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

Interview with James Hodges

January 17, 2005
Las Vegas, Nevada

Interview Conducted By
Suzanne Becker

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The material in the *Nevada Test Site Oral History Project* archive is based upon work supported by the U.S. Dept. of Energy under award number DEFG52-03NV99203 and the U.S. Dept. of Education under award number P116Z040093.

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

Suzanne Becker: *First if we could just start with some background, where you're from, how long you've been out here.*

James Hodges: Well, I've lived in Las Vegas since 1956, and came here from southern California.

Whereabouts?

In Lomita, California, which is by Torrance, California. And Harbor City, I lived there in Harbor City, too. And moved up here. I was going to get rich in the hotel business, like everybody else, I guess. And that didn't work out, so I went to work at the [Nevada] test site. In fact, the day I got a call from EG&G [Edgerton, Germeshausen, and Grier], I also got a call from REECo [Reynolds Electrical and Engineering Company], and I decided I would go to work for EG&G instead of REECo. Their main office was in Boston and, I don't know, I just decided to do that. I'm glad I did.

I went out to the test site on bomb testing. Well, that's what we called it originally, was "bomb testing," and then they changed it to "weapons testing," and then they changed it to "device testing." They call them "devices" now instead of "bombs," but they're still bombs. I guess the politically correct thing is "devices." And one of the things I remember about the test site, both at Rover and at weapons testing, was when we first—the first weapon I ever saw go off, I had worn the glasses like they said, the dark glasses to protect your eyes. And I took them off and you couldn't hardly look, so that was the only time I ever wore those glasses. I quit wearing them. After that one, the bomb went off, I would just kind hide until I could look and

see it, because when you take off those dark glasses, your pupils are dilated real big [and] all the light is a lot worse. So I quit wearing those goggles. I wore them once.

What did you think about the first time you saw a bomb go off, or you saw the cloud?

It seemed pretty thrilling to me, and of course I've got a lot of pictures, or had a lot of pictures. I gave most of them to the [Atomic Testing] museum. And I guess we believe what the government says, that there was no danger. Of course, in retrospect, there was a lot of problems with radiation *from* the bomb testing, but at that time I didn't think much about it. It was no big deal.

Sure. So if we could just back up briefly, you came out here in 1956.

Yes.

And you were going to go into the hotel industry but didn't do that. Instead you got an offer from REECo.

Yes. And EG&G.

And EG&G. And what were those offers for? What was your background at that time?

Well, I had studied geology at UCLA [University of California, Los Angeles]. I had three years of college, and both of them seemed to think that with that much education, that I would fit somewhere in their program. So they both decided to hire me and, like I say, I'm glad I selected EG&G.

How come?

Well, I met a lot of, I think, more educated people at EG&G than at REECo. Most of the people were physicists and mathematicians and high degree people. Physicists, there was quite a few physicists. I decided that that would probably be a little better for me in terms of career and learning to select that. And it turns out I was probably right. I'd had a lot of courses in camera

[00:05:00] repair and maintenance, getting along with people and selecting teammates to work with me. We went to a lot of places, too, like Sandia [National Laboratory] down by Los Alamos, and I've been at Los Alamos [National Laboratory]. And of course, a lot of the people for REECo didn't go overseas, or if they did, they were just—a lot of them were security and drivers of the boats over there in the atolls. There were very few technical people from REECo. So that's one of the reasons I'm glad I picked EG&G, Edgerton, Germeshausen, and Grier. They shortened it to EG&G.

It's much easier to say.

Yes. And a lot easier to spell, too. We used to get mail for all different kinds of names on that.

I bet.

Yeah. In fact, they used to publish them once in a while, the different ways things were spelled. And like I say, the people that owned the company, started the company, were quite brilliant. A lot of them had their own patents already. And then there was Doc [Lewis] Fussell. who was quite smart Most of those people are gone now. Doc Fussell, Mr. [Herbert] Grier, he's not there with us anymore. But like I say, I think I picked the right one in the long run.

And you were hired by EG&G to take pictures.

Well, not originally. Actually, I went into that pretty quick, too, into the taking pictures. I worked with Harry Smith who had some cameras called, oh, well, what were those called? We were up at Building 400 and we had rotor cameras. They had a rotor in them that turned 4,000 rps [rotations per second] and they would—oh, streak cameras, that's what they were called. When the bomb went off, they made a streak with time and that showed you, since you knew what the speed of the rotor was and how long the film was, it showed you how big the fireball got. They used that for measurements on the yield, yield measurements. And I did that quite a while. When

I wasn't doing the streak camera measurements, I was working in the office in the other photo camera stations. We had photo stations everywhere sitting out there with cameras in them, all types of cameras, all speeds from Rapatronic cameras that took a picture in four billionths of a second to so-called cloud cameras that took a picture every few seconds and traced the cloud as it was going up. That was one of the things that we had to do because we were not allowed, supposedly, to let the radiation leave the test site. That's why they always had wind direction going. And I was trying to remember the other day, there used to be a blue light down at the REECo headquarters where if the shot was on that day—I can't remember if the shot was on or off, the blue light was lit. I think if the shot was on, the blue light was lit.

