

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

Interview with
Robert “Doc” Campbell,
Jr.

March 12, 2005
Santee, California

Interview Conducted By
Suzanne Becker

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[00:00:00] Begin Track 2, Disc 1.

Robert “Doc” Campbell, Jr.: My full name is Robert Martin Campbell, Jr., and I was born May 24, 1930 in San Diego, California. I was born in my grandparents’ house on 35th Street in San Diego city because my mother was very leery of babies being kidnapped out of the [hospital]—the only big hospital we had at the time was Mercy Hospital.

So that’s where I started out, with my grandparents. We lived with them for a short period of time and, of course, being a military brat—my father was in the service for twenty-two years—so we did a little bit of traveling. When we finally came back from Washington, D.C., while my dad was in dental school, we moved into El Cajon Valley, the little city of El Cajon, into a house which my great-grandfather and my grandfather had built back in 1919. It was an old wood building, used more for vacation than anything else in those days. It was what we called a board-and-battening house. Had a wood stove, kerosene lamps, kerosene heaters. We moved there in 1934 and lived with my grandmother and grandfather.

In 1935, my grandfather passed away of a heart attack, and in 1935, my mother decided to buy the house from my grandmother. So we bought the house, and long about 1938, ’39, my father and myself and my mother started tearing the old house down and building a new house which is here in 2005. The house that we built and completed in 1939 is still standing on the corner of Renette and Avocado in El Cajon.

We lived there until we took a trip to Hawaii in 1940 because my father was stationed there. We came back in 1941, just prior to December the 7th. Things were happening which were suspicious at the time, and so we came back. At the same time my father thought he would come

back to the States and reenlist and go someplace else. Well, we came back here and reenlisted and they sent him right back to Pearl [Harbor, Hawaii]. So he was there for December the 7th, at Ford Island, the dispensary there in Pearl.

We lived in El Cajon till 1946. My parents sold the house then and we moved into San Diego. I went to Hoover High School for two years, and because my father wanted to retire and my folks wanted to go to college. I felt that—I never did think school housing was much worth of anything. But anyway I went to the eleventh grade and had all but two or three credits. So to get out from underneath their feet and give them more breathing room and not have the expense of raising me anymore, I joined the Navy in July of 1948.

I joined the Navy right here in San Diego, took a train to Los Angeles, had the physical, got sworn in, and took a train back down to San Diego and went to the Naval Training Center here for boot camp for thirteen weeks. Back in those days, we had what they called a father-and-son program. And because he was a pharmacist's mate in the Navy, I chose to be a pharmacist's mate at that time, which in turn became corpsman or hospital corpsman now, as they call us.

And what is that exactly?

A pharmacist's mate in those days was in the medical department. In those days, they called them pill-rollers. Pharmacist's mates.

You doled out the medication.

Well, not only that, but you were the medical personnel wherever there wasn't a doctor or a nurse, and you worked with the doctor and with the nurse.

[00:05:00] So I chose to go to Corps School and become a corpsman in '48, because in '48 is when the military made the big transfer. The Army Air Corps was abolished and became the Air Force. Pharmacist's mates became hospital corpsmen. They did away with the white stripe

around the right shoulder of the Navy uniform. They did away with the one-two-three stripes on the cuff for the rating system and they went to a rating system all on the left arm. Prior to that they had both right-and-left-arm rates, so they went all to left-arm rates. This was all a big conversion in '47 and '48.

Now were you eighteen yet when you joined the Navy?

Oh, yes, I was eighteen. That's the only reason that I could join without their permission.

So I went to Corps School. In those days, you had to be a year in a Navy hospital after you went to Corps School before you could go out to any dispensary or to the fleet. So after fourteen weeks of Corps School, I spent a year at the U.S. Navy Hospital on ward duty. I was on three different wards learning. It's like [how] a doctor goes through his internship. The corpsmen do the same thing. You work under different nurses and [on] different type patients and different situations. My last duty there was as the CO [commanding officer] driver. I was responsible for keeping the CO's vehicle maintained and drive him and the executive officer wherever they might want to go.

In 1950, I got my orders to go to BUMED [Bureau of Medicine] Unit One, which at the time was stationed at the U.S. Naval Radiological Defense Laboratory at the Naval Shipyard, Hunter's Point, California. But prior to arriving there, I had to have a clearance. Well, this clearance entailed the FBI [Federal Bureau of Investigation] checking my history. Now to do this, my folks got many phone calls from many friends and relatives, wanting to know what kind of trouble I'd gotten into because the FBI was checking up on me.

Were you aware of why they were doing the clearance?

I wasn't even aware I was doing it.

OK. So you had no idea.

I had no idea until I got home and my mother says, I'm getting phone calls. What's going on? And I said, Well, I'm going to a special unit. That's about all I can tell you.

But you'd had no idea.

I had no indication what I was getting into. I didn't volunteer for this. I was chosen. Which brings up a question of, why was I chosen? Well, the only thing is because I was raised on five acres and I had animal experience. We raised rabbits, we raised chickens, we raised a cow most of the time. Prior to my grandfather passing away, we always had a hog each year and we slaughtered the hog. So I had what we would call today in the science as animal husbandry. I was qualified in animal husbandry when I was finished with BUMED Unit One because that was one of the things that you had to do.

So I was not aware of it. But anyway, the folks got phone calls from many, many people because I lived in El Cajon, went to one school for eight years minus about a year, a half-a-year in two different grades which I missed while in Hawaii, so it was pretty easy to follow my tracks. And what ended up happening is that we got a Queen clearance.

What is that?

Which is the highest clearance.

The Q clearance.

The Q, what they call Q or Queen, was the highest clearance at that time. It was the same level clearance as the President of the United States had. Right now, there is a clearance higher than that, and I believe that's called crypto. Crypto, which is the highest communication level secrecy there is. There's that one. But at that time, that [Q clearance] was the highest.

[00:10:00] Now we also had to sign, when we arrived at the Radiological Defense Laboratory at Hunter's Point, we also had to sign a secrecy oath that we would not divulge any of our activities to any person.

What were you thinking about all this out there?

Well, we didn't know. Every day we were learning something new. So we weren't told what we were—

What did you think, though, when they asked you to sign a statement like that?

Well, we were pretty hot stuff. You know, a kid at twenty years old, you're not thinking about that. You just take it in stride. Here I've only been in since '48 and already I got special orders to this special unit. And the next thing I know, we've got a Major [Robert H.] Veenstra who was the last veterinarian left in the Army at the time who was our boss as far as the animals went. The three specimens we used were mice, swine, and canine. Well, he was in charge of the swine and canine project of getting them ready for shipping, see that they got over there, and went through the experiments.

So we reported to the RAD Lab, as we called it in those days, which was an extension of [University of California] Berkeley. We got to the RAD Lab, and we had quarters that looked like something out of the Dark Ages, you know, the old steel two-bunks-high bunks with nothing but springs across them and a mattress pad probably not more than four or five inches thick. The old Navy terminology for those in those days was "fart sack." In parentheses. That's like gedunk and some of those other slangs, which I have fifty-some pages of on my computer. But anyway, that's a different story.

So the next thing we know, we're down with the hogs, and one group is debarking the canines, which were all purebred—I'll think of it in a minute. Anyway, they were debarking the canines.

Where did the animals come from?

These came from down South. The canines were beagles, purebred beagles, and they came down from South, around Tennessee area down in there where they raise beagles for hound dogs for hunting.

So they raised a bunch for the military.

And they shipped them to us there at the RAD Lab. They were already there when I arrived. The same with the swine. Now the swine, I don't know where the swine came from. Because, see, a lot of this information, it wasn't need-to-know.

Right. You were just there and knew there were—

We knew that there were swine there and they had four legs and they had a lot of squeal in them. And with the dogs, until they were debarked, they had a lot of bark. So the dogs were debarked. Then I was assigned to the swine, and our first duties were to maintain, just keep the sow and the boar separated. That was the first primary duty. We notched their ears for identification because this was going to be a highly controlled program. As soon as the swine was given a number, we earmarked by taking notches out of the ears to identify that sow from that day on. Then we made up logs on each sow and on each boar for breeding purposes.

So we were there at the RAD Lab, and that was the main job, to get the animals ready for shipping.

How long were you out there?

At the Radiological Defense Laboratory? You want to cut that off and I'll look it up for you? I can look it up—

I'm just curious if you had a general idea.

It seems like we were there, oh, about three or four months, something like that. Like I say, I can give you a thing on here because this has the whole thing on it [referring to documents compiled].

So the other thing was to get the crates ready for shipping off of the base because we [00:15:00] were going to have to transport them.

Some of the other things they took on there was test equipment. We had a lieutenant, a Reserve officer, who was in charge of all of the equipment and the actual field operations. We built the equipment that we were going to use, and the equipment entailed—because when the detonation goes off, you lose all external power, so you've got to have equipment that will operate on both AC [alternating current] and DC [direct current]. This equipment now is mainly for the mice, because the mice are going to be in constricted areas and they need ventilation and they need heat or cooling. Ventilation or heating. We had no way to cool them, just ventilation or heating. So we had to build units which would work AC/DC. In other words, have a converter in there, solenoids that would flip when the AC current went off, [and] automatically turn and go to these batteries so that we'd keep the—if heaters were required, that we had thermostats set up, wired in—

And they would kick in.

We had built our own heater strips. He had designed them and then we ourselves—we were all corporsman, now. These are all corporsman doing this work—we built our own heater strips. He laid out the schematic and we learned how to wire this stuff up off of the schematics. So we were

doing this work also. This was the reason that after each operation, we would come back to the RAD Lab and get our equipment and animals ready for the next test.

When we got ready to leave San Francisco, because we had a group of protesters outside the main gate, rather than load the ship during the daytime—and for some reason they decided to go ahead and load the ship over at Treasure Island—we had to crate up the animals, put them on the old military-type trucks, and take them over to Treasure Island and load them aboard the USS *Warrick* (AKA-89). The *Warrick* was an auxiliary cargo ship. And we loaded the animals aboard there.

