



Nevada Test Site History Tour Booklet

October 2019

De Baca Test, October 26, 1958

Photo courtesy the National Nuclear Security Administration/Nevada Site Office

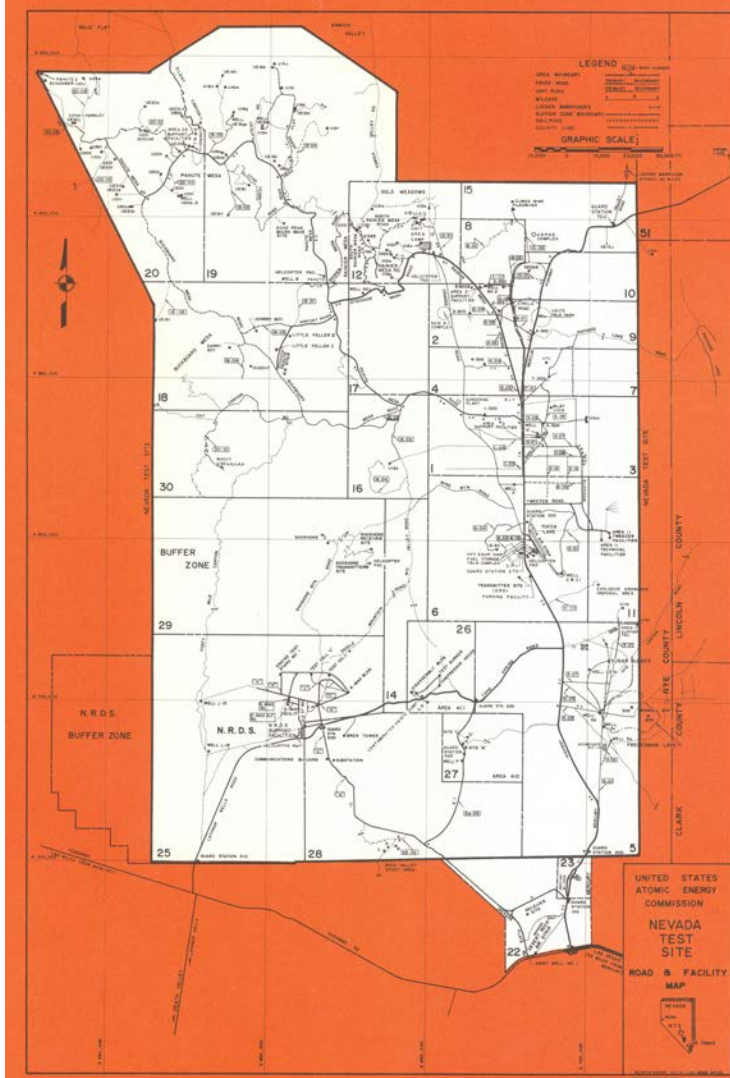
NTS NEVADA TEST SITE...