So that's how you knew it was going to be happening.

Yeah. So then we had to get on the bus and go up to the test site for the shot. And it was pretty exciting. I remember it seems like so many people had nicknames. In fact, I wrote down some of **[00:10:00]** them. Most of these guys are gone. I was Hodgie Baba. That was from a song that came out in the fifties about Hadji Baba. And we had Blue Eyes and Banjo Eyes and we had Big T and Ace Chavez and Chief and Gordo. And we had Mother Tucker. That was Ed "Mother" Tucker. He was one of the people who went up on the very last shot when we had the moratorium. He went up to disarm the bomb because we couldn't shoot it because the wind was bad. We had already armed it and everything was all ready to go, and it was sitting on a tower out there. And Ed was one of the ones that went up to disarm the bomb. He's not with us anymore either. Then we had people just known by initials only, like T.R., Ted Rotunda, he's still around. And most of these other people—Blue Eyes and Banjo Eyes are still here, but all these others I just mentioned are gone.

And you guys all worked together at EG&G?

Yes.

Doing the same type of work?

Oh no, some of them were timing and firing, T&F, some were alpha radiation detection stuff, some of them were photo. Big T was a boss and Ace Chavez was a boss. He was my boss, in fact. And that's all the nicknames I can remember. We had a little bit of a competition between the Las Vegas people and the Boston people who would come out. The competition was all friendly, but it was competition. We always called them "the guys from Beantown," the bean counters. I remember once we had a shot going off about four in the morning, or it was supposed to go off, and everybody was talking on the net and talking back and forth. And of course, when shots were going on, you didn't get much sleep. You just slept where you could, at your desk or laid down on a desk or something and just tried to get rest whenever you could, because after the shot you had to go out and get on film recovery, pick all the film up and bring it back in.

So how did that work? You went and put film or cameras out in different areas?

Oh yes. Yeah. Let me get a picture. I'll show you a picture of these. I think there's some in here.

[00:13:24] End Track 2, Disc 1.

[00:00:00] Begin Track 3, Disc 1.

Some of the pictures that we took are still classified. One of them was taken by a Rapatronic camera. I had a streak camera with a sixteen-foot telescope on it and it looked right into the cab of the tower and you could see the case of the bomb. We have a picture of a crack appearing in the case as it started to blow up. That picture's still classified. And then I took one at Johnston Island from the deck of the *Boxer*, that's an old aircraft carrier with an old wood deck, it was an old one. And they classified the picture because it was some clouds which had, of course, the aerial bomb went off way up in the atmosphere and there was a cloud shaped like an angel, so

they said, Oh, we don't dare publish that picture. People will say we're punching a hole in the sky and all the air's going to run out and everything else. And so they classified that picture, and as far as I know, it's still classified. I don't think it was ever released. And I was over on Rover on TNT when they blew the reactor up on purpose. That's called TNT, a transit nuclear test, where they withdrew the rods from the core of the reactor *real* quick; so quick that it blew up. And nobody knew what was going to happen, whether it was going to blow up or if it was just going to warp, or if nothing would happen. But it did blow up and threw radiation everywhere, of course. Not too bad because there wasn't too much in the core of the little reactor there. Rover was supposedly an engine for a rocket, so there wasn't that much radiation in it. But it did spread it all over everywhere. I remember once, we had our bunkers down so that the camera's aimed up, and then it went through mirrors. That was the only way you could get close enough. They had to be down below so they wouldn't get irradiated; the film had to be below the line of sight of the reactor. And Kenny Graham went in there to recover some film and he got bit by a black widow [spider]. His arm got just as hard as a rock or a piece of wood, and he never did go to the doctor. He just said, Big deal. And of course Kenny Graham was a tough little kid anyway. And so we got all the film out. He was the only one that got bitten. The spiders loved the dark down there in the below-ground bunkers.

Now were you guys out in the field when they were doing the tests, with the cameras or positioning the cameras, or you would go out there to retrieve the film afterwards?

Oh no. Retrieve the film afterwards. The cameras were anywhere from, oh, I guess probably the closest was a couple of miles.

So you would set them up beforehand.

Yes.

And then the test would happen and you would go out afterwards.

And then recover the film, yes.

You mentioned, a little bit earlier, radiation. Did you guys think about that much?

No. We had film badges. And I remember once out on the big ones, out in the islands—and they were big ones out there. You're talking about forty megatons as opposed to kilotons in the little ones in Nevada. And I went out on a recovery and we went in by helicopter, landed and got the film. I had a meter with me, of course, to check the radiation, and it was really hot.