Now did you still not have any idea of what was going on?

We didn't have a full picture, no. We were just given kind of a thumbnail sketch.

Did the protesters know what was going on or did they just know you had these animals?

The animals. Somehow the word got out that we had these animals, and whenever the military has animals, you've got those people [saying], Aha, aha, they're not going to be up to any good with those animals. So it's that type of a thing. Whenever the military has animals, something's going on.

OK, so they found out.

So we got the animals all loaded aboard the ship and we left port. Now the way the ship is loaded, we have one hold which is loaded with dynamite explosives. That was a tedious job, getting that loaded, because they had to put mattresses up on the bulkheads so that whenever the ship would pitch and roll, it wouldn't create any static electricity in any way. So they put all mattresses in there and on two or three levels they put fans blowing in there because we're going into the tropical area—

You want to keep it cool.

Keep it cool. Yes. Because we slept on one side of this hold. On the second deck was our quarters on one side of this hold, which is number two hold. Number one hold has all the booze in it. Number two is the dynamite. Well, we slept on the second deck on the starboard side of the hold, and our galley was on the second deck. It was the port side of the hold. Then in number three hold is where the swine were, and then in number four hold is where the canine were.

Now, this is where the fun comes in. We're heading out and we have to keep—animals when they go to sea, they defecate the same way they do on shore. Well, you got to do something with that. Also we found out that right below, the level below us, was cement [00:20:00] bags. Well, they had somehow sealed the hold below us and put us on the second deck of the ship, but still, with the hold open up on the main deck, the ventilation was very poor. So every morning we would go down and wash the residue from the animals off. Well, it's got to go someplace. They have what they call sea cocks on board ships, and sea cocks can be opened up at any level on board the ship to give ballast or to drain a hold if one hold happens to get full. As long as that hold is above water, they can open that sea cock and the water will flow out of that one level of that hold. After about two or three days, we come to find out that we've got more water because when they built the deck for the hogs to walk on, they built it out of pine timbers. They put those timbers up off of the main deck so that the fecal matter would go through the cracks in the floor and would go out the sea cocks when we washed the deck down. Well, this wasn't happening. The water was going *slosh* back and forth. As the ship would roll, this slosh [was] going back and forth underneath our planking. After a few days, I don't know, it must've been five, six days, this takes fourteen days to get over there, we're getting into the hot tropic area and this water is not leaving the ship and the stench is getting worse. We can only go down there and work about thirty minutes at a time cleaning the pens out and feeding the hogs. We have to feed the hogs

twice a day. Come to find out, the ship had a port list and the sea cocks were only opened on the starboard side, so the only time any of this water was going out is when she took an extreme starboard roll. Finally they realized that the port cocks—now why they didn't have both sides open, we don't know. Of course, we were just passengers on the ship. By that time it [was] stenchy and warm. We had even gotten augurs and bored holes in these timbers, trying to get this stuff to flow through and get out of there. And of course these timbers [are] all wet, and if you ever try to hand-drill holes into timbers, two-by-sixes, it's pretty hard to take a wet hunk of wood and drill a hole in it with a wood augur or a brace-and-bit. [A] lot of people know it as a brace-and-bit. It's bad. But anyway, they finally got the sea cocks opened up and finally we got it cleaned out. But still, everything, all the wood, lumber, that we were standing on, the hogs were walking on, the lumber got wet and they got slick. I don't know if you've ever seen a hoof on a hog, but it's got no traction whatsoever, and if the ship took the least roll, those hogs were sliding off on their bellies and not on their four legs. It wasn't a first-class trip. Finally when we really got out there, and about three or four days out of our destination, somebody finally got the smart idea of rigging a canvas off of one of the booms on the ship to give shade over the hold. That sun from about ten o'clock in the morning until about two or three in the afternoon; it was just beating right down into that hold, and *it was hot*. We didn't have air conditioning in that hold.

And you were on your way to—?

We were on our way to the Enewetak Atoll in the Marshall Islands.

We pulled into Enewetak, finally, and they came alongside with the landing craft, what they called M-boats. Of course, a real unusual experience, not for us but for the ship, that they went to drop one of their anchors because there [were] no docks there, we had to anchor out in

the lagoon. Well, they dropped it. They dropped the whole [00:25:00] anchor and all the anchor chain. Somebody forgot to tie off the anchor chain at the other end and the whole anchor chain went down. In fact, I have the recorded history of how many fathoms of chain and anchor they lost in the lagoon. But they had divers out there. Because out there, to keep the channel open to get into the lagoon or the atoll, you have to constantly blast out the coral. Coral grows and grows and grows, and you have to blast it out to keep the channel open.

So they were out there doing that.

That's why they had divers out there. And I'm sure they had underwater tests when we did the tests, but they had divers. They were able to get a winch onto the end of the chain and bring it back aboard. But for the ship's crew, that was a trip for them.

So we got the landing craft, the M-boats, alongside, and we crated up our animals and took them over to the island of Japtan. Now there were three main islands as far as personnel goes. That's the island of Enewetak itself, which was mainly Air Force and Army. They flew a lot of people in and out. The island of Parry, which at that time was where the contractor Holmes and Narver lived. And then there was the island of Japtan, which was the only island, both during the Second World War and while Holmes and Narver was doing any construction, that there were any palm trees left on. Coconut palms. It was the only one. In fact, when Holmes and Narver went in there, they were going to take out some of the coconut palms to build our desaltation [desalinization] plant, our barracks, our galley, and our house for our mice and our lodging for our canine and swine. And they didn't get too many out until somebody came along and says, That'll be fifty bucks apiece for every one of those coconut palms you take down. So Holmes and Narver quit. So it was more comfortable living on Japtan than it was living on Parry or Enewetak, because it was just nothing but flat sand spit bars, is all they

were. It was just where sand had collected on top of the coral reef and created an island. That's what an atoll is, is a coral reef in a circular dimension and sand accumulates up on that coral reef and eventually it becomes an island. Now there were other islands, but some of them were only visible at low tide. But then a lot of them were still visible at normal high tide, and those were up in the northwestern quadrant of the Enewetak Atoll, and those were our test islands. One that I can think of without looking up is Majuro, which was the main test island. I have a list of the different test islands. But Majuro was the main one, and I believe that Majuro is the one that they ended up with the Enewetak cleanup program. I believe Majuro was the one where they had the largest crater, so they used that crater to locate all of the contaminated material and they ended up—

They put a dome over it, right?

Put a concrete dome over it. But that was way after our time.

Right. So you were out there in 1950?

This was in 1950. We had separated areas for our swine and we had other areas, then, for our canine. Then we had a building where they flew in the mice because they could not in any way—mice are very delicate. [And] all of these swine are purebred. They're a known breed of swine.

And how many animals? When you're talking about canines—?

Off the top of my head, I'm going to say we probably had a dozen sow, and probably twice that many dogs, or canine. But mice, we had literally hundreds of mice. Now, our main reason for getting out there in 1950 is because we have to [00:30:00] breed the animals and use the breed stock for the tests, so that they're somewhat acclimated to that area. What we do from then on, is we start controlled breeding. We know what boar breeds with what sow so that we can document it.

So you basically spend a year out there breeding the animals.

Yes we spent almost a year out there breeding the animals. Now the mice, they were bred more often to get a strain which would be acclimated out there. They had a group that did nothing but the mice, and a group of us that took care of the swine, and another group that took care of the canine.

And then what [did] you do with them?

We only had three tests at [Operation] Greenhouse. We had cylinders, which I have pictures of, which are made out of all aluminum. Now in the different tests, depending on what results we were after—because we not only took what the radiation, as far as the unseen radiation, but also the thermal radiation. That's what we used the hogs for, were the thermal portion of it. So we had containers, aluminum cylinders, which the animals would be slightly anesthetized so that we could lay them in these units. Some of these units would be a completely cylindrical unit with no outside apertures other than the ends which were parallel. Neither end was exposed towards the detonation, ground zero. So they, what I would say, was horizontal to the—

And these were like long tube-like—

Just a long tube, right. And some of those had no apertures in them. Now some of them had apertures in them because we wanted to see the difference of the burn pattern of having the swine exposed to the actual rays *versus* the swine not being exposed. You always have to have a control.

Yeah. And this is still out at the islands.

We're still on the Marshall Islands, Enewetak Atoll, Operation Greenhouse. All this.

So you saw some of the shots.

All of them. All three.

What'd you think of those?

Well, they were very—

I mean what was your first—?

Well, the first one, it was very impressive.

So anyway, in the mornings, we would take our animals up to the islands and then place the swine or the canine in these above ground units. For the mice, we had units which were buried in the ground with our batteries and our heaters and our fans in them. The portion that was above ground was a lead dome, and this lead dome sat on top of the instrumentation portion or the part where the support equipment was. There was a lead plug in this lead dome, and we pulled this plug out, and the mice were in a screened cage, oh, maybe ten, twelve inches long and maybe six inches in diameter. There'd be a few mice in each one of those tubes. Then we'd take the plug out and we would insert those mice in that tube through that hole. That's the reason [for] the shape of the container the mice were in, so we could get them through that hole and lay them on a platform above the support equipment, and then put the plug back in. Now the plug was built so that there were graduated steps on the plug so radiation couldn't get in. The lead was a certain thickness, and we knew the capabilities of other tests. The only other thing was isotope tests in a lab or X-ray tests to see how much radiation you get [00:35:00] through this amount of lead. And the mice were put in those units.