...america's outdoor nuclear explosives laboratory

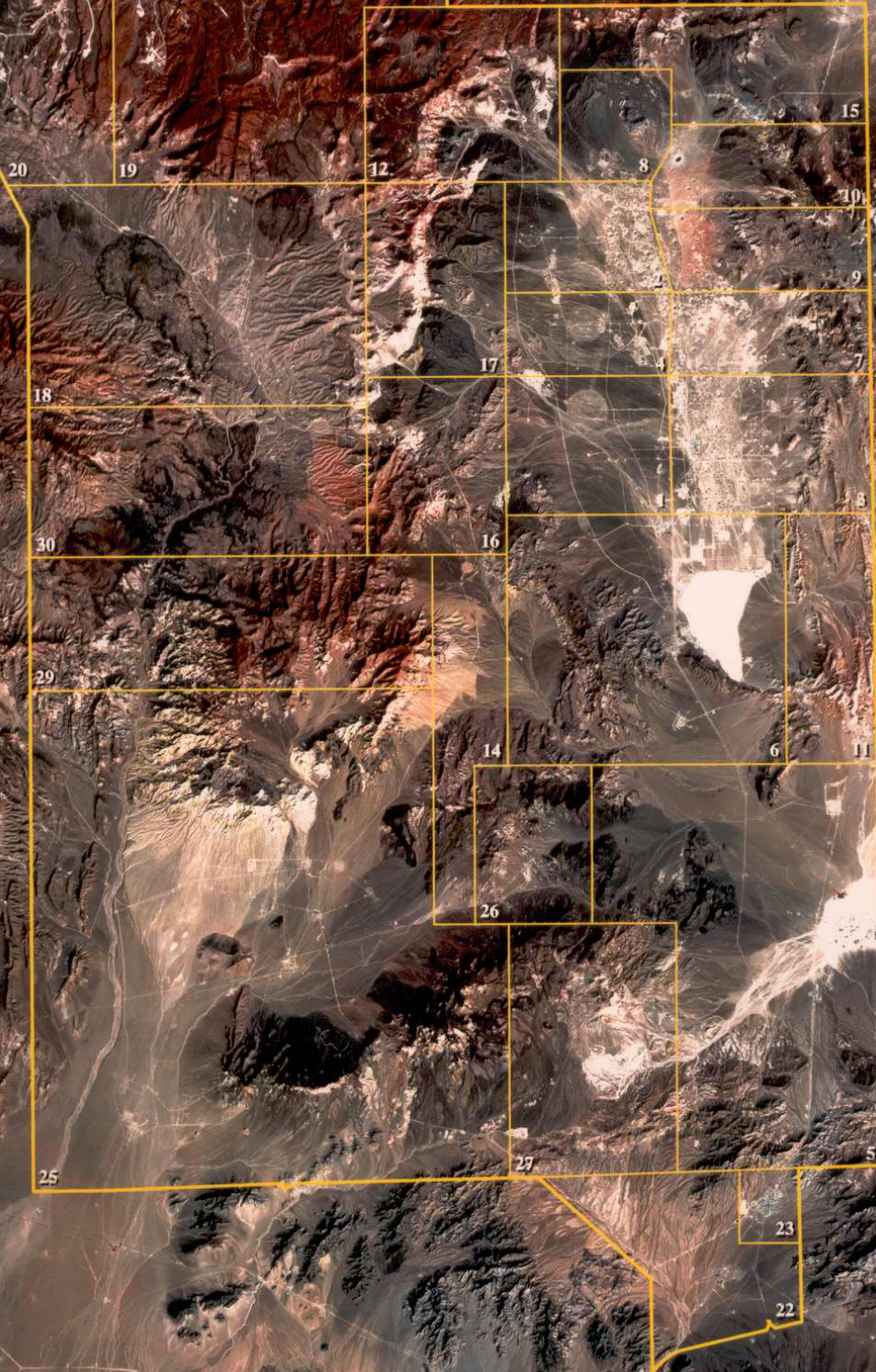


Thanks to the National Nuclear Security Administration's Nevada Field Office's Office of Public Affairs for the Nevada National Security Site tour.

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Nevada Test Site



Mercury, Nevada



Mercury, the Main Base Camp at NTS, is linked to Las Vegas by U.S. Highway 95. The camp currently provides overnight accommodations for more than 950 people. It is a warehousing, communication, repair, fabrication and field administration center. Facilities include a hospital, theater, bowling alley, cafeteria, and post office. There are no schools or family housing. Photo courtesy the National Nuclear Security Administration/Nevada Site Office.

“Well, that [Mercury] was just like a little city, only there was no children. ...Oh, there was, because you worked together. And if you stayed there like I did, then at night there were things. There was a movie house. There was a softball diamond, tennis courts, horseshoes, a bowling alley with a restaurant, and there was physical fitness. The whole building was physical fitness, iron and all that stuff. And there was those things to do. And then they had a real nice steakhouse which they still have there. ...Oh, it was excellent; and the price was beautiful. The cafeteria was good, too. We ate there for twenty years. I did and never had a problem with it. There was a lot of work out there, and so guys needed to get a good night’s rest to be able to do this. Some days, sure, it’d be slack, but other days you actually worked hard.” James Merlino, Interview by Suzanne Becker, November 7, 2004, Nevada Test Site Oral History Project



Operation Teapot, the Met Shot, a tower burst weapons effects test April 15, 1955 at the Nevada Test Site. Photo courtesy the National Nuclear Security Administration/Nevada Site Office.