When I got back I told them, I said, Well, I don't know how you took the readings out there.

[00:05:00] They said, Well, we went down with a chopper about forty feet above the ground and took a reading.

And I said, Well, it was so hot down there that I'm not going on any more recoveries. What do you think of that?

And I didn't go on any more recoveries.

They said, Well, we're going to send you home.

And I said, Fine, I'll get on the next plane.

Well, they didn't send me home. I had to stay there and work in the office. But I didn't go on any more recoveries either.

Probably a good thing.

Yeah, probably, because I picked up a lot of radiation on that one trip. But like I say, we never thought a whole lot about it, even out there on the big ones. And when the big ones went off, you could see the boats go down and they'd sit on the bottom—our M-boats and T-boats we used to go up and down the islands with—and they were sitting right in the mud. Then the water came

back in and they came back up. In fact, when they were talking about the tsunami, that reminded me of it, where the water went out and then came back.

Wow, I didn't realize that. So the explosion caused a big wave.

Oh yes, a lot of water would go up in the air, and of course that lowered the level right close to it there. When the water came back down, why, the boats came back up off the bottom. The first big one I watched, of course, I still wasn't wearing my goggles, but I'm watching it, and I forget how big it was, but it looked like it was going to surround us. It just looked like it was coming right around this way [indicating direction]. We kept watching and watching, and then up at about a hundred thousand feet, it had a big ice cap on it. You could see it *really* neat, shining there, it had an ice cap from the moisture, and of course it got up to where it was really cold. It's not cold there in the islands, of course, it's warm. So we could see those ice caps on top of them. Kind of exciting.

Like I say, we never thought much about the radiation. It was just one of the things [that] went with the job. I guess downwind in Utah they had thought a lot about it. But we never thought much about it.

Right. Can I ask you to talk about your thoughts? When you got involved with the program, this was a fairly new program and kind of an exciting period. Many have said it was a really exciting period of history and in their lives, and I'm just wondering what you thought about getting involved with operations at the Nevada Test Site?

Well, originally, I was all for it. Towards the end, when I finally quit EG&G, I decided that they just keep testing the same bombs over and over again and I couldn't see any reason for that. Maybe there was but I couldn't see any reason for that, so I quit EG&G. Got out of the business because I thought, well, there's no reason for this; no reason to keep shooting the same ones.

Whether or not they were the same ones, I don't know, but it seemed to me like they were, at least for the same purposes and reasons. So I just got out of the business.

What year was that?

Nineteen seventy-one, I guess it was. Yeah, because I was with them fourteen years, a little over fourteen years with EG&G. It was '71 when I got out, when I quit. And I went to work—well, I had my own hobby shop for a while and went broke doing that, so I went to work in retail sales and been there ever since, till I retired here. I worked for Payless, Thrifty, Rite-Aid for like seventeen years. And my wife's still working for them. She just works part-time. Keeps our insurance.

Which is a good thing these days.

Yeah, that's true. I guess that's about all I can think of.

You'd mentioned Enewetak a little bit earlier?

Yeah.

What were you doing out there?

Same thing, taking pictures up island and down island. Most of the time we went by boat, went **[00:10:00]** by LSTs. They're landing crafts. In fact, that's what REECo did out there was security and running those boats up and down the island. When I say "up and down the island," that means around the atoll. In fact, I remember one night we were coming down island, we'd picked everybody up and we were coming back. All of a sudden the boat stopped and the guy's out there with his spotlight and he looked and there's a guy out there on a surfboard. They pulled him aboard and of course he was drunk. And they said, `What are you doing?` And he said, `I'm going to Honolulu.` And of course that was only like two thousand miles to Honolulu. So we took him on board and took him back to the main island.

And we used to have parties there on the island. I can remember once they said that from now on, that EG&G will not have parties on an inhabited island. If they're going to have a party, they're going to have to go over to one of these islands where there's no people because most of us had to stay up all night long listening to you. We were kind of rowdy sometimes.

I remember once, like I say, we had competition between Vegas and Boston, and one time we had a guy come in from Boston and he was really a—told a lot of jokes and stuff. So Beecher, who was Blue Eyes, old Dick Beecher, he's still around, said, Now listen. What we're going to do is when he tells a story, nobody's going to laugh, no matter how funny it is, and they said, You, Hodges, you've got to get out of the room because we know you're going to laugh anyway. So I had to go next door and listen. And the guy come in and he told this, and it was a funny story, and Beecher says, That was very funny, and nobody laughed. *Crushed* this guy, you know, because you didn't have much to do out there but tell stories and tell jokes and go to the officers' club and have drinks. And so he decided he wouldn't tell any more stories for a while. They only pulled it on him once, because he *was* funny. But we had a good time.