Now we were the last ones in. We came back on the last craft coming out of the test because our animals could not be sustained; [we] had no way of sustaining those animals for long periods of time, so we were the last ones out *and* we were the first ones back in after the detonation. For the detonation, we were on the island of Japtan, and we would sit down on the beach with our head between our legs and cover our eyes, and I don't remember that we even

had goggles there on Japtan. We might have, but regardless, when these things would go off and the brightness of this light, it was early morning hours, this brightness would be so bright that even with our hands over our eyes, we could see through our eyelids and we could see the bones in our fingers. That's how intense this light is. It would go off and of course create this big ball of fire. Depending on the altitude that this ball would go up, this ball of heat and accumulated substance off of the island—anytime you have an *explosion*, you're going to get an *implosion* and *vice versa*. You are removing a lot of something that's going up there, along with all this heat and moisture and particles are going up there, and it creates different colors at different altitudes. So the size of the detonation depends on what reaction you get into this fireball or this ball of accumulated junk that's going up there.

As soon as the range controller [range officer] gives us the OK, we're into our boats and we're headed up there. Now when we go in to collect our animals, we don't have any film badges on because a film badge is nothing but dental badge. You take that and if you get any excessive amount of exposure, that thing's blacker than the ace of spades in two minutes or less. The only thing we have is a guy with a Geiger counter with us, and he is walking us around hot spots. And these hot spots are pegging the needles, so we don't know how hot they are. All we know [is] that we should try to go around it. So the amount of radiation that we get actually going in and retrieving our animals is an unknown factor. And this is where we have a conflict with DTRA [Defense Threat Reduction Agency] in their dose reconstruction programs, because they have no way of telling whether person one got fifty or person two, because he went around the other side of the hot spot, got twenty. There's no way that DTRA can put this on any graph. All they can do is say, well, that device emitted amount A, and looking at our charts for weather and everything, that this is what the pattern should have been.

So this is what we did. We went in and we got our animals and sometimes it was more than one trip. Then we take our animals back to the island of Japtan and take them back to the lab. With the swine they took pictures and photographs of the burn patterns, what extent—

And so the animals were burned.

Well, those swine that had an open place on it, oh, yeah, there would be a burn pattern there. You could see it.

Incinerated.

No, no, they weren't incinerated.

Just burned. You could just see the burn pattern.

Oh, no, no, no, no. No, no, they weren't incinerated. We set these animals at different distances to see—when a detonation goes off, it's very fickle. It's like a sound wave. When you have a sound wave, if it hits an object, it bounces back. It's just like when you have a hot spot, say, if—when skips running on a CB [citizens band]. Well, skip is because your signal is going up and hitting the ionosphere and bouncing back down. Then depending on the amount of power behind that depends on how many times it'll bounce back and forth. Well, the same way with a nuclear atomic detonation. The power wave has a certain pattern that follows, and what we want to do is to tell at what distances certain things were happening.

[00:40:00] *And so you could tell by the various burn patterns.*

Well, we could tell by the *extent* of something, the extent of the burn itself or the extent of the radiation. Because we'd go back and we would test the animals to see how much radiation they had absorbed, if anything. But the main thing is merely how much burn was given to each swine at certain areas. Then also, we took the spleen, the liver, the thymus, we took blood samples and took bone marrow out of all these animals, mainly the canine and the mice. This is where they

determine the amount of destruction to the different cells within the body, depending on the distance they were there, depending on the container they were in. These were all known factors, the amount of lead shield that was on the mice and what distance that unit that the mice were in because we put them at, I think, five or six different distances.

So you were basically testing for what was happening at various distances.

Distances, yes, right.

Right, with different types of shields.

Shielding. Well, we only used two shieldings, either no shielding aluminum or lead. And then the distance pattern was the other known factor. Of course, one of the problems was the time element—from the time they [the animals] were exposed to get them back to the lab and start doing the sacrificing of the animals. Now all this information was accumulated and is in a repository someplace.

So the results of these tests—

The results of these tests would give us a better idea of what we're dealing with today. I've never investigated to see where they are. It's like trying to get a hold of the *people*. I was told there was about forty-seven of us still surviving. Well, I had to make forty-seven copies of my letter, put in forty-seven envelopes, put forty-seven stamps on it, put my return address, and send them to DTRA. *They* then said they had their addresses and they would mail them out to these forty-seven different people. Now these are supposed to be live people. Well, one was the widow of a guy that had been dead for over a year. Now this is the way our federal government keeps track of special program people like this. And she wanted to know how I got her name because she had moved since he had passed away. She wasn't even living in the same place. But anyway.

So we did this on three different tests there on the Enewetak Atoll, Operation Greenhouse. Now the second test was shot George. This is the big one. We're supposed to have the aerologists out there that know what they're doing. Aerologists, the people that determine when it's good to go and when it [is not] good, the wind's blowing the wrong way. Well, I am now in communication with the person that was an aerologist out there on Operation Greenhouse on shot George.

Really. Now. Currently.

Right now. He's one of my state commanders. He one of my NAAV [National Association of Atomic Veterans] state commanders. And he has related to me that he didn't know straight up when he was under it, when he went out there as an aerologist to do this job.

Really.

That's right.

Had no idea.

He was a young, snot-nosed—what was he, in the Army or Navy? I don't remember. But he was either an ensign or a boot lieutenant, I don't know which one. But he [was] the aerologist. He knew nothing about the wind trends out there. He knew nothing about the history of the wind.

Well, what was he doing?

He was the aerologist. They said, You're going to be the aerologist out there. He'd come out of school. He's supposed to know all about it. OK? You're going to go out there and do it. So he's one of them out there.

It makes you wonder.

Well, come to find out that the George shot was, one of the three [00:45:00] shots we had out there, nobody knew it at the time but we had the greatest amount of fallout that came back out of

the shot because the atmospheric condition changed and all that came back and made us hot. In fact, we had to go in, and I don't know how many showers we had to take. But it didn't make any difference because all of our clothing that we had there, it was contaminated, too. So you'd take a shower and you'd take the clothes you got there, put them back on, well, you'd cleaned your body but you got hot clothes on.

You guys are young, you're there doing your job. Were you ever thinking about radiation?

No, no, no, because we were told oh, there's nothing to worry about.

And did they tell you anything?

No, no, because they didn't know anything. Remember, we're only how many years away from 1945? July 16th? White Sands, New Mexico? [Trinity test]

Right. Hadn't learned yet.

That's what they're doing. Come to find out now, the animals weren't the only guinea pigs. We [were], also. We were the guinea pigs, too. So no, we were just told, Don't worry about it. We've got these Geiger counters and we'll keep you away from the hot stuff. See, all this that we know now is hindsight. All hindsight. Here's the one thing that really has galled me over the years. For me to become a sailor, I went to boot camp. For me to become a hospital corpsman, I went to Hospital Corps School. For me to become an X-ray tech, I went to X-Ray School. For me to become an independent duty hospital corpsman, I went to Independent Duty School. For me to become a field med tech to go to the Marines, I went to Field Med School. Now I went to all these schools, but not *one* indoctrination, not one indoctrination on what we were getting into of the possibilities or the ramifications. Nothing. Not a thing. And this has been one of the big gripes.

So George was the big one. My understanding [is] that it was a combination of an atomic bomb which was used to infuse the first hydrogen bomb. [George was the first thermonuclear test explosion]. Now this is my understanding. It was a biggie.

You remember that one.

Yes, we *all* remember that one. We could see the—well, how can I say it? If you visualize harmonics or waves coming across the surface of the lagoon, you could see this coming across, and this was a whopper. This was a biggie.

There are so few people in the world that have actually seen above ground shots. Well, I guess that would be the only ones to see. But there are so few people. I mean do you remember what you were thinking when this was happening, when you were waiting for the shot to happen?

Well, it's a mixed bag. It's a mixed bag, because at the time you're sitting there, you don't realize until you walk in there and you see the destruction of this. But now realize that I've already seen the aftermath—I was old enough to see the pictures and the photographs, the aftermath, of Hiroshima and Nagasaki. My dad was at Hiroshima. In fact, I'm a second-generation atomic veteran because he was also exposed to radiation when he went into Hiroshima. And my mother is still alive at ninety-three and she's drawing compensation for his disabilities that he acquired while in the Navy, which portions of them might have been because of the radiation, but anyway she's getting compensation. So I'm a second-generation atomic veteran. But see, at that age, twenty, twenty-one years old, you've got the tiger by the tail. Man, hang on, world, we're going for a ride. You're not thinking about these things. All you're thinking about is boy, when this tour is over, I'm going to have enough money, I can go home and buy my first new car. I'm going to the Automobile Row up in Los Angeles, that's what it

was called, Automobile Row in L.A., and buy me a *car*. So you're not thinking about these kind of things.

Right, just the hugeness of it.

And I'm not married yet and, I haven't got sense enough to realize the magnitude. [00:50:00]

You see it visually but it's *beautiful*. It's *beautiful*. Just *gorgeous*, the colors that are emitted out of this ball of mass, and the higher it goes into the air, it becomes an ice cap on top of it because it's getting so high, and it's just a beautiful ice cap. Then that breaks open and more of it goes up, and another ice cap [forms]. I mean it's just *gorgeous*.

Sounds magnificent.

So you're *awed* with this *visual* concept and not *thinking* about the *ill* effects of what just happened. It's up there on an island all by itself. There's nothing there, no people around to be immediately affected. But at that time, we don't understand the effects of the irradiation because there's no studies that have come out of Japan yet in 1950 and '51. And there [are] still studies that were just announced, that Japan is still releasing that people didn't know about, and the effects that took place. There's still things that are being released that the whole story has not been told yet. So you really don't, you just don't comprehend the *ill* effects because of its beauty and you don't know because no papers have even been published on what—

And how would you [know]?

That's right. And because the lab techs, we can't talk to each other on what we're finding out. So the blood counts, we don't know what the lab techs—

Essentially then, you guys put the animals out there, and you go wait for the shot to happen.

They say it's clear, you go back in, you retrieve the animals, and you take them back to the labs, and then what is your job at that point?

