of participating and we thought we were winning the Cold War after a few decades. There were times when we wondered who was winning the Cold War, but we eventually did. And I had a lot of very good things happen. I had good things that happened to me that I can't tell you about, that I can't tell my wife about. And I don't really like that but I knew that going in as part of the deal and that's just the way it is, you know.

I was wondering about that.

I had an incident occur that profoundly affected me. After I retired, I took a part-time job escorting tours at the test site. And I had a group from an agricultural college from someplace up

on the California-Nevada border; it would've been west of Tonopah somewhere in there. I'm not sure of the name of the town. I can't remember the name of the college. But I mean it was an actual working ranch, and these kids were studying agriculture, getting some kind of a degree in agriculture, and also participating in running the ranch while they're doing this. And there was this professor, this old bearded guy with a ratty-looking hat and so forth, and he was with these kids. We **[00:05:00]** were in a van; it was small enough that maybe a dozen, ten or a dozen or so. And you never know what people think about Yucca Mountain, what they think about nuclear testing, what they think about this or that. So you just kind of keep your mouth shut. Well, as the day wears on, this guy starts letting me know he's in favor of Yucca Mountain, he's in favor of nuclear weapons, and he thinks we did the right thing and so on and so forth. We get done with the tour at the end of the day and I pull out the gate and into the parking lot so they can get out of the van and get into the vehicles that they come to the test site in, and he lined these kids up. They were men and women both, young men and women, and he lined them up and he said, and I have to paraphrase this because I can't remember it exactly but he pointed to me and he said, `I want each and every one of you to shake this man's hand and I want you to thank him for working for all the years that he did fighting the Cold War.` And I almost cried.

Mrs. Ulmer: Well, they had somebody show respect.

Phil Ulmer: Yeah. Nothing like that had ever happened.

Yeah. That doesn't happen to many people either. That's a very validating incident to have happen.

Yeah. And I don't think it occurred to me until after the [Berlin] Wall came down that the Nevada Test Site had been the major battleground of the Cold War.

Absolutely.

It had never occurred to me in those terms, but it was. There were the laboratories and there were a lot of other people participating in this. I mean we weren't in this thing alone. But the Nevada Test Site was a major battleground of the Cold War and we won.

Mrs. Ulmer: They made that comment. Somebody said that at the fiftieth reunion of the test site. That impressed me, too, that the Nevada Test Site was a major reason that the Cold War was won and that it was a battleground for the Cold War.

Phil Ulmer: And during the years that I was in management and working around the test operations office or the test controller's office and the years after that, I got acquainted with a lot of really well-educated, intelligent people, physicists and mathematicians and people who were studying seismology and different disciplines connected with the testing program. I got really well-acquainted with some of those folks, got to know some of the people who were major players in designing nuclear weapons. And I would see them in the mall and they would stop and talk to me. And that impressed me. Some of those people are dead now. And they were brilliant, dedicated people. Brilliant people. So that was a privilege to know those people, be around them, be acquainted with them, talk to them. Some of them were not particularly friendly or congenial, or acted like you were somebody they didn't want to talk to, but there were a lot of them who were not that way. They were very nice, very nice people.

Either way you look at it, the test site is such a huge part of our history that everybody involved in it is a huge part of our history.

Well, you know, for the first several years that I worked there, we passed between eight and twelve thousand people a day through those gates.

That's huge.

You know, that's a lot of people, and that went on for decades. So there's been a lot of people work out there, a lot of people contribute to that.

Mrs. Ulmer: And you meet people all the time [and they say], Oh, I worked at the test **[00:10:00]** site for just a short while, or an extended period, or something. So many people that have been here for any number of years, you hear that from them.

It's a huge part of Nevada history, as well.

Phil Ulmer: Yes. I don't know what you know about the history of the test site, or maybe you don't even want to know, particularly in this venue—

Oh no, I do.

This is what they termed the on-continent test site when it was created by President [Harry S.] Truman. I think the actual paperwork declaration was made in December of 1950 and the first bomb was tested in January 1951. And the reason for that was that they felt they could test smaller weapons here on continent because the testing in the Pacific had become so expensive and such a logistical nightmare of getting all that equipment out there. It was so much cheaper for them to do what work they could here with the smaller weapons in the atmosphere. Then of course later on the Pacific Testing Ground was closed down and it wasn't used. Well, that occurred in 1962 when the treaty went into effect. Everything then was done underground after that.