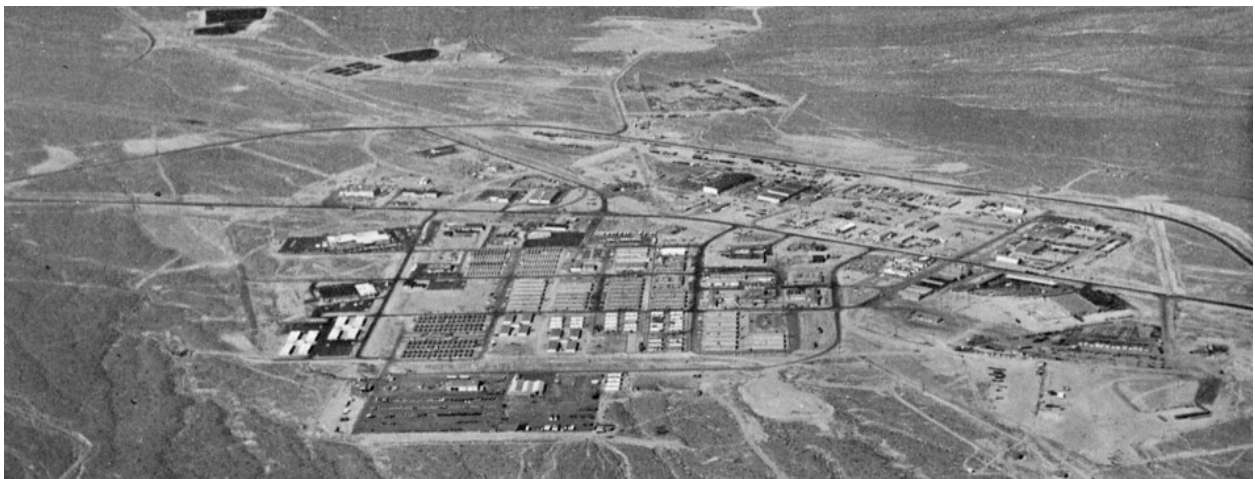
“And as Operation Teapot [1955] continues on and, you know, we do a number of shots in Operation Teapot. I was present for all of those shots. I continued to live in Mercury. As you well know, I just came out of the service, I didn’t have any residential home in town, so I just rented a room at the test site. There were eight of us to a room. Most of them were married guys, naturally would go home during the week and also the weekend to see their families, and I would just continue to live in Mercury. I was trying to get arranged to have a car bought. I didn’t have wheels yet and I didn’t go home to get my old 1936 Ford; it was still sitting back there but I knew it wasn’t in good enough shape to drive it from there to Nevada. And so I’m just trying to save my money to—I’d had all my mustering-out money and I have good intentions of getting a car within a couple of months.

And so I continued just to stay at the test site. Saturday evening or Saturday afternoon— we were working six nines—Saturday afternoon would come, five o’clock, and Seth Woodruff, which was the manager of the test site at the time for the Las Vegas field office, which in turn he worked for Jim Reeves, he would come over and he’d say, Ernie, all of us AEC guys are going to town. You mind being the duty officer? Now you got to remember, I’m just two months in the system now and here I am, I’m being asked to be the duty officer for the

entire test site, for the AEC. ...The duty officer's responsibility basically is if there's a crisis comes about, you know, if there's a fire comes about or if some criminal effect happens at the test site internally, or some sort of an incident may have happened, you know. There's been a big fight, you know, you as the duty officer, you go look into that to make sure, or—you don't look for these things to happen but various incidents do happen, you know, and so— ...

And I'm twenty-four years old. And you have a logbook and you log in for the duty officer. You log in what activities happened and—for instance, early in my career a gentleman was on his way from Las Vegas to Reno with a load of frozen chickens. And a gentleman was coming to the test site. He failed to give a right-hand signal and he didn't turn off to come in to the test site, to the right, and of course the trucker didn't realize he was turning off, and unfortunately the rear bumper of the car caught the bands of the fuel tank on the truck and the fuel tank dropped, and of course I got a call and said, Hey, we got a trucker in a car accident, or in a vehicle accident. Nobody's hurt but you need to go out there and see what we can do. So I get in my car and I drive out to the highway and sure enough here's a participant that works at the test site and he said, I just failed to give a signal. Nobody's hurt, and basically the cars are not hurt. There's no damage; it was just a fluke incident. And, you know, I had the sheriff come out with me and the sheriff said, Well, I'm not going to issue any tickets. And the guy says, But I've got a load of chickens, you know, and they're frozen and, he says, I need to move.