I'm not a lab tech, but I know what the lab's doing because I'm standing there and I'm helping them pass the animals about. This is the days of the old microscope and the white and red blood cell counters, the hemacytometers, and these type of equipment. We're assisting them, but because we're not—at that time, the lab techs, we're talking about second and first class hospital corpsmen who have been in during World War II, and those of us who only been in '46, '47, '48, like that. So we're the younger breed and we're doing more of the mechanics rather than the scientific part of it.

But you guys were bringing the animals back.

So we're bringing them in.

But there's no communication between what happens after you—

Well, there's no communication of what their *findings* are. In other words, if this certain animal, because it was a certain distance, its white blood count has gone down, and we all know that the white blood cells are the germ or the infection eaters. If you get an abscess, that's an accumulation of the white blood cells. Well, when that white blood cell count goes *way* down below normal, that means you don't have the ability to fight an infection. Or when the red blood cells—we didn't do sacrifice on all these animals all on the same day. Some of them we left out for two, three, four days to see what happened in a long range of time. We would see then whether or not the red blood cells were deformed—there are different names for different blood cells in their juvenile stage—or are they [at] a different stage of being destroyed? So that this type of information was never released amongst the whole group. Even though we were all there working as a team, we all more or less had—we didn't communicate the results. Here's another thing, too, that would happen. When we would go off of an operation back to the lab, our security clearance would be downgraded from the test security clearance to the lab [clearance].

Now this is what I was told: That some of the guys, they would need information from the test site and they couldn't get it because their clearance was downgraded while they were at the lab, so they couldn't get the information that they had collected out in the field.

And they can just do that like that.

[00:55:00] Oh, yeah. Once you have a Q-clearance, [it] doesn't mean that you're cleared for the same level when you're in the lab as you are out in the field. Now this is information that was passed on to me.

So we had three tests out there on the Marshall Islands, and then we would come back to the RAD Lab at Hunter's Point. Then we would get our equipment ready, and wait to go to the next test. Because different operations had different type of devices that they detonated, we were only interested in certain types of devices for the type of work we did.

Which were?

Well, I mean the type of experiments. In other words, if it was a low yield or a high yield; if the yield of the device was not within the range that our boss was looking for, that wouldn't be where we would go.

OK. So they had very specific—

Then there were certain requirements of the device also, depending on whether it was an air drop. All of ours on Enewetak Atoll were tower shots to start with, because that was the first testing that we went in. Now there were some animals on the Bikini shot, but not to the extent that we had them. They were just tied externally on board some of the ships. And they didn't go into the in-depth evaluation of the animals. It was more or less "did they survive?" type of a thing. They didn't do all this extensive research on each animal, nor did they have the controls on the animals themselves.

They just wanted to see if they would make it through.

They just wanted to see what would happen to animals left on board ship. Rather than sticking a guy over there, they put a sheep on it.

So not only did we work on our equipment that we were going to have for the next site or the next operation for the series of tests, but we would also work in the labs. I worked for a physicist there at the RAD Lab. He was a civilian. I did some experiments such as known radiation. We had a big massive X-ray machine and they would run that X-ray machine for x-amount of hours to radiate so much radiation. And one of the studies I did was a total body radiation study. In other words, took rats at a given weight, given exposure—well, given age, given breed, radiated with so much radiation, and then did a complete sacrifice on that animal with acids to digest the animal down to its least component. Then weigh that animal, or weigh the remains, and then read the exposure readings of the remains of that animal. This was one of the tests that I did. So it's like any lab work. If you've ever done lab work, you just don't go in and bang, bang, bang, and get the results. It's takes *days* and *days* of processes and steps to get to the sample so that you want to look and see what you've ended up with that sample. Like I say, you've got to have the animal first and you've got to have control on the animals, and that took a while to get that. Once you do that, then you got to have them radiated. And then you got to sacrifice the animal, digest him down with acids, and then remove the dangerous part of the acids. You've got to flush that acid out of the remains and boil it off. So there's many steps to getting to where you want.

And then this was not—you were OK doing all that?

I'm doing all that. Yes. That was one of the things that I did, along with, [01:00:00] like I said earlier, construct these heater elements to put in the exposure units, to do the wiring on them, to

put the plugs together with the wiring, and the fan system, so when we get out to the [Nevada] test site, we can put these systems in our test units.

So what was the process? When did you end up out at the test site in relation to all this?

After we came back from Operation Greenhouse, we went out in the first part of 1952. I believe it was either January or February of '52 that we went out to the Nevada Test Site for that operation [Tumbler-Snapper].

And had you been told yet what you guys were doing? Did you know what the test site was?

Well, we knew what we were doing. We were raising animals and building test equipment and putting them in the test site and bringing them back in and getting them ready for the lab techs to do their work. We knew what we were doing.

But did you understand, I guess, that you were a part of this whole developing nuclear program?

Oh, no. Oh, no. Everything was still in the experimental age. This was all experimenting to get where we are today.

OK. So then when you get sent out to the test site, first of all I'm curious what your impressions of that were, because you are now in the middle of a desert compared to a—

It's damn cold.

Yes, the desert's cold in the winter.

In February, it's damn cold.

First impression: cold.

And it's dry, except when it rains.

Yes. It's very different from California.

Oh, yes, yes. I remember one time we went out to the test site and it got over 100 degrees, it rained, it hailed, all in one day. In fact, we stood in mud when it was over 100 degrees. Now

that's bad working conditions, but that was it. We had what we called tropical hours. We would get up before daylight, we'd be down at the Mouse House, we would have our coffee, and we'd get out to the test site and it would still be just barely breaking day. We would get our work done and along about twelve, very seldom past twelve o'clock, we were back to camp.

I would imagine you'd have to be.

We were back to camp because, see, we'd be out there from February until May, May or June.

Take me through how you got out there. You came back from—

Well, we came back from Operation Greenhouse, and then we did our preparatory work at the RAD Lab at Hunter's Point there. Then of course we had some equipment that had to get out there. Now our transportation were these old World War II Army what we called two-and-a-half-ton trucks, the old canvas tops and canvas doors. And so some of the guys volunteered to drive those out there from San Francisco all the way over Highway 50 in those days, over to 99, down 99 to Bakersfield, up east out of Bakersfield through Barstow, and Barstow into Las Vegas. Now in those days, there were those of us that had a car, which I was fortunate enough because when I came back from Operation Greenhouse—

You got your car.

I was able to get my car *because* we had built us a little bar there while we were out in Operation Greenhouse. We went over to the island of Enewetak and bought our beer and booze from the Army, took it back and had our own little bar in there. Well, I volunteered to be the bartender because they were tipping and gave a little bit of extra money to the bartender, so I volunteered. Nobody else wanted the bar because they either wanted to go snorkeling or—oh, this is something I left out. All the time that we were out there on Greenhouse, we have two desalters.

In other words, two, no three, evaporator units, like you have aboard a ship. You take salt water in and you get fresh water out.

Yeah, I saw the memos on that.

Now this water's coming out of the lagoon. To get fresh water out of salt water, you go [01:05:00] through an evaporation system. An evaporation system only takes out the minerals, which is the salt. But has anybody ever tested to see what else it takes out and sees the level of radiation left in the water? Even though it's gone through an evaporation system, has anybody ever tested to see what the radiation level is?

Not that I'm aware of.

The contamination that goes up in that fireball has to come down someplace. People were contaminated and they call those Downwinders. Well, not all of these particles went away from the lagoon. Now particles can be anything from something you can see to how small? Now depending on the size of the particle depends on the weight of the particle. Depending on the weight of the particle depends on how far into the water that particle submerges. We are out there in that lagoon snorkeling around in that lagoon. Now what type of contamination did we pick up in that lagoon? There's another unknown factor.

That's interesting. You're right.

When we had the fallout on our islands, we were never told what the reading was, amount of fallout, and I would be willing to say that that is probably one factor that DTRA doesn't even have, or if they have, they aren't telling us. Now I've got all of my readings.

Right, I saw that.

No, I've got more than that.

You've got more.

Yes, I have more than that. But all of that is very limited, and none of that is readings which you would expect from fallout from one of these tests. But anyway, that is just a factor that I left out which should be included in there.

[01:07:10] End Track 2, Disc 1.

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

OK, we're back to going out in '52 to Nevada Test Site, and like I was explaining, some of the fellows volunteered. That's one thing I learned real early, you never volunteer. But they volunteered to drive a couple of the two-and-a-half-ton trucks out there with some of the equipment in it, not realizing with those open-air, canvas-coated how cold it was going to be up around the Mojave area. They were very uncomfortable in February. But because we were there for the long range, we were bivouacked, or not bivouacked but we lived in units over in Camp Mercury, Nevada. Now these units were up on platforms, and they were four-by-eight sheets of plywood around the lower half, and then the top roof was a canvas roof, and we lived in there on bunks.

How were those living conditions?

It wasn't the Waldorf Astoria but being military, they never did promise a rose garden, but we survived. Like I was explaining earlier, we would get up early in the morning before daylight. And I was fortunate. I always seemed to try to, no matter where I was stationed, if I had *terra firma* under my feet, I always seemed to have a part-time job. So I worked at the old Slop Shoot. In the evenings that's where all the contractors and everybody met for a cold beer and a hot dog, hamburger, or whatever. So I got myself a part-time job in the evenings there because we had tropical hours and we'd work out in the field for so many hours and usually by noon the day was

over because it was just getting too hot. So I had time in the afternoon and the evenings and I could go up there and work. A lot of the guys, they would go in town and gamble.

Down to Vegas?

Oh, yes, they'd drive that. Back in those days, this is a *two-lane road*, one lane each way. I guess now they call it what? Widow Road?

Widowmaker.

Widowmaker. Yeah, they call it Widowmaker now. And of course, Indian Springs, there was an old service station there which now, today, all I could find was the concrete where the gas pumps were. That's the only thing left of the old service station there. There was another place just a little closer to Camp Mercury and it was just kind of a little liquor or bar store and that's all that was there. Across the street from the service station was a trailer park. I mean *a trailer park*. In those days, there [were] very, very few people living out there. There was the gas station, the bar and a little small restaurant, and a lot of slot machines. That was the first thing going to Vegas, so some of the guys, that's all the farther they'd ever get.