And I remember when I was in Honolulu for the shots there, I went there for a high altitude sunspot test, and the guys from Boston took *really* good care of me. I shot a lot of pictures and they processed all my film for me and they really took care of me while I was there in Boston. I was glad of that. They were good people. We just had a little competition with them.

So did the Boston office do similar things as the Las Vegas office?

Oh yes, we had photo people and timing and firing and alpha measurements and neutronics, they called it, NET. We had one guy who was called NET, and he monitored all the radiation equipment. I don't know where he is now, Ray, I haven't thought of him in a long time. But that was out at the Rover test where we monitored a lot of neutronics because of the reactor. Reactors

were, of course, radioactive and the idea was to—once we went to San Diego, we had a test on what they called a pusher plate, and the idea was that you have a spaceship and you'd have this big plate below it. You'd set off A-bombs underneath it to push—it was a dumb idea but they tried it anyway—and what they did was they had this big plate and then they set off an A-bomb beneath it to see what it would do in terms of how long the **[00:15:00]** plate would last. [The idea was to place a thick, metal plate below the spaceship and drop A-bombs to go off below the plate, which would propel the spaceship into space]. They decided after one shot that that wasn't a very good idea and they weren't going to try that anymore. So they didn't.

Did you ever personally get any shots? Did you ever bring your stuff out there and get any pictures?

Oh yeah. In fact, I don't know why I can't—I've got pictures of the Redstone rocket there that was on Johnston Island that set the two Teak and Orange shots off at high altitude. And I just can't figure out where all my shots are. Maybe I just gave them all to UNLV [University of Nevada, Las Vegas]. Or I mean to—

The museum?

Yeah, the DRI [Desert Research Institute] museum. I just looked. I don't know. Maybe I just didn't find them in there just now. But wait a minute, I think I just thought of one place they might be.

[00:16:22] End Track 3, Disc 1.

[00:00:00] Begin Track 4, Disc 1.

Well, what else? Anything else you can think of?

Well, I have a few technical questions. I'm wondering if you built the bunkers that the camera went into or those were already set up? How did you guys do that?

Most of the construction was done by REECo. Now of course our trucks, we put everything in our own trucks and we drove our truck stations to wherever they needed to be.

And then you guys set up the equipment?

Yeah. Well, we usually just kept the equipment right inside of them, in the truck. Then we'd move it into place and check the focus and aiming of everything.

Right. Then obviously to get the picture, there was something that triggered it or you had a remote that you could—

No, that was timing and firing. From the control point, from the CP, we had wire that went into the station to turn everything on and off.

And so how was it working for EG&G? Seems like you guys were a tight crew?

Yes. [Looking through papers] I got some more papers here somewhere.

So what was Las Vegas like when you first got here?

There was like forty thousand people in the whole valley.

So it's changed quite a bit.

Oh yeah.

[Continuing to look through photographs]

Did you say you wanted to take some of these and—?

Yes, I'll go through them when we're done. There are a couple I saw in there that I would like to scan, if that's possible, and get a little explanation for them.

OK.

[Continuing to look through photographs]

So a majority of the pictures that you guys took were used for research purposes or just development or to monitor things?

Well—I thought I saw a picture of a station here. [Looking through photographs] No, I thought I saw a picture of a camera station here but I guess not.

Yeah, there were a couple in there.

Yeah, well, this is the TNT ones.

[Continuing to look through photographs]

[00:04:17] End Track 4, Disc 1.

[00:00:00] Begin Track 5, Disc 1.

Is there anything else that you want to add?

Well, I can't think of anything right offhand.

OK. I'm curious because you were out here fairly early, and at a crucial time in Las Vegas's development. As you mentioned, there were only forty thousand people when you got out here, and so I was wondering if you could talk a little bit about what that was like and what it was like in connection to the test site? It seemed like it was a pretty growing part of Las Vegas's culture at that point in time.

Well, downtown Fremont Street was much more important to local people then than it is now. You could go downtown on Saturday night and run into ten people you knew. And of course now you can't. But the test site was just kind of a secondary thing. And Sahara Street was called San Francisco when we first moved here, San Francisco Street. In fact, I gave directions to a guy coming to my house from California and I told him to go down San Francisco and I had forgot they changed it to Sahara. He never found my house. But like I say, downtown Fremont Street was much more important to the locals than it is now. Now the Strip is more important, even to the locals.

EG&G was one of the big employers in town. I was number monthly 129, I was the 129th employee in the local EG&G. And we had a good group out there. We had a lot of fun out at the test site.

Sounds like it.