I said, OK, fine, we can handle that. I said, Just give me a few minutes. I'll go back into Mercury. I know there's some guys that work in the motor pool that didn't go to town because I saw them at the cafeteria. And I said, So I'll round them up. I know where they're sleeping. I round a couple of mechanics up and we'll be back out and we'll have a couple of jacks and things and we'll get your tank. It's full of diesel fuel. And so we go out there and we get him fixed up and get him on the road and he's happy, I'm happy. But I record all this. This is part of the duty officer's responsibilities. And then of course as the duty officer you make sure that, you know, that you log in that you ate breakfast and how did you rate the food and, you know, would it be excellent or not so good or, you know, was the eggs too runny or what, you know. But that's just part of being a duty officer, you know." Ernest Williams, Interview by Joan Leavitt, March 26, 2004, Nevada Test Site Oral History Project



Mercury Nevada Aerial View, Nevada Operations Office (NVOO) Atomic Energy Commission Factbook, 1969.

"To commute meant getting up at four in the morning to get to Area 12 on time, and then if you left you got home at eight o'clock at night, and it just didn't make sense, so I always had quarters in Mercury. I used to go up there on Monday morning and come home Wednesday night and then come home Friday or Saturday, whatever was fair. ...

Well, not everybody was in the field. There was a lot of administrative and of course there's a fire department and then there's the hospital and et cetera. And they have to be manned around the clock, so there was a population. The warehouse, the motor pool, those operations belonged in Mercury and there were people that were working them around the clock. And so that was one situation. Now the ones like the people in the forward areas, they were working day shift, swing shift, graveyard, and rotating shifts and whatnot. And then when it came time close to executing an event, there would be times when, in a typical event, where the mine force was probably in the neighborhood of forty or fifty, there'd be four hundred people underground in a twenty-four-hour period, maybe sometimes six hundred, which was this vast throng of what were commonly nicknamed "users." These were the experimenters who were not only installing their experiments but tweaking them and proofing them and making dry runs on them, because you don't get a second chance. Once you pull the trigger on the event, its history. You don't get to be able to come back and say, Hey, I forgot to connect this up. And so for a great number of people, we also had living quarters in Area 12. A lot of the miners used to just come up there on Monday and go home Friday." William Flangas, Interview by Mary Palevsky, November 12, 2004, Nevada Test Site Oral History Project



Life in Mercury, Nevada. William Beam, Interview by Mary Palevsky, December 2, 2005, Nevada Test Site Oral History Project.

“Fortunately we only worked an eight-hour day so we had to be at the site at eight and then left at 4:30 on the dot to go home. And so by 6:30 I was at home, have a nice dinner, what have you, go to bed by nine, and then up 5:30 in the morning, get ready, and be out at the site by eight, Monday through Friday, and then the weekends off and then holidays. I was fortunate because I worked in Mercury. Now there were times when I would do an assignment out in the forward area but I never had a time where I actually had a reporting site in the forward area and had to be *there* at eight. Otherwise that would’ve *really* stretched the day out. But usually during that period, rode the bus and it was the LTR line, Las Vegas-Tonopah-Reno Stage Line, and the buses they had were standard buses with standard spacing on the seats and all, and so for twenty-one years I rode the bus. And in order to sleep enough I’d sit on an aisle seat, then twist sideways so I could lay my head on the back of the headrest and then put my legs out in the aisle and curve them back in underneath the seat in front of me. ...

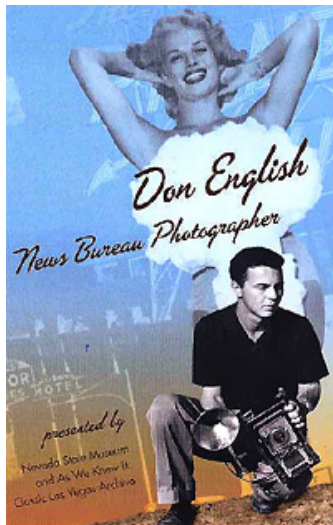
I rode the bus and then when we bought our home on the west side of Las Vegas and moved in there, then I would catch the bus from the corner. I mean literally the corner where I lived. I mean the network of buses were very thorough. ... And [the bus] even drove out to Boulder City part of the time. And you’d have the waves of buses because the ones for the forward area would go through and then go out to Area 12 or what have you. Then a half-an-hour before my bus would come, the one would go through that went to the control point. And then you’d have the one that took you to Mercury. And so yes, there were *very* large numbers of buses going out there every day. And sometimes you’d have a situation where you’d have to drive a few blocks, and for a part of the time I literally walked out the front door and right around the corner and stood there on the corner.