And this is 1952?

Nineteen fifty-two. And like I say, there was a trailer *park* across the street. Not the big mobile home park that you see across there now with all the big units in it. Because there were no civilians working *at* Camp Mercury other than the guards.

So while you were out there, you were out there with the Marines—

No, I'm in the Navy.

In the Navy. OK.

I'm in the Navy. I'm a Navy hospital corpsman.

Who else was out there? The Army?

Well, now, see, the Army and the Marine Corps units, when they would come in, they were over at Camp Desert Rock, which was on the west side of the road.

OK, and you guys were out at Mercury.

There was a division. We were on the east side of the road in the permanent building area in those days, which is all changed now. And there was no mass transit between Vegas and out there, every day people going to work, other than maybe a few guards. But the guards and the people working in the establishments out there—the support-type people that might work in the galley, in the cafeteria—they might travel, but even some of those people lived out there at Camp Mercury.

But pretty much everybody was out—

[00:05:00] Lived right there, because it wasn't the size that it is today as far as the camp goes.

There wasn't that many.

So how many guys were in your unit out there with you?

Not as many as I remember that was at Operation Greenhouse. There weren't as many. There was probably maybe thirty or forty out there at these operations.

So I was able to work in the Slop Shoot part-time, and in the evening, if there were any sweet rolls or doughnuts or anything left over, the guy would let me have them. I'd bag them all up and at the same time I would make myself a big humongous sandwich for my lunch for the next day. Because we were on an allowance. In other words, we were getting, I think, twenty-one dollars a day, for our food and for our lodging.

And how is that, comparatively speaking?

Today? And then?

Well, was that decent?

Oh, it was decent, sure, because not only were we getting that but we were getting our regular pay.

So you're getting that on top of it.

Oh, yeah, twenty-one dollars. So by my making myself a sandwich, I didn't have to buy one meal, and I didn't eat breakfast anyway because we had all these sweet rolls and doughnuts, and I was a coffee drinker then.

You were doing good.

So I would take all these doughnuts and stuff down to the Mouse House in the morning and we'd sit there and have doughnuts and coffee before we went out to the field. A lot of us did. Some of them, they went to the galley and ate, but a lot of us, we just went down there and had our coffee and doughnuts. So I made some brownie points with the gang, see, by bringing all these sweet rolls and doughnuts in the morning.

Now you may be getting to this, so just interrupt me, but you've mentioned the Mouse House a couple of times. I'm wondering if you could talk about that and what that is, what were you referring to?

The Mouse House was where we kept the mice, but also where we did the lab work when we retrieved our specimens from the field. That was the lab and—

And you guys built these things.

No, no, no, these are all concrete block constructed. They were already there. This building was there and it's still there today. I have pictures of it. A couple, anyway.

In what area? And this is out at—?

This is on the west side, the same side of the road that Camp Desert Rock is, on the same side of the road, because, we had animals and they didn't want the animals up there in the other area. So

the Mouse House was where we had our swine and canine and our mice, and it was separated.

The type of work we were doing was field work but we had to have a permanent place. Now

most of the other units that went out there were units like where they took paint specimens.

When the test was over, they boxed them all up and they took them back to wherever they came from and then did their thing on them. But with animals, we had to do our thing right on site.

You can't really transport them around.

We couldn't transport them. So all their experiments and a lot of the experiments that were done were visual experiments. Like the houses they built with the mannequins in them. That's one thing I used to have, all the newspaper clippings of all those mannequins and the houses and, oh, that's a different story. But anyway, a lot of that was visual and was recorded on film, and they were able to take that back to their lab and study it there. But with animals, you've got to do your work right there on site. So that's the reason we had this one building which was set aside, because of the type work we were doing. It was away from everybody else and it was a restricted area. But that was our meeting place and that was our function. That's where those of us three or four that had cars, that's where we washed our cars and waxed them and kept them looking good out there in that desert sand.

Earlier when I was talking about Operation Greenhouse, when I got through out there, that's the reason I was able to buy the car.

Yeah, that's what you were saying.

When I get back, and we go to the Nevada Test Site, I have a car, so I'm able to drive my own car and take it out there.

What kind of car did you get?

My first car was a 1948 Chevy Club, a business coupe, which has no seat behind the driver but it has a little jump area where the businessmen would put their samples and satchels back there.

[00:10:00] And it was a 1948, and this was '51. It had a brand new red maroon paint job.

Metallic red maroon. Prettiest little thing you ever saw. And so anyway I had transportation that I could take out to Camp Mercury, out to the Nevada Test Site, and I was able to take a few side trips while we were out there. There would be time in between the tests. The tests weren't just every day, every day, every day. And as long as we got our equipment set up and we were waiting for the shot date, then we kind of had free time. So I was able to take a few side trips, like go up to Mount Charleston [Nevada] and took a few trips to Beatty [Nevada] and to Death Valley [California] and to Bullhead City [Arizona].

Did you come down to the Strip a lot at that time?

There was hardly anything on the Strip.

Right. It just started.

You have to remember, '50 and '51 and '52 and '53, there was the Flamingo. That's the first one you saw when you came in on the highway was the Flamingo. But I think there was about three or four total that were out on the Strip. The rest of the Strip was a small airport. They didn't have the big airport they have today. It was comparably smaller. And it was just miles of sand until you got into downtown. And there was the old Golden Nugget and the Frontier, and then there was the train station right there downtown. That's where all the action was. Those out on the Strip were more for the migratory-type people, those who wanted to see the big shows back in those days. But the real avid gamblers, they were downtown at the old standbys. And of course in those days, they had one day a year when they had a big gathering, and they had a jail on wheels. Frontier Days, I think it was.

Sure. Sounds about right.

Frontier Days. And we were there for that both years. I remember one year at least that I went in town for Frontier Days. But I wasn't a big gambler. I might put a nickel or a dime in, but being in the service, and I was only getting around ninety—less than a hundred dollars a month. Still, I wasn't bad off because I was working a part-time job. In fact, when I was stationed at Hunter's Point, in between operations I always had a part-time job there also. I worked at the bowling alley and I worked at the Slop Shoot. I worked at the EM [Enlisted Men's] Club. So I always had a job.

So you always had something going.

Always had something going. Rather than going out and spending all my money, I was pocketing it.

Good idea.

But as far as the '52 test it was just the same thing, only different-type working conditions where we had to do our work in the early, early mornings and then try to stay cool the rest of the day.

And so you did the same thing with the animals out here?

We did the same thing with the animals. We were fortunate enough, we could get a contractor to come out and dig our holes to put our units into, so we didn't have to do that. But we did have to truck our own—the aluminum shells that we put the lead domes on, they were put out in the field for us, but we trucked the lead domes out there ourselves from the Camp Mercury area. Some of us had military drivers' licenses. I was one that had a military driver's license because when I first came in the Navy, being the captain's driver at the Navy Hospital in San Diego, I had to have a Navy driver's license. My driver's license at that time had already been upgraded all the way from vehicle to emergency vehicles. So it wasn't hard for me to get any other type of

license. When we went to Camp Mercury of the Nevada Test Site, they had a fifteen-ton aircraft wrecker that we had to use to put the lead domes, and we had to do it ourselves. Out in [00:15:00] the Marshall Islands, we got a contractor to do it, but we had to do this ourselves. So I would go out and check out this aircraft wrecker that the Air Force used for aircraft purposes. It had a top speed of eight miles an hour, and I would drive that out to the test site. Then when the guys would bring the domes out, then I would be responsible for taking the domes off of the truck and placing the domes on top of the test equipment. Of course, I was mechanically, not only being a corpsman, but I was raised to be mechanically inclined. When I was growing up as a kid, you didn't call the plumber in, nor the electrician.

No, you did it yourself.

You did it yourself, being out on a ranch. So that was an experience there for myself. And we placed all these lead domes on the equipment. Like you say, it was just the same thing. Then we would move the equipment from one area to another. Whenever there's a nuclear or atomic, any kind of a nuclear device, you're always going to get a higher background level of radiation than you normally have. That's a known factor. So here we are, we're out there removing this equipment from a contaminated area and we're moving it into another contaminated area, but it's not as hot yet because it's had longer to cool down.

But you're in contaminated areas.

But you're in contaminated areas. So these are other unknown factors, again, because we don't wear film badges out to the test site. We only wear them when we're in the rear with the gear.

And did you think about that at all again?

This is all hindsight. This is what we see when DTRA says, we're doing a dose reconstruction and this is the amount of radiation you received because this

is what we base it on. Knowing what we did and where we were, we now know that dose reconstruction ain't worth the paper it's printed on because it has no factors. The only known factor is the yield of the unit and the distance we might've been from it.

But yet this is how they determine this.

But this is how they do it. And this is why right now we're fighting Congress to do away with dose reconstruction.

Not to skip around, but I'm really curious about that process. Can you talk about that, what you guys have been doing?

We have a lawsuit with Putnam right now. We have a lawsuit that are suing *individuals*.

Really.

Yes, they're suing individuals that worked for the Defense Department.

And this is a lawsuit by you guys, by the Atomic—?

It's a class-action suit. It's a class-action suit because there were certain individuals that got together. Because now, see, the Lord's been good to me. I have no known or visual effects so far from it.

And you've been tested. You've gone through [screening]?

Well, I'm on the Ionizing Radiation Registry. I've had a physical by the VA [Veterans Administration] down here at Mission Valley at that unit down there.

And then so far nothing has turned up.