We did wild things, too. I remember once we—there's a movie house there and they kicked us out because we didn't have shirts on, we just had T-shirts. So we went and got a work order and got a privy, got an outhouse, and loaded it onto a pickup and took it down and set it in front of the theater and put a big sign on it that said, "No T-shirts allowed." And we would've got in a lot of trouble but one of our honchos, Al Lusk, saved us. He saved us all by getting the big wheels off our back. In fact, he did that more than once. We got in trouble a few times. I remember once a whole bunch of us from EG&G got called in front of the head of the test site up there, and Clint Webb who's now in Los Alamos said, `Let's not go making a mountain out of a molehill.` Of course, that wasn't the thing to say. But Al Lusk got us out of that, too. He got us out of trouble there. He was a good man. But we were kind of wild, like most young people, I guess.

Now did you stay out at the test site when you were recording the shots or did you commute out there?

Well, we used to commute, but most of the time—we commuted to Rover all the time, almost every day. But out at the test site, sometimes we'd be out there ten, twelve days in a row without ever coming home because we had the shots; especially towards the end there when we were trying to get all the shots off before the moratorium started.

What was it like out there, the ambience, the atmosphere when the moratorium was announced?

I'm not sure I remember. I don't think anybody seemed real concerned about it. We didn't think it was going to hold anyway, that they wouldn't have a moratorium very long. As it **[00:05:00]** turns out, they did. There's still a moratorium on above ground shots. But we didn't think it'd last very long, so nobody seemed too concerned about it. We figured the Russians or somebody would break it and then we would go ahead and say, well, you did it, so we're going to. But nobody ever did. I guess it just faded away.

Now after they had a moratorium on the atmospheric tests, how did your job change, or did it change?

Well, yeah, most of my shots now were taken in the tunnels where we had line-of-sight things to detect the radiation. Line-of-sight for alpha detectors, radiation detectors. And we would have these line-of-sight pipes that come down to the station where the scope cameras were, and then the scope cameras would trace the radiation by amount of light. The scope camera would show a trace and the amount of radiation would define the size and the shape of the trace. And that was practically all we did then, after above ground was over with. They were all below ground then, and everything was on scope cameras.

So it changed a bit.

Yeah, quite a bit. Our cameras now were all scope cameras. They just showed these traces. They didn't show any fireball or any light or anything.

Did your family ever have any concerns with your working out there?

I don't think so, not that they mentioned.

Suppose they would've told you?

Probably not. Though I was a little worried about the radiation there towards the end. In fact, we probably all were a little bit.

And you used to wear the film badges out there.

Oh yeah.

Were you able to get your records?

I sent for them. I've never gotten them yet. Yeah, I never have received them. But I've lived this long. I guess the radiation is not going to bother me.

Mrs. [Zora] Hodges: Yeah, but we did used to worry about it, of course. Everyone did.

James Hodges: Well, yeah, kind of.

Mrs. Hodges: You watched your badge real careful. There was a time your badge turned and you weren't ever going back out there. And your friends did, and a lot of them have died.

James Hodges: Yeah, a lot of them are gone.

Mrs. Hodges: Different kinds of cancer.

Do you stay in touch with a lot of the guys that you used to work with?

Just one of them real regularly, old Blue Eyes. I stayed in touch with him. And the rest of them, I haven't. Now when Ace Chavez died, T.R. and Banjo Eyes were at the funeral, and I went to the funeral. But like I say, a lot of them are not here anymore. I remember one guy from South America, I can't remember his name right now. Craven. Peter T. Craven, Jr. He died of some real rare liver cancer. Very, very rare. And we figured it was caused by the radiation. In fact, his brother owned a gun shop here in town. I don't know if he still does or not. Craven's Gun Haven.

It's a great name.

Yeah. I don't know if he still owns that or not.

Did they ever talk to you guys about radiation, mention it or say anything?

Not really. RADSAFE [Radiological Safety] would mention it—you've got to have a new film badge—and we had to get a new film badge every month.

Which is a good thing.

[00:10:00] Yes. But in fact, if you didn't have your film badge, you had to get off the bus at the main gate and wait till you got a film badge. But nobody ever seemed to be particularly worried about the radiation, other than maybe in the back of our mind.

Sure. Was there any kind of decontamination process or anything that you guys went through coming back in and out from the field?

Well, yes, if you picked up radiation, then you had to go through a wash cycle. You had to take all your clothes off. And we usually wore booties in, and masks and gloves, so usually that's all you had to do was throw those away. But sometimes you got—I never did. I was lucky, I guess. But sometimes you had to wash, and wash your hair and scrub and scrub and scrub till there was no radiation left. Some guys did that, especially if they went into the tunnels, they had to decontaminate real bad. But most of my cameras were out on the outside, or in stations outside.

Which is good, sounds like.

Yes. Even when we were below ground, all the scope cameras were outside in stations.

Any highlights? If you had to think back, are there any things that particularly stand out in your mind as good or bad or just stand out, period? Any times?

Well, no, just the fact that we had a lot of fun, and I had a lot of good friends out there. We did a lot of wild things.