And so that was really convenient. And then for about, oh, two or three years I actually rode in car pools also, which was a whole different situation because they’re people you work with and you could swap stories and tell what you did the night before, you know, the lies and exaggerations and everything. That got to be really interesting.” Robert Friedrichs, Interview with Mary Palevsky, February 25, 2004, Nevada Test Site Oral History Project.



Sample preparation in the laboratory in Mercury, Nevada. Robert Friedrichs, Interview by Mary Palevsky, February 25, 2004, Nevada Test Site Oral History Project.

News Knob



“Well, as soon as they started the atomic tests Acme News Photos, which later became UPI, brought their wire photo machine. As soon as there was a test news media from all over the world started coming to Las Vegas. There was also INP, International News Photos, came and Associated Press, and they kind of headquartered at the news bureau at first anyways because we had a photo darkroom and they were able to kind of headquarter there. So it was a wonderful opportunity to get associated with the press and for us to get the name “Las Vegas” out. ...

I can't give you the date but it was a while before they started having what they called “open shots,” and the AEC [U.S. Atomic Energy Commission] invited the media, the press, to come out and view a shot from an area that they designated or came about anyways as News Nob, which was seven miles from the blast, and that's what they would call an “open shot.” Before that people were getting, like you said, the glows in the sky. And in fact one photographer, Jeff Scheib, I think was his name, worked for the *Review Journal*—and *Life* magazine was up here, everybody was up to cover the tests—but all they would get, they'd go down on Fremont Street and get the flash of light on the horizon. And he went out in the desert and actually saw a cloud—it was probably the dispersion of the mushroom cloud—and he shot a series of pictures. And to the chagrin of the press that were here, he scooped them all because he had a series of pictures of this cloud dissipating and he wrote the time down for each shot. And *Life* did a huge layout of seven pictures or something, Here's the atomic cloud at 4:03, here it is at 4:09, and this kind of thing. ... That's about the first time I think there was anything other than the glow on the horizon that was shot. And soon after that everybody, the press and everything, started going up to a mountain, a summit called Angel's Peak where you can get a clear view of the mushroom, and the press and everybody got spectacular pictures of the mushroom cloud, particularly from the airdrops and from the tower shots. ...

It was exciting, it was a mystery, and also for the photographers and press covering it, you better come back with some goods, you better have a picture. ... I remember one time it was Acme and they brought in their wire photo machine and we had a technician—in those days you had to be quite a technician to operate a wire photo machine. It was a drum. You put a picture on this drum that would rotate and it would take about ten or twelve minutes for a light beam crossing the drum slowly, similar to the early days of the Victrola when they recorded music on a drum that rotated, kind of the same thing, and then when they would transmit it over a telephone wire sometimes they would have to get eight or nine long distance calls in before they could get a clear line for someone to receive it in New York or Los Angeles. But anyway his name was Doc. And this was a little later on in the atomic testing and there was an open shot and the television crews were there and in San Francisco, the headquarters for Acme News Photos. They saw the blast on television and they called up Las Vegas, called up Doc, said, Where's the pictures? We just saw it on TV. And Las Vegas was, I think, about a hundred miles from the blast and Doc said, Well, he said, the shock wave just

reached Las Vegas, he said, the pictures will follow a little later. In those days you didn't have digital cameras and cell phones and laptop computers to transmit photos. The film had to be brought back physically, it had to be developed, it had to be printed, it had to be put on the drum and sent over the wire photo machine. ...There was some pretty big races coming back from the test site and so yes, it took hours. Several hours. ...



Test observers and the press at News Nob, April 22, 1952. Photograph courtesy Marcel Verdoone and the U.S. Army.

News Nob actually is just a spot in the desert on the atomic proving flats, seven miles from the blast. And they had bleachers out there. By the way, afterwards I'll show you a picture taken recently from those bleachers. And of course most of the tests were done at predawn, so just right after the test the light would start coming. So people were there, the press, hundreds of writers and photographers, everybody lined up, checking their equipment. And there was a little red light, like if it was a tower shot there'd be a little red light—this was seven miles away—and you'd kind of train your lens on that, trying to find it anyways if you had good eyes, so you'd be aimed in the proper direction. Also we had explicit instructions—we were given heavy dark glasses for eye protection but even with that you couldn't look at the bomb. You had to turn around a hundred and eighty degrees of the area where the bomb was going to be detonated because the intensity was still so great. Nobody would look at the test while it really went— ...