I think about some of the technical gee-whiz stuff I've seen and some of the things that they do and it still amazes me. You know when there's a what they call a weapons effects test conducted, there's an energy source at one end of the pipe and the pipe is tapered. The pipe may be several hundred feet long and it gets larger as it goes back, and there's test chambers here and there, two or three of them along the way. They hang stuff in there that's connected with

missiles, and it's exposed to this energy that comes from this weapon down here. And then they study the effects of it. Well, maybe they have these things up and running. Maybe it's some system for some missile, a guidance system. And so they got it up and running and they want to see if it continues to work properly after it's been exposed to this energy. Different things like that. Well, here's the gee-whiz amazing thing. There's a closure system, or a series of closure systems, between that energy source and this first test chamber down here. That bomb is initiated and the X-rays and gamma rays and whatever other energy comes off of it goes down the pipe at the speed of light. Then of course if you don't do something to stop it, the fireball is going to come right behind it and do a lot of damage to all of this stuff. So they have systems that close this thing off.

As it goes?

After the energy that they want to go down the pipe but before the physical energy, if you will, the fireball, the debris, and all that stuff comes down the pipe. It's all in the timing.

Mrs. Ulmer: Amazing that they can do it, though.

It is. There's been so much that's been developed out there.

Phil Ulmer: The speed of light is approximately a 176,000 miles a second. A light beam at the equator where the Earth is approximately, we'll say it's 25,000 miles around the Earth. Actually it's 24-something, but we'll say it's 25 for the sake of this conversation. So in a second, a light beam is going to make seven revolutions around the Earth. Now do you know how long a nanosecond is or how far a light beam travels in a nanosecond?

I have no idea.

One foot. They measured things in sub-nanoseconds.

That is precise.

That's amazing to me, you know, that that can be *done*.

Yeah, there's some amazing things that have been developed. **[00:15:00]**

Mrs. Ulmer: Well, and the things that are developed there that affected other things, you know, like the NASA program brought us so many things. It makes you wonder where these things are being developed today. Are they learning all this new stuff that they were learning back then? I don't know.

Phil Ulmer: There's an awful lot of the technology that we enjoy today in the consumer society that are spin-offs or offshoots or whatever from the nuclear weapons program and the NASA program. An *awful* lot of stuff.

That's interesting.

Miniaturization, for one thing, of electronics. In order to build—you know, when bombs were first conceived, you had one way of delivering them and that was by plane. So we had the bombers, we had the SAC [Strategic Air Command] bombers, we had the B-52s, we had the other bombers. Well, it takes quite a while to fly from here to there, and let's say your target is in the middle of Russia. It's going to take you several hours to get there and they're going to have a lot of time to react. And the chances of you being successful in getting there are I don't know what, but less than perfect. So if you have a missile that can travel that distance in a shorter time and deliver that bomb, that's what you want. But you've got to remember, early weapons weighed tens of thousands of pounds. We didn't have any kind of a rocket or a missile or whatever that you could put that kind of weight on and make it go anywhere. The need for miniaturization. So the bombs got smaller, the missiles got smaller, the guidance systems, all that stuff. You started cutting the weight down, you started cutting the size down. Way back when, we had what they called "city busters." These were multi-megaton weapons. Later on, the

strategic people decided, We don't need to do that. We don't need to kill cities. We need to take care of military targets and we can do that with smaller weapons. But they have to be accurate. So there you have all that need for all that miniaturization and that precise performance that *all* this stuff has to do.

That's a part of our existence right now, as consumers, just in the products that we use.

Oh yeah. Yeah. All this stuff. It's all the spin-offs from—

What other sorts of things? Anything else that we use today that you may recognize as having its early origins in development at the test site?

Oh gosh, no, I really don't. I just know in a general way that those things—

But sure, that's a huge part of our society now, how we live.

Yeah.

Mrs. Ulmer: Well, probably electronics, to some degree, maybe.

Phil Ulmer: Sure.

Any other thoughts that you have that you want to share or wrap up with?

Well, I still have the privilege of working in the system. I'm no longer connected with the security force and I no longer go to the test site, but I still play a part, a little small part.

What do you do?

Consultant part. I do some work for the local Department of Energy here that I would rather not discuss.

OK. No problem.

It's no big deal but—

I do actually have one random question that's popped into my head. You spent a lot of time physically on the test site after the tests, and you hear so many people talk about exposure and

[00:20:00] *radiation. What do you think about all that? Do you think you were exposed to a lot, or do you know people that have been?*

I have my thirty-one years and four months radiation exposure records that I was given. You [can] request that when you leave. And I requested my record and I got it. The exposure that I got in the thirty-one years and four months that I worked at the test site is less than one dental X-ray. So I don't worry about glowing in the dark.