It sounds like it. I've heard some stories.

Get our trucks out there on the dry lakes when it would rain and then it would freeze and we'd *slide* on the ice. You can slide a long ways on that ice when you got up a head of steam.

[Laughing] Lucky it never broke.

Well, it was usually only three or four inches and it was frozen solid. And we could see the ice out there. In the summertime when it rained, we didn't go out there because there was too much mud. But we had a good time most of the time. I can't think of any *special* thing that stands out. Just kind of all of it.

I would imagine that the whole experience stands out.

Yes. There's not too many of us around that saw all those bombs go off, because counting Enewetak and out in the islands, I saw over a hundred of them go off.

Really!

Yeah.

Still think that's pretty impressive.

Yeah, and it was pretty thrilling. *And* if I had to do it all over again, I guess I'd do it again, even with what I know now about the radiation.

Mrs. Hodges: I'm not so sure. I'm not so sure about—you know a lot more now than we did then. The government knew, but they weren't telling.

James Hodges: Yes. That's true. But it didn't hurt me, hurt me, hurt me, hurt me.

Mrs. Hodges: [Chuckling] Turned your hair white.

James Hodges: Yeah, it did, and I was thinking about suing the government because my hair turned white, but I didn't see how I could prove that.

Anything is possible.

Yeah.

How close were you to some of these shots?

Well, it seems to me about the closest I've been was probably about five to six miles.

And you could feel the shock wave and the heat?

Oh, and the heat, yeah. You could see the shock wave coming, and then it would go back. In fact, we were at News Nob one time one time and everybody had been drinking coffee. There was coffee cups on the ground, and the shock wave came and blew all the cups this way [indicating direction] and when it went back the other way, all the cups went back that way.

[00:15:00] *That's powerful.*

Yeah. Yeah. All that air going up in the air, of course, with the heat from the weapon where it's rising—let me look and see if I skipped any of my notes here anywhere.

OK.

Oh, we had a couple of—remember the code talkers, the Navajo Code Talkers?

Yeah.

We had one of those out at Rover. Cecil Tsosie. He was one of those Navajo Code Talkers.

So tell me about that.

Well, somewhere I've got a note that he wrote for me, because the Navajos don't have a written language, and he wrote it in phonetic form. I don't even remember what it was. But he was a code talker in World War II and he died of a heart attack. He was adopted by a very rich couple in San Francisco when he was very young, and they gave him all the money he wanted, but the only thing he really made any concessions to was he owned a Rolls-Royce. He lived in a trailer but he owned a Rolls-Royce, and he liked that car. He died one morning of a heart attack. He didn't come to work and so they went over to his trailer and there he was. He'd died of a heart attack. He was, I guess, in his fifties then.

And he worked with you guys.

Yes. And we had another—we had Charlie Amadon He was an Indian, full-blooded. I think, Cherokee. And he stuttered. The only Indian I ever knew that stuttered. And he had a *terrible*

stutter. But everybody liked Charlie. He had a company after the test site closed, after EG&G closed. Something to do with electric cars or with green power. I don't remember just what it was.

Good foresight.

I don't know if Charlie's still around or not. I don't think so.

And so those guys were part of your team or your unit?

Yes. They were both on the Rover project.

And everybody got along?

Oh yeah. We had a good—in fact the chief, he's gone, he died of a heart attack; he took care of all of us. He must've had a photographic memory because he knew every job you were on and he always filled out the time sheets every week for everybody. He was fantastic. He'd write down what job you were on. If you were off on vacation, he knew it. Everything about you, he knew, and put on the time sheets. He was an unbelievable fellow.

That's a good boss.

Well, he wasn't even really a boss. He was just kind of an administrator.

The guy in charge.

But he took care of all of us, made sure that all the time sheets were filled out and sent in correctly and sent in on time. He was a real jewel. Ray Harkins. Unbelievable fellow.

Important person to have on the job with you, to have those people around.

Yeah. Yeah, he was.

Mrs. Hodges: I remember Ray.

James Hodges: Yeah, Ray Harkins. Everybody remembers Ray. He was a good guy. And Big T, he's gone, but he tried to be so mean and so terrible to everybody, but he was just a big

[00:20:00] pussycat. I remember when I left Rover—I was the historian and camera operator over there on Rover— and then when they were all through there with Rover, I went back to weapons testing. He called me in and said he was sending me back over there, and he whacked me on the knee and said, `OK, good luck now. We'll see you later.` Just a big pussycat. He wasn't so tough.

You mentioned that you're a historian for this. What does that entail?

That entailed writing down the history of each reactor run, when you started, when you opened MV8A, which was the main gas. You wrote down everything when it happened, when you opened and closed valves. And I would have the time and write it down, too. Then when I was all through, I would type it up and it would be a resume of that run. That's what the historian did.