As soon as it went off, then you could turn around. That didn't mean the cameras weren't going. And you know you think—it was ethereal. I remember one time the bomb went off and the yucca plants, all the desert plants, caught on fire for miles around, and it was ghostlike because it looked like a city that had been incinerated. You could see these little flames of fire. But other than that, another interesting thing, you'd think, what would there be? Would there be a hush? Would there be absolute silence? Maybe people shouting? I'll tell you

what happened. Everybody out there was responsible for—getting stories was the one thing but for photographers they better have the picture. There's no way they could go out there—and so the first thing that happened after the flash went off, *Life* magazine and AP and a lot of these people that had very expensive equipment, they had light sensing devices so that as soon as the light went off from the bomb it would trigger the camera, and they had what they called Hulcher cameras. They were high speed cameras that took I don't know how many frames a second, and you'd hear them *chug-chug-chug-chug-chug-chug-chug-chug-chug-chug*. You'd see the flash, you'd hear the *chug* of the Hulcher cameras, and then you'd hear oaths from one end to the other, everybody fighting their equipment. OK, first of all, the blast kind of—you couldn't see too well and everybody was fighting their—they were taking—in those days a lot of people had four-by-five cameras with film packs in them and film holders and they had to take them out and change them and change their f-stops. And anyway everybody was fighting their equipment and somebody would—their leg would kick a tripod leg and they'd be upset. But anyway that was the impression—that was the first thing that happened. Of course then a few seconds later, *bam!* the shock wave hit, so you got that. It wasn't damaging, didn't set you on your fanny or anything like that that, but it was a pretty good jolt. Then another few seconds or half-a-minute, something like that—first of all the shock wave goes out and then it comes in, so then you got it again from the opposite direction. So it was exciting.” Donald English, Interview by Michael Childers, March 25, 2004, Nevada Test Site Oral History Project



“Well, it seems to me about the closest I've been was probably about five to six miles. ... 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.” James Hodges, Interview by Suzanne Becker, January 17, 2005, Nevada Test Site Oral History Project.

Charlie test, October 30, 1951. . Photo courtesy the National Nuclear Security Administration/Nevada Site Office.

Atmospheric Nuclear Testing

The First Continental Test Series – Operation Ranger



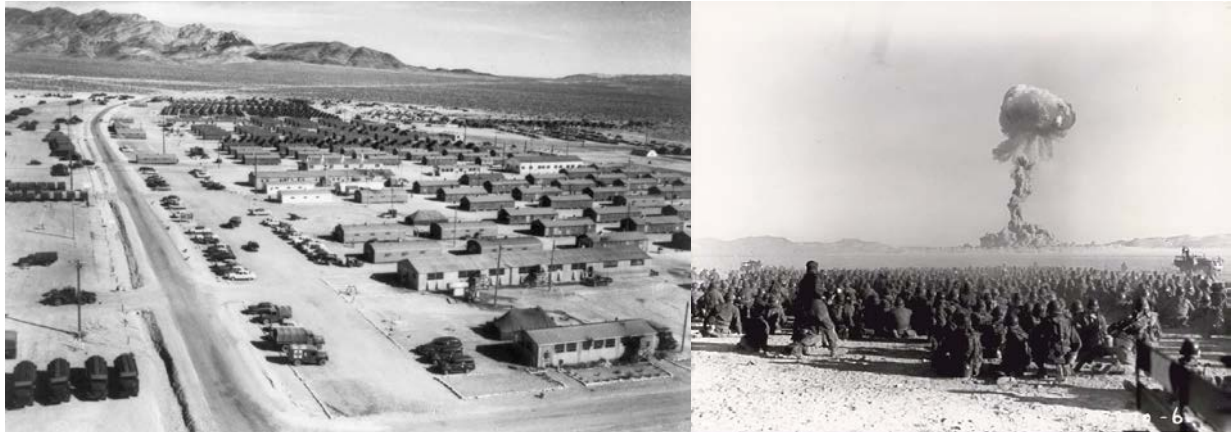
The Able test detonated on January 27, 1951. Photo courtesy the National Nuclear Security Administration/Nevada Site Office.