They haven't done a complete bone scan but one of these days I'm going to go in and force them to do a complete scan to see if there's any metastasizing going on that I'm not aware of from some small minute tumor or cancer that I might—a tumor I might have that would be—. The only thing they've detected is I have a cyst on the upper portion of my liver. Yeah, a cyst. It's not

a tumor. But anyway, I'm very fortunate. One of my friends has already had three lobes of his lung taken out, and he fought with the VA and fought and fought and they wouldn't pay any attention to him. He went to a civilian doctor and that's where the surgery was done, and the surgeon made a report that all three lobes were extensively burned by radiation, and he went to the VA, and now he's on 100 percent disability. But all this expense before and all this time before, the VA says nah, nah, nothing, nothing there.

So where are you in the process right now with the lawsuit?

[00:20:00] I'm not on top of that. All I know [is] that they've tried to sue the government before. Well, you don't sue the federal government. And to get somebody to take something like this on—and Shaw Pittman have taken it on free of charge.

Really.

Oh, yeah, free of charge.

And they're a local—?

No, they're in Washington. I mean they're sitting right there at the White House. They're a big outfit. I'm sure you've heard of them. So they're the ones that are suing now because NAAV [National Association of Atomic Veterans] is such a small group of people. Right now we're less than 2,500 members on the rolls. We're a small group. We're nothing like DAV [Disabled American Veterans] or VFW [Veterans of Foreign Wars]. They have a continued source of membership.

Well, right, you guys are very limited—

Well, we have just expanded it now to all the nuclear-powered—people that are involved in nuclear power aboard ships and subs. Now all those in Gulf One [First Gulf War] because of the DU, depleted uranium, we've got those that we're going to include in there. All those nuclear

handlers. Any shore power plants. Even civilians that are involved or in the proximity of it. Those are considered into our group. So we're hoping if we can get the word out now, and that's one thing that's hard to do is get these old guys in their eighties. I'm one of the younger ones; I'm only seventy-five. A lot of the guys that are even seventy-five and younger than I am are in worse physical shape than I am, so their get-up-and-go has got up and left. So it's hard. There's very few of us that are as active as I am, and as aggressive as I am, too. You've got to be very aggressive to get somebody's attention.

What got you involved in this aspect?

Oh, trying to find some of my old shipmates. And then I happened to get on the Internet and see that there is a group. I felt with my medical background that I could be of assistance to some people, to understand the medical terminology and this type thing. So this is not only being the state and area commander and coordinator, but I also have a lot of people that come to me and want to know the process, How do I do this? Where do I go? And they have to realize that there's different things, such as there's two types of claims that you make, and where to start the process and where to get records. Being twenty years in the Navy, sixteen years in Civil Service, I have the background of knowing what department to go to, to get what records for who, and if not, I know how to get there to find out.

It seems like there's a lot of navigation involved.

Oh, there's a *lot* of navigation, and it's so much different than [for other veterans]. You take a serviceman, a veteran. He walks into the VA and says, I got this problem while I was in the service. Here's my DD-214. With an atomic veteran, it's not that simple. With an atomic veteran, if you go in with your DD-214, they say, Prove you were there. Well, on my service record and on my medical records, it says I was stationed over in the island of Kwajalein.

So I had to go back in and get this from the federal government, the logbook off of the USS *Warrick*, the one (ship) that took us over there. On the back page of that logbook it has those of us that disembarked at the island of Japtan. Those are all the people that were on that ship that took the swine and the canine over there. So it's very arduous and sometimes can get very disheartening.

It sounds like, that of all the veterans, you guys have to actually prove not only your service but that you were there.

Yes. Yes. They were there. And the big problem is so many of these people were on what we call TAD [Temporary Additional Duty] or TDY [Temporary Duty], and TAD and TDY does not become a permanent part of your service record.

And what is that?

Temporary Additional Duty. That does not become a permanent part of your service records, so when you get out of the service and you say, well, I was at this duty station. They can go back and say, No, you weren't. You were at this one *all* that time. You never left there.

[00:25:00] *And do you think they did that on purpose?*

No, that's a process.

Right. I'm just curious.

Yeah, that's a process. No one ever thought that the federal government would try to get out of their obligation. We always know that when you're dealing with Congress, that they're going to try to get out of it. They don't want to spend the money except the way they want to spend it. And this is just one of the ways that the federal government has a tendency to put us on the back burner. The government doesn't have to prove anything. *You* have to prove it. And there's many cases where they've lost service records, at least I'm told this. These are the stories I get. There

was a big fire back East where a lot of records got burned up but there's a lot of records that didn't get burned up. Rather than try to hunt them down, a lot of the response is, well, they got burned up in such-and-such a fire.

And that's just their blanket response?

Right. That's their blanket.

Interesting.

Back to Nevada Test Site, 1952. There was just the same thing day in and day out. Then of course, at the end of the testing era, we go back to the RAD Lab at the Naval Shipyard there at Hunter's Point. And we go through the same thing. Some of us work in the lab. Some of us work on next year's equipment, because this is in the summer of '52 and we're not going back until February of '53.

One of the other jobs that I had while I was at the RAD Lab, in between field tests, was working in photo dosimetry. Photo dosimetry is where we establish and make the control badges and then take the badges every thirty days from all those people working at the RAD Lab and put them in a photo dosimeter-type machine that reads the amount of exposure because of the darkness. In other words, it's a piece of film and as you expose light to the film *or* radiation to the film, the film turns black. The degree of density tells you the amount of radiation. Now to do this, you have to have a control film. To make this control film, you have to expose it to a known factor of radiation. To do this, there's no machine. You're people again. So we take this into a concrete building. It has a concrete floor, a ground zero drawn on the concrete floor, and it has circles around that set at different distances away from the ground zero. And we set these little dental film badges in little holders facing the center circle at known distances. We then bring our [lead] pig in and set the pig, covered, in the center, [and] take the lid off. Now this is a known radiation. This is a person doing this. You take the lid off and you walk out of the room and you

wait so many minutes and then you walk back in and put the lid back on. These films are all marked at what distance they were from the source and for how long. Those are your control badges.

Interesting. So somebody had to create those.

We did.

Yes.

That was one of our jobs, working in photo dosimetry. We had to create these control badges. So this was just another one of the jobs that I had while I was with BUMED Unit One.

Then we go to 1953 and we go back out to the Nevada Test Site again, and we have our same living conditions [Operation Upshot-Knothole]. We have the Mouse House that we work in and we go out to the field on tropical hours. Now, this is the year that they bring out the 280-millimeter cannon [Grable test]. The cannon has never been fired with a nuclear device in it. It's brought out and it's [00:30:00] transported in between two motorized tractors, one on the front and one on the rear, and it's radio-controlled. They can talk back and forth to each other. I saw that unit out there when they brought it in, and it was *big*.

Wow. I can only imagine.

It was big. And I've never really seen any good pictures of it. I have some very poor pictures of it right now. But when they fired it off, they thought that it was going to be the thing of the future for delivering a nuclear device at lesser range and less expensive. The only problem is that when they tested it, it fell short. I don't know if that was the only reason. I'm sure there were probably other reasons. But when you have a nuclear device, you want to be sure that it gets delivered at a distance which is not advantageous to the deliverer and less advantageous to the receiver. So

anyway, it was a sight to be seen. As far as I know, it was removed and apparently it was scrapped because I've never seen, heard—that was the end of it.

That was 1953.

Nineteen fifty-three.

And that wasn't an official shot that they did with it.

Yes. Oh, yes, it was one of the shots, but we didn't have any tests in it. We didn't have any tests, any animals in that one but—

But you just remember the whole—

Oh, I just remember it, and then hearing later that one of the problems is that it fell short. It did not go on target where it was supposed to, and when you've got a 280-millimeter cannon sitting up there firing a nuclear device, you want to be sure it gets to where it's supposed to.

So what was it like living out there? It sounds like you guys had a pretty tight knit group?

Well, we were a tight knit group but we all had our job to do and we were constantly meeting time lines. Everything was done on a time line because you have to realize that the whole operation was built around the building of the nuclear weapon. The detonation of the nuclear weapon was done by one group and they wanted to see one thing and that's all. They wanted to know the impact, the yield, and all of the physics of that unit that they built. Now that was only one group. Then you had group[s] that were interested in building construction. You had groups that were interested in the items that go into buildings. You've seen the old safe out there, the old trestle out there. Out in Operation Greenhouse we had some tank cars that were out there. So you have different groups. You have people that were interested in how a hangar would withstand. They would build a hangar facing either side or facing the open end. They'd put trees out. In one test they had a lot of trees out there in different distances.

Heard about that.

That was your Forestry Division did that. Many different agencies would correlate their test with the detonation because when the range master, when he was told the date, he would inform everybody else. And it went off. If your stuff was there or not, it was detonated. It was only within house that the units worked together. All the rest of the units were individuals. You had them from paint companies, construction companies, all these different outfits were testing their own things. There was cable companies building cable that they would tie certain things down to see what would happen to the cable. And rope.

Everything they were trying to—

We would see this stuff as it was being put out there, just like us putting our stuff out there, and we all had to meet this one day and deadline. So you had to be bang, bang, bang, bang. Then when it was over it was free time because we had nothing to do. Once we got the animals [00:35:00] back and we did all of the sacrifice testing on them, then it was free time. But you have to remember, in the service, you're working on a time clock all the time. You have a certain amount of hours that you have to be available and you have to be on station, on duty. It was just a different type of time frame that we had to meet.

I guess it would be like being stationed anywhere

It all depends on what you—

You guys happened to be out at the test site, and depends on what you're doing.

See, you're not in a union. You don't work eight hours a day when you're in the service. In the old days, you didn't. You had to be on your base at a certain time, had to be in a certain uniform at a certain time, the chow hall was open at a certain time and it closes at a certain time, and liberty started at a certain time. You might have a duty night, you had to be on duty a certain

amount of nights of a week, so all of this was regimentation. When you join the service, it's one of the things you take for granted, that there's going to be regimentation, because that's what makes good production is regimentation.