That's a good thing.

I used to tell the protesters, they would ask me, `Aren't you afraid of this radiation?` And you know I'd have some smart aleck answer like, `No, we take pills. We're resistant to it.` Or I'd say something like, `Well, I glow in the dark a little bit but usually if I just cover up with a sheet, it'll take care of it. It doesn't keep me awake.` And they would realize that I was jerking their chain and laugh and that'd be the end of it.

I wanted to ask you about your thoughts on the license plates. Before you got here, we had been talking about the lack of license plates.

The license plate? I'm probably angrier about that than anything else. I have a big fat resentment against the governor and whoever that lady is in the Department of Motor Vehicles [DMV] that's responsible for that license plate not being put out. That makes me very angry. It's strictly a political thing. The test site played a very important part in the history of the United States and the world, and to not let the people that worked there display that if they choose to display the fact that they worked there, that they're Cold War veterans or whatever you want to call them, that makes me angry. I think it's pretty little. I think it's awful petty.

Now what was your involvement in the process? Were you involved in the process of getting it, trying to push it through?

Of getting that? No. No, I wasn't active in that. I tried to get the [Atomic Testing] museum to, or I suggested to a couple of people who were active in the museum creation that they offer a license plate frame for sale that said, "Cold War Veteran. Nevada Test Site." But nothing—

Do you think that'll happen?

I don't know. Nothing has come of it that I know of. I still think it's a good idea.

Well, particularly for Nevada, the test site's—

Well, you know, the legislature authorized that license plate and some person objected on the grounds that she felt that her father had died as a result of his work out there. And I appreciate the lady's feelings, but what about the rest of us? I appreciate my feelings. I'm proud of the fact that I participated in the Cold War, and why am I not allowed to have a license plate just like the VFW [Veterans of Foreign Wars] and a lot of other people have? And if it's upsetting to somebody, well, that's too bad.

Was the main holdup because there was the image of a mushroom cloud on there, or is it just the fact that it commemorates the test site?

All I know is what I read in the newspapers, and I have no idea how accurate or complete that was, but I was told that it was the mushroom cloud. And there was also a statement in **[00:25:00]** the newspaper which they attributed to the lady at the DMV who made the decision or talked the governor into not issuing the plate; that there would be a plate but that it would be a different design.

Right. But that hasn't happened yet?

Hasn't happened. I've seen other plates come out since. I read in the newspaper and I heard on the news, a year or two ago, there's too many plates. We're having a moratorium or whatever on

new license plates. There's not going to be any more of these special license plates. But I've seen new ones since then. And you know, that upsets me. It really does.

Yeah, absolutely.

And I would tell Kenny Guinn to his face that I am now sorry that I supported him as a delegate at the Republican Convention at the Showboat, what, seven years ago?

Mrs. Ulmer: Oh, gosh, I don't know how long ago.

Phil Ulmer: Six years ago, whatever it was. I regret that. I really do. And I know he's never going to run for governor again because he can't. Well, I better not—

So you're safe.

There's a whole bunch of other people that I'd vote for first, let me put it that way. Very unhappy with him about that, and then you throw that tax thing on top of that.

Just no good.

Enough to make you ashamed to be a Republican.

Well, either way these days, it's all crazy.

They're all bad. Anything else?

Well, I think that's it. I appreciate your time, both of you. Thank you very much.

No problem. Glad to participate. Glad to see the museum.

Mrs. Ulmer: I am, too. I think it's—

Phil Ulmer: I'm glad to see it being created, and we're going to take our grandkids down there after it's open. They have no idea what Grandpa did, you know. It just wasn't talked about. I have a fifteen-year-old grandson that told me just a couple weeks ago that he had heard someplace that I knew something about atomic bombs. And I says, `Oh yeah? Where'd you hear that?` He just blew it off, you know.

I think that it's interesting because while it's not directly World War II or the Korean War or the Vietnam War, it was a war era in our time, and for it not to be commemorated and for the folks that worked on it to not be commemorated—

I think that Troy Wade puts it really well. I've known Troy for forty-some years and he puts it really well. He says it's the largest and most successful peace effort that's ever occurred in history. It was a peace effort. We called it a Cold War, but it kept the peace. It really did. We were both afraid to bomb each other. That's what it amounted to.