How long did you do that?

Well, I did it along with the camera operator most of the time I was there. In fact, I had a picture there once of the control room. I probably turned it in to DRI. Showed the control room and all the people, most of them Los Alamos, some EG&G and me. In fact, it might be in here.

Yeah, there was a picture of the control room in there.

Yeah, I thought I had a colored one, too.

Oh, I didn't see that.

Yeah. I might've turned that in to DRI.

Yeah.

Anything else you can think of?

Well, I think we've covered a good chunk of what it was like.

It was a lot of fun. Exciting. Always something going on day and night.

I bet. How many hours did you guys work on average?

Well, most of the time we worked fifty-four. We got paid for fifty-four.

A week.

Yes. But usually that meant if you were on a fifty-four-hour week, you usually put in sixty-four or seventy. Most of the time it wasn't worth it to go home, then come back out for a shot at four o'clock in the morning, so you just stayed there. And when we were on a forty-hour week, there weren't many shots going on and we got to go home every night. That was for both weapons tests *and* Rover. If there were no reactor tests, why, we got to go home. Otherwise we stayed out there for the test.

Was that difficult, being gone for those periods of time?

Well, most of the time you were so busy, you didn't notice how long it was. You were loading film in cameras and picking it up, and then I would hop on a plane and take the film to L.A. [Los Angeles] and get it processed and bring it back. In fact, one time I brought back some film showing the inside of the reactor when it was running, and it was the only time I ever got a hand for my pictures [clapping] a big hand for pictures of that particular run. It was pretty exciting to see all those rods going back and forth. We had, of course, a secure area in L.A. to process it, Cinema Research.

I bet. You had to.

Yeah, they were all secure there.

And would the test site just fly you out there to—?

Oh yes. Yes. I [would] hit L.A. and then rent a car and take the film in there for processing and evaluation. And we finally got our own—I'm trying to remember why I took that to L.A. because we had a big trailer to do processing in, [and] **[00:25:00]** we did a lot of other film there.

So it was just certain batches of film that you would take to L.A. to have processed.

Yes. Oh, it might've been partly because the one trailer was over at weapons tests, that had all the film processing in it, and the only time I took film to L.A. was from Rover. We didn't have a processing trailer over there.

OK. So just from Rover?

Yeah. So that might've been. I don't remember just why now, but that sounds reasonable.

That makes sense.

Yes, because they were using the film trailer over there for *their* film, so we just went to L.A. I'll have to think about that for a while. I don't remember just why. Find somebody that was on Rover and ask them.

Well, I definitely appreciate you taking the time this morning.

It's no problem. It's kind of nice remembering how much fun I had.

Yeah, it sounds like quite an exciting time.

Yeah. Yeah, it was.

Mrs. Hodges: Yeah, it's nice to hear how much fun you had.

James Hodges: [Chuckling] What time is it?

Mrs. Hodges: Well, you're fine. It's 11:30.

James Hodges: Oh, OK.

Mrs. Hodges: I stayed home taking care of the four kids while he was off traveling around the world.

Was [that] hard when he was gone?

James Hodges: I went to a lot of places. I went to Los Alamos—

Mrs. Hodges: Sixteen weeks, one time.

Oh really?

Mrs. Hodges: Yeah.

What were you—?

James Hodges: Sandia Base and overseas on bomb testing.

What were you gone sixteen weeks for?

James Hodges: Overseas.

Mrs. Hodges: Enewetak.

James Hodges: Enewetak.

Mrs. Hodges: Johnston Island.

James Hodges: Johnston Island.

That's a long time.

Mrs. Hodges: Yes.

James Hodges: Yeah. And then Hawaii. I was there for the so-called high altitude sun tests. We took pictures from a high altitude airplane.

So you took pictures from the plane.

Yes. Of the sun. I don't remember just why.

And did you take those, or again did you have equipment set up to do that?

We had equipment set up to do it. I shot some stills from Johnston Island, from the deck of the carrier, I shot some of those stills. That's in fact the one where the angel was, I shot that one. And like I say, that one's hid somewhere far, far down in the—

I wonder what they did with those.

I don't know. They probably still got them.

That's too bad. That sounds like a great shot.

Yeah.

So none of your stuff ever went out to the media or the press.

No.

This was just all for in-house EG&G?

Yeah. I guess since then they released some of the shots. You see them in these movies, which is always kind of humorous because you see the weapon go off and you see all the light and you hear this big *boom!* Well, it was a long time before the sound got there.

The sound had to travel.

Yes. But you got to have that right away in a movie. People would quit watching if it was silent for a while.

Sure. So the mushroom cloud has become a pretty significant image in our culture.

Yeah, they had a Miss Mushroom Cloud or something back in the—

Right, the Miss Atomic—

Yeah, Miss Atomic Cloud or whatever it was.