Then back to the laboratory. Now when I got back to the lab in '53 after the last test in the summertime there, they put a hold on us for two years. Because of our clearances and the type work, we could not be transferred, especially couldn't be transferred to a war zone for two—

So they put a hold on you, meaning you couldn't go—

We had to stay there at that duty station for two years after the last operation.

Because?

Of the information that we had. They didn't want us—

OK. So they didn't want you going and talking to anyone, basically.

Well, no, war zone. War zone.

Right. OK, so they didn't want you to get into a chance of—

Right, being taken, captured, and so we didn't go into any area where there was any chance of a conflict of any type. So we stayed right there, those of us that had been to all these operations.

We stayed right there for two years.

Very interesting. I saw some papers in your book. Did they brief you guys as well and say, you know, You don't talk about this?

No, because we'd signed this secrecy oath. That was it. See, they knew us. We were a very small, tight group. Your other units that went in there, there were some Air Force military security units, military Army security units, that were exposed to the amount of secrecy things that we were. But the troops that just went in there and observed the detonation or who walked

up there a little bit, now those guys, they didn't sign a secrecy oath. It was only those units that were *involved* in the actual testing or involved in some minute thing like we were, or your security units that had to know what was going on, that had access to secret documents. This is what it was. All of the paperwork that we were creating was secret. Every bit of information we put on a piece of paper, it automatically was stamped secret. And you had to have a secret clearance to get to it. So you might hear of a lot of people saying they signed a secrecy oath, but there's not really that many left anymore that had to sign a secrecy oath. And I'm sure that there were those of us that were real into it, like BUMED Unit One. I'm sure they knew what our activities were.

I'm sure they did.

I'm sure, and they were checking around. Of course, with myself I had no problem because I very seldom went into San Francisco on liberty. I would go maybe in town on a date *once* in a while. But I was working so much of the time. I'm sure that some of these guys that went into some of the bars, I'm sure they were being observed and listened to and/or being [00:40:00] coached a little bit to see if they would talk. I'm sure because this was a totally *new* era. This is a totally new era in those days. Russia and the United States were fighting at that time to see who could get there with the bestest, the mostest.

Quickest.

And the quickest.

So a couple things. You mentioned that you went back three years ago and met up with some folks. You reunited—

Oh, back out for our little reunion.

Yes. And we'd started to talk about it earlier but I'm wondering what that was like for you guys to be back out there and how you felt about that.

It was a very emotional experience because we had not seen each other since 1953. is the last Well, with Walter Easterday, we hadn't seen him since 1951. But with Fred Little and Danny Amato, we had been together until 1953. The three of us, Fred, Little, Danny Amato, and myself, we had all been at Greenhouse and at the two operations at the Nevada Test Site. But to see each other, that was very emotional. We have one other gentleman that lives up Northeast, but he wasn't able to because of his wife. She had cancer herself, and he wasn't able to make it. And then we had one down in Florida and another one down South someplace. I can't remember exactly where he lives. He wasn't able to make it. So there's one, two, three, Walter, Danny, and myself right now. There's only five that I know. No, wait a minute, six, the gal back East. [Pauline Silvia, interviewed October 18-20, 2005]. So there's six known. Because Fred Little, he was out there with us but he passed away just a few months after we met out there. And he wasn't able to stay the whole time because his mother got sick, so he had to leave. We didn't even get a picture of him.

But yes, we went out to the Imperial Palace. I worked up a deal and they only charged us thirty-nine dollars a night for our rent at the Imperial Palace [Las Vegas]. We had a film producer that came from New York that's doing some film on atomic nuclear type people, and the Imperial Palace allowed him to photograph all of us while we were in the Imperial Palace. We made arrangements to make the tour out at Nevada Test Site and were allowed to go out there in a van rather than one of the tour buses. And we took the film people. They were allowed to take their camera and they allowed me, then, to take my still camera along and actually take

pictures. We saw the old Mouse House and what was called Camp Desert Rock, which is only the concrete slabs where they used to pitch the squad tents.

In conversation with one of the Bechtel [Nevada] security people, we were talking about the Mouse House and they said, Mouse House? You talking about that building down there?

And we said yes.

He says, You mean you people worked in there?

I said yes.

And he says, Well, after the testing was over, he says, after you left down there, that place was so hot for so many years, we couldn't even get in there to clean it out.

And that's where you guys worked.

That's where we were working. I picked up on that right away and I thought, well, boy, that would be another place where we didn't wear film badges all the time, again.

[00:45:00] But we went over to Camp Mercury side of the camp, which has changed considerably. There's a few more permanent buildings in there where there were a lot of temporary buildings and Quonset huts and that type thing. And then we went on out and we saw the spectator area on the west side of the highway going out to the test area. I took pictures of the old benches which look like they're about fifty-some years old. Then we stopped at News Nob, got pictures of the old benches there. They are pretty well weather-beaten; they look like we feel sometime[s]. Then we went on out, had to go through what they call HAZMAT [Hazardous Materials] people area, had to check in with HAZMAT and let them know we were going out there. And then we drove on out. On the way out to this one area, of course we saw the areas where they'd been doing a lot of this Plowshare program. I had heard about Plowshare but I

didn't realize what they were trying to do. Trying to use the nuclear device to excavate land. And I'm thinking, well, if it's anything like they used to use, it'd be so hot for a period of time that it would be economically not feasible to use some device like that and have to wait so many—

And I think that was part of the problem with—

Period of time to be able to go put people in there to start doing what they needed to do after the excavation of the earth. I thought, well, that don't compute.

But anyway, on our trip as [the guide] was taking us around there, I saw something kind of shimmering out on the salt flats there and I asked her if she could take us over there. We went by the old vault which I had seen quite a few times when we were out there, and the train trestle. But we saw [something that] looked familiar to me; sure enough she drove over there, and our test equipment that we used above ground is still sitting out there on the salt flats. And it doesn't look any worse for wear than it did the day that we were using it out there.

And it's still there where you guys left it?

Well, some of the units have broken loose from its moorings a little bit. The contractors put it in pads with anchors in the pads because of the detonation blast, so they're anchored in there pretty good. Some of them have broken loose and moved just a little bit. But otherwise, the pallet, the one that had the opening for the swine in it, the pallet's still laying inside of it. The one next to it where the other swine would be had no opening. They're just not quite as shiny as they used to be fifty-some years ago, but they're still out there. I'm surprised that somebody hasn't gone out there and reclaimed them for the aluminum in them because of the price of aluminum. I'm sure they're not still hot or they wouldn't let the public go out there.

One would think.

Yeah, one would think. I would think that they would know.

Or hope.

But it was a very, very—we were out there almost a week. The only places we didn't get to, we took a day and went to the old garage area just before you get to the test site. We were going to try to make it up to Mount Charleston but at the time I was still on oxygen and I was tired. I was beat after making an all-day trip out to the old service station and then the next day going out to Camp Mercury. And that's an *all-day* [trip]. You really got to hydrate. But it is so much cooler out there because you're out away from those buildings and that desert breeze is blowing [00:50:00] across you. It was in the low hundreds downtown. In fact, it was quite a joke about Jean and I because [we] got into the room and some of them were already there. She went with one of our buddies who had already passed away of cancer and so we invited her. She came along with her daughter. And so she and Jean went off and I was trying to get the room arranged. I had to call the service people up because the room was almost as hot as it was outside. Come to find out, the air conditioner was out of order, so they moved us from that room directly across the hall into another room, with a room. It was two rooms. The sitting area was as big as the normal motel room, with a bedroom and bath area which is as big as that was, with mirrors on the ceiling and around the tub, which would sit four or five people. So we got what must have been the honeymoon suite or something at no extra cost.

Sounds like it. Nice.

Yes. They never have let Jean and I live that one down.

We're coming up toward the end of this CD. We [have] about fifteen minutes left or so. And I guess I wanted to get your thoughts kind of now versus then, [because] now you've got a lot of hindsight. You were in the military, so that's where you guys ended up, as opposed to other

people that worked out at the test site and that was their job. I guess my question is what do you think of it all now? Are you angry about it, about the ways things have been handled?

You mean as far as the way we have been treated as a group, knowing what we know today.

Correct.

Well, there's no sense of being angry because all that does is get your blood pressure up and you don't need that at our age. But what it does do, it merely supports the attitude that the Defense Department has towards its military forces. If you look at it today and you take a Gulf War person that comes back from the Gulf War and he's back there at the Bethesda Navy Hospital or one of the other military hospitals. And he's told that he's got to pay for his food while he's in the hospital. Now for an active duty man to have to pay for his food while in the hospital, this is an attitude and it takes quite a bit for the military through the bureaucracy to realize that hey, somebody's got their wires crossed someplace. When [secretary of defense, Donald] Rumsfeld will tell the atomic veteran that—well, let me go back from the beginning. Every action that the military is involved in, whether it be war-type or humanitarian-type, there is a medal cast. But not for the atomic veteran. Because Mr. Rumsfeld says we don't have enough money.

Why aren't the atomic vets included in that initially?

For a medal?

Yes.

Because Rumsfeld says we don't have enough money.

So literally just because of the amount of money.

Oh, yes, yes. That's a documented statement that he made. We don't have enough money. You see, the federal government never wants to open up Pandora's box, and if they were to admit and do away with dose reconstruction and do away with this non-presumptive presumptive, there

would be Pandora's box. According to some people in Washington. Now when I say the Defense Department, Defense Department can only react according to what [00:55:00] Congress puts down. The Congress has these people out there putting this information together and Congress acts on it and then gives that action to take place to the Defense Department. So it's because of ill-informed people from the beginning; those ill-informed people then pass the information on. The old saying is, old Will Rogers said, Every time Congress makes a joke, it becomes the law. Every time Congress makes a law, it is a joke. Well, this has never changed. It's still going on and it will still continue to go on. It's only the squeaky wheel that gets the grease, and the wheel that squeaks the loudest gets the most grease. Well, with the atomic veteran, we don't squeak loud enough because we were number one, number one, secrecy oath. *We couldn't talk about it.* So when we went to the VA and we had a problem and the VA would ask questions, there were certain questions that we could not answer because we were under a secrecy oath.