Mrs. Ulmer: Well, and the thing of it is, it's out there and you can't take it back, so something had to be done about—

Phil Ulmer: You can't put the genie back in the bottle, you can't uninvent something. Since I've retired from the test site, I have read several books about the early history of the bomb and the people who conceived the idea of fission and the process, and there's an interesting comment that I would like to make, and I really don't care who hears this **[00:30:00]** one. If [Adolf] Hitler had not been a racist and had not made life so miserable for those Jews in Germany, he could have ruled the world, because those Jews, those Jewish physicists, those Jewish scientists, that he made life so miserable for that they left, are the ones who made the bomb that we used to end World War II.

Many of them, yeah.

[Albert] Einstein, [Enrico] Fermi, I can't think of their names now but, you know, there's just a long list of those people. [Edward] Teller. Who else?

Mrs. Ulmer: [J. Robert] Oppenheimer? I don't know if he—

Phil Ulmer: I don't know. I don't think Oppenheimer was one of them. A guy by the name of [Leo] Szilard. I don't know. I can't recall any more names right now. But, you know,

you stop and think about that little bit of twist of history, of Hitler hating the Jewish people so bad and doing what he did. These people were intellectuals, they were scientists, they were smart. They saw it coming. They left. They were luckier than the people that went to the extermination camps. And they wound up in parts of Europe and most of them wound up over here. A *lot* of them worked on that bomb project down in Los Alamos [National Laboratory]. And if it hadn't have been for that, who knows how history would've twisted some other way?

Very interesting twist. That is definitely food for thought. Hard to wrap your mind around.

Yeah, it's real. I read this book, *The Making of the Atomic Bomb*, by Richard Rhodes. But I'm reading this book and it's talking about all these things and I'm thinking, My God, this is what happened. Hitler made life so miserable for those people, they left. They come over here. If he hadn't done that, if he'd have taken advantage of their knowledge and put them to work on the same thing we put them to work on, history would've taken a totally different turn.

Be a very different world we'd be living in.

Most definitely. And another thought, another really sincere, well-considered, long-considered thought and opinion that I have is that we did us and the Japanese both a favor when we bombed Nagasaki and Hiroshima. There were large elements of the Japanese political structure and military structure who were bound and determined to fight to the death. And untold millions of civilians as well as military people would've perished, both Japanese and Allied. We did the right thing. Also something that a lot of people don't remember, don't consider, don't think about is that one night, and I can't recall the night but it's no secret, not long before we bombed Hiroshima, that we killed more people in one firebomb raid on Tokyo than we killed when we bombed Nagasaki.

Interesting.

Yeah, we killed over a hundred thousand people one night.

Mrs. Ulmer: We saw a program on television about that here.

Phil Ulmer: And I read that. That war was a terrible thing, and I think it's a terrible thing that the political and military structure of the Japanese put their civilians through what they did with that, you know. It's bad.

Yeah. So it had to end.

Well, we were getting ready to invade the island. We were moving people that way. We had already captured all or almost all of the chain of islands that it was necessary for us to **[00:35:00]** occupy to invade the mainland, the main islands of Japan.

Do you have any military service?

No.

Mrs. Ulmer: No. Being born between those, Korean and Vietnam, I mean—

Phil Ulmer: Yeah, I was too young for Korea and too old for Vietnam.

Mrs. Ulmer: Besides that, you were doing something more important or something just as important at the test site by then.

Phil Ulmer: I would say, just a passing thought that I had, that the security business, during the period of time when I started and up through now, I mean nothing has changed in that order, has changed so dramatically. It's the world situation that's created it and it's unfortunate that we have to do these things to protect the assets; spend the money that we have to to protect the asset. But it's very necessary. We can't afford to have one of these weapons or some of these weapon components fall into the wrong hands.

What do you think was the most significant security change that occurred out there while you were there?

There were a long series of things that were spaced out, but the thing that started it, the thing that got it rolling was the Munich situation, that massacre of the Jewish athletes there in Munich. That opened eyes, you know, and things started to change then. I think it was in 1972 we formed a special response force and we started acquiring armored vehicles and heavier weapons. And that grew. A few years later, we had an airborne response team and a helicopter. We had a lot of armored vehicles; we had a lot of heavy armament. We conducted a lot of exercises against some very formidable forces. Without naming them, they were law enforcement and military units that are known to be bad that we did force-on-force exercises with. We kicked their butt every time.

Good to know.

Of course, we were on our home turf.

Mrs. Ulmer: Yes, I was going to say that.

So you've probably seen a lot more that you can't discuss.

Oh. Sometimes I wish I could talk more about some things.

Yes. Was that hard?

You can turn that off.

[00:38:40] End Track 2, Disc 2

[End of interview]