Big theme in Las Vegas at the time.

Of course, every time somebody sees a mushroom picture, they think of Las Vegas.

Yeah, that's interesting.

They don't think of the Nevada Test Site. They think of Las Vegas.

Right. And you captured a lot of those images.

Yeah.

Did it seem like at the time people in Las Vegas were aware of the test site, were conscious of it?

[00:30:00] Well, yes. I think so because—

Mrs. Hodges: Yes. They used to warn us when the shots were going off, especially in the higher buildings, they'd feel it.

James Hodges: Yeah, they'd feel it, and also, of course, you could see the light from Las Vegas. And EG&G had probably a hundred and fifty, two hundred people working there, and then REECo had a lot of people.

So they all lived in Vegas.

They all lived in Vegas and, of course, they were aware of the test site and of the shots going off. Like I say, I couldn't remember whether the blue light meant we had to go out that morning or we didn't have to go out. It seems to me if the blue light was light, the shot was on, but I'm not sure I remember that for sure.

Sure. But that was how you could tell what was happening.

Yeah. There was a blue light in front of REECo. Actually it was in front of the AEC [Atomic Energy Commission] headquarters.

And that was downtown at the time?

Yeah, I can't remember just where it was. EG&G was over on A Street. I guess A Street is still there. And I can't remember just where the AEC headquarters was. It's probably still the same place, only now they call it something else.

It's the DOE [Department of Energy].

Yeah. I'm trying to think. Sandia was out at the test site, too, because I had a job down at Sandia once, too.

And they used to come up?

Yes, they were up at the test site, too, Sandia.

Mrs. Hodges: Same people that you interviewed.

James Hodges: And I went on a little job down there in Albuquerque. It was high energy exploding wires, and we took pictures of this gap, on how much electricity it took to jump across

the gap. And I don't remember just why they wanted that information, but it seemed important. We were down there for a week or two, taking that information. Bob Herry was with me down there—"Banjo Eyes." And also Joe—what was Joe's last name?

Mrs. Hodges: All I can think of, the one that worked at—

James Hodges: Oh, at—yes, EG&G—Marine, during WWII? Can't remember Joe's last name. He married a gal from South America. Joe—though we had one guy we called Jack Armstrong, the All-American Boy. Joe Settlemeyer. He died, got some kind of a very fast-acting cancer and died within less than thirty days.

[Do] you think a lot of this is related to the test site or to having been out there or spent time out there?

I don't know if Joe Settlemeyer's was or not.

Mrs. Hodges: Oh, I imagine all of them were. So many have died since.

James Hodges: Most of the others here that are gone were, though Mother Tucker was pretty close to eighty when he died, so I don't know. But most of the others were fairly young. Harkins was real young. Big T was young. Ace Chavez, that was Donovan, he was in his seventies, about the same age I am. Big T was a little bit younger, I think, but not much. I don't know, Gordo, I think he's still around. But it was exciting.

[00:35:00] *Well, I appreciate you taking the time to talk about it.*

Well, it was kind of fun to reminisce. It seems like I'm missing something here. I don't know what. Some exciting things. I don't know what. Went to Hawaii, I went to the islands, Sandia. San Diego, we had a test. I went a lot of different places.

It sounds like you got to do a lot of traveling.

For EG&G, yeah.

Worthwhile.

Yeah, I think so. While she stayed home and took care of the kids, I gallivanted around the country. I remember I went to—

Mrs. Hodges: You only did it for fourteen years.

James Hodges: Yeah. I went to Boston, and I remember once we went to Boston and we were walking along there and I saw this house and it's Paul Revere's house. And so I went in and this one guy from Boston was with me—there was three or four with me, but one of them says, I'll go in with you because I haven't seen it either, and he's lived there all his life in Boston.

So we went in to see Paul Revere's house and there was a little teeny three-legged stool about, oh, it was only about eight or nine inches high and I asked him, I said, What is this for?

He said, Well, they sat on that. He said, You got to remember that the people in those days, the average height was like five feet or less.

And I said, Oh, OK.

So when I went down on the USS *Constitution*, the ship, I went below decks and boy, you had to duck down. And the same answer, everybody was under five feet tall so they didn't need a lot of room. Then I went to the Old King's Church, the big black church there. It was all black granite. That was neat. And I was in Boston Commons.

So you got to see a lot.

Yeah. Saw the capitol there in Boston.

Here, we're coming to the end of the CD, so I can switch it out, but I just—

No, I think that's OK. I think I—

I didn't want to get you cut off at the end of it.

I think I've about run out of things to say.

Well, I definitely appreciate it. You had a lot of good things to say. If you remember more, please give a call, or I may contact you if I have more questions as well, if that's all right.

OK.

But thank you.

All righty.

[00:37:58] End Track 5, Disc 1.

[End of interview]