And are there still things that you come up against and you can't talk about it?

Oh, no, no. They've lifted [that]. Not 100 percent, but none of us are paying attention to which they've lifted and which they haven't lifted because it is so asinine. It's asinine. Because there's so many other things. And this is one reason that the atomic veteran, those people that were exposed, for years couldn't get anything done because of the secrecy oath.

Because you can't talk about it.

You couldn't talk about it. You couldn't say, Hey, I was out at Operation Greenhouse, I was out at Sandstone.

So you weren't even allowed to say where you were.

No, no, no, no, no, no.

So you were in the military but that's about all you could say.

That's right, during that period of time.

You couldn't say, I was out at Enewetak.

No. Uh-uh. So that's the first problem. Now they've got us squelched down. And we still have members today that won't talk about it because they still think they're under the secrecy oath and they're afraid that the FBI or somebody's going to come walking in the door if they talk about it. That's your first problem. And then once we started talking, we were such a minority. Not only that but when you get out of the service, you got to go to the VA and get that physical as soon as you get out. Now if you haven't established any service-connected disability, then you don't get benefits, because you got to prove it's service-connected.

But you can't do that.

So if you're service-connected and you got a cancer and you say, Hey, by the way, I was at Operation Greenhouse out there, you can't tell him that you got that. So you go to a civilian doctor. Now you're ticked off at the federal government because you know that you got something but yet you can't talk about it until Congress—and Congress only released us about six, seven years ago. I think it was '97. So this squeaky wheel hasn't been able to squeak. Now once they got this thing going, and now you've got people up there with dose reconstruction with a bunch of charts and graphs and mathematical computations on a piece of paper. They've never seen a nuclear device detonated in their lives. And you say, what do you know about Hiroshima? What's Hiroshima? They don't know about Hiroshima, Nagasaki. They don't know. You ask them, what's July the 16th, 1945 [Trinity test]? What's the significance of that?

And they don't know.

They don't have the foggiest what the significance [is]. Yet they're the ones up there, sitting there, using all these mathematical computations and all this paperwork.

For them it's just a job or a process and that's what they do.

It's a job or a process, that's right.

They do their computations and this is what they come up with.

That's right. So like you say, mad, no. But be aggressive and put your energy *into*, those few of us that still have that energy, put it into getting this wall broken down. Get this barrier broken down. Educate people. One of the biggest things that we've started up right [01:00:00] now, here, you can have that, unless you want two or three more.

Sure, I'll take a couple. You guys put this together?

No. There was a document called *Agent Orange Review*. *Agent Orange Review*, for those veterans that were in 'Nam [Vietnam] and got exposed to Agent Orange, and have come down with cancers and come down with diabetes and these things. I went through the commander, because one day I'm sitting here—I was in Vietnam and I'm getting the *Agent Orange Review*—[and] I said, Well, why can't we have [something like this]? That's only back in the sixties. Seventies. Why can't we have an ionizing radiation review? So in our convention in Houston [Texas] in 2002, I brought it up to the board and brought it up to the membership. And they said, Yes, let's do it. So I told the commander – I'm only the vice-commander, so I went through the commander and I said, Either you do it or I will. Get a hold of our secretary presente. And lo and behold, he said sure. He told me, Here's the contact for you, Rosenblum. You and Doc, you work together and get this thing printed out. So last year we came out with the first edition and this is the second edition. Just came in the mail a couple of days ago.

So you guys got this up and going.

We got that up and going. But this is what has not been done in the past. So many guys sitting back say, well, nobody will pay any attention to me. Well, no, they're not going to pay any attention to you unless you get to the man up there at the top.

I mean you can't help wondering just because of the whole issue of secrecy that has surrounded it and because it is something we don't really talk about much.

Have you ever heard about the group of Negroes down South back in the 1930s that were exposed to syphilis by the federal government for a test? [U.S. Public Health Service, Tuskegee Syphilis Experiment].

Yes.

But when did you hear about that? You're not that old, OK? And unless you were researching some program like that, you would never hear about it.

No, it wasn't part of my regular education. I heard about it later in my education.

That's right. Well, you go out here on the streets and take any ten people and if I say "an atomic veteran," there won't be one out of that ten or one out of *twenty* that can tell you what [an] atomic veteran [is], from what era.

Well, that's what I'm saying. This is such a part of our history that's just not prominent.

And why isn't it prominent? Because of the secrecy oath. And those that worked directly with it.

The secrecy oath.

I mean they didn't even tell you guys what you were doing out there.

No. We were just playing it by ear day by day.

For the whole time you were out there?

The whole thing. They say, Here's what we need you to do.

Did you kind of put two and two together?

Oh, I never gave it any thought, even after I retired from the Navy. It wasn't till I'd been retired. Because after the Navy, I went Civil Service for sixteen years. And I didn't have time. I only look back to see what I can take out of it to better myself today. That's all I do. I'm not one to sit around and cry over spilt milk. But we have a lot of atomic veterans. I can show you two letters in here today. I can show you two letters in here today of people that the glass is half empty. Because they've had a bad experience with the VA, the VA ain't worth a nickel's durn, you know? And it isn't the VA. Congress and the Defense Department are the people you need to be getting on, not that poor dingbat in the VA. It's Congress that writes the laws that he goes by. And this is a big problem. I get all this negativism, all the time negativism.

So it's hard to mobilize people.

Oh, it is hard because we [have] been doing it this way for twenty years. We don't want to rock the boat. Or, I tried that and you can't get it done. Boy, that's like waving a red flag in front of me when somebody says you can't [01:05:00] get it done. I'm not that way. Not that way. It was just like this bulletin here put out by the VA. They mail this out to every member of NAAV, and what I do is I send in a list of who wants how many copies. Now I got a hundred copies right there, and I can send in and get another hundred copies. But this is the way we have got to get the word out and wake people up and advertise NAAV.

The other program was the poster program. I've got posters here that we weren't seeing at the VA hospitals. They weren't there. And so I got a hold of my people in Washington.

Oh, yeah, look at that.

Got a hold of the people in Washington and I says how come? [They reply], Well, we're sending them out to the hospitals. So I got onto the VA hospital out there at La Jolla and I said, where are they? She didn't know anything about it. Come to find out they were going

to the Mission Valley unit down here but weren't getting out to the La Jolla hospital. So I got a hold of my people in Washington, and I got a hold of my state commanders and I said, How many of you people are seeing these? Nobody! So I said, Check around and see if they're getting them. So I'm able to send out a small one on e-mail and I sent this out. Now I've got Washington sending whoever, my state commanders taking these things out and distributing them personally to the VA hospital, to the VA units.

So the information was not getting out there anywhere.

The information is not getting out there because [of] the VA. And you go to the VA hospital to get on the Ionizing Radiation Registry, you've got to know. This is why we have to educate our people, our atomic veterans, and this is one thing I do. I've got all kind of information here that when a guy contacts me and says, I'm an atomic veteran, I want to go to the VA, I give him a whole package of stuff and I say, You go through this and you will be as educated, if not more educated, than the people at the VA. Because there are so few of the atomic veterans and they don't know what to do with an atomic veteran when he walks in. There's only one unit at each VA hospital that is trained in any way at all to do the physical which gets you on the Ionizing Radiation Registry. Now this same group is the same group that does the Agent Orange physical, the DU physical for the Gulf War people. They're the same group and they're only at the VA hospital units.

So it's really limited.

It's limited, and there's only a limited group. So if you go to one of the clinics and say, I'm an atomic veteran, I want to get on the Ionizing Radiation Registry—

They may not know.

They may tell you there's no such thing. And it has happened. Unless you get to the right unit. Because in the VA system you got the administrative side and you've got the medical side, and

unless you go to the administrative side first, the medical side says, I don't know what you're talking about. The medical side has no radiology specialists. Nuclear medicine. They have nobody qualified in nuclear medicine. Radiological diseases.

So it's almost like this whole thing never existed.

That's right. That's what it is. And they don't want it to exist. The Congress has just now cut—has not really cut the budget—but Congress has not allocated the amount of money to cover the old budget plus the new requirements that are coming in with all of these injured from the Gulf War. The injured, sure, we had 1,500 and I think we're up to 1,500 and just a little less than twenty killed, but who knows the total figure amount of wounded and injured and those now remaining? They're in the *thousands*. I heard the figure the other day but I didn't program it in, but it's in the thousands that are now under and/or are going to be under the VA program, and Congress has not allocated the extra money to cover those people. So when we're trying to go back and make the Congress pick up for *us*, what *we* want now, that's hard. That's hard.

OK, we just have about two minutes left on this disc. I don't want to interrupt you but I'm just wondering [01:10:00] if there's anything that we haven't covered that you want to wrap up or that you can think [of] that's important to this.

The only thing I can think of that whoever hears this or reads it, that the information gets out; that there are service personnel that are in dire need of assistance and only through the Congress can this be accomplished, and through the Defense Department and on down the chain. But it takes people with pressure on our Congress to see that the serviceman not only is praised when he's doing a good job, but [also] that after he does that good job. Anything that he falls to and is injured in any way in the future, that the government praise him as well in being sure that he's taken care of after the fact and not merely wave the flag while he's over there ducking the

bullets. But when he comes back missing an arm or a leg or needs a kidney transplant or has a disease which the federal government created because of either nuclear exposure or Agent Orange exposure or DU exposure, that he be taken care of thereafter and not be thrown off into the corner and forgotten about because he's no longer dodging the bullets.

Right. Wow. Lots of information in this. Thank you so much for talking on disc about it.

My pleasure. This is the way we get our word out. This is the way we get the word out. It's the only way.

[01:11:58] End Track 2, Disc 2.

[End of interview]