“We went out for Ranger in January of 1951. Again, I worked for Jack Clark, as he was the Test Director, but Fred [Frederick Reines] and Bill [William Ogle] were also there as well as others of the group, including Smitty [Marvin Smith] and Joe Valles. I did work for anyone who needed dictation and typing. It was indeed an exciting time (what an understatement!). Camp Mercury was not there yet, so we just stayed at the Control Point, which was near Frenchman’s Flat, up to and during the shots. These were air drops, the plane (“Bullpup”) coming from Kirtland Field in Albuquerque. ... There were five air drops on Ranger. For me the most exciting one of all was of course the first shot. I had seen

numberless pictures of the fireball going up, but just to be there—there’s the countdown—on these shots we went outside the CP to watch, were told to put on dark glasses or face away from the blast. And then comes this awesome, indescribable sight, and later you feel the shock wave. And your heart starts beating again after a while.” Dorothy Grier, Interview by Mary Palevsky, January 3, 2005, Nevada Test Site Oral History Project

Military Exercises During Operation Upshot-Knothole

“Well, I’m not like a GI who’s scared to death or heard rumors. I have been in this business long enough not to worry about it. And so when Desert Rock came along I said well, I’ll go out with them and see how it goes. They had trenches set out, let’s say a mile or two, further than that, from where the bomb would be on a tower. I don’t remember them doing free drops. The Desert Rock guys lived in tents, had their own mess hall and everything. And they had all the briefings: we’re going to go out at four in the morning. They usually fired often in the dark because the optics measurements were pretty good then, the bomb optic measurements. So they said, We’re going to go out there and we’ll get in these trenches and the loudspeaker system will tell you when to duck down in the, in this case, trenches. Do not look at it until the [loud]speaker says it’s OK.



Camp Desert Rock and troops participating Operation Buster-Jangle during the Dog test on November 1, 1951. Photo courtesy the National Nuclear Security Administration /Nevada Site Office.

And so we went out there and crawled in a trench with everybody else. Since I'd already seen some through dark glasses previously, I wasn't going to look at it. Well, I knew that. Anyway, we all knelt down and the bomb goes off, and you have this sensation of intense light coming down in the trench and everything, and it's shortly gone, and then the voice said OK, and you can look, and what you see is the boiling colors. It's not the flash or the intense light, but the colors are—I don't know how you describe them. Wicked. They are an incredible mixture of colors and movement. Fluid movement. They don't last very long. ...

Well, they had several of these exercises. The written record on it is better than my memory, I'm sure, but my impression is part of it was to demonstrate to the troops it was safe to go into an area where this thing had gone off. Another one was to find out the reverse of that, how would troops react, having had one of these happen? So that has to do with the people part of it. Whether they created a scenario, a made-up scenario or a scenario, which is quite possible because that would probably give a little bit more meaning to the GI that this is in the context of something other than my going and watching a bomb go off and go home again. Now that's pretty ethereal, I'll agree, ephemeral, but I would not be surprised. I really do not remember what scenario they created in order to explain to the GI, this is the context in which you're doing it. We can order you to do it, but that's not the point. ...

See, they have to know how the troops are going to react and what their reactions are and anything they can learn. This is so mysterious. Now Hiroshima's pretty much in their minds. And it's all new, and especially to the military. Is it going to change the fundamental kind of war work we're going to do? It probably did. We never used it to find out. But for instance, one of the tests, not Desert Rock, was what protection do foxholes give in a forest? As you know, we planted Yucca National Forest. Hauled all the goddamn trees down, planted them in concrete, dug foxholes, put in measurements. The birds came, and the workmen came and left paper and we had to haul it out. And finally you've seen the movie of the trees going back and forth, back and forth. That's an example of a very down-to-earth-type practical demonstration or experiment ...

And a lot of analysts who were saying warfare's going to do this or that, and of course they didn't agree at that point. And you've got a lot of young folks that—well, you've got young officers. Well, even the senior officers hadn't the foggiest idea what this was about. And so a

number of the Desert Rock-type things were for that purpose, whereas some of the other experiments were just straightforward ones: what is the damage radius for blowing a Jeep over? We blew so many Jeeps over, somebody claimed we had a Jeep calibration for overpressure.” Edward B. Giller, Interview by Mary Palevsky, April 5, 2005, Nevada Test Site Oral History Project



The coniferous tree stand in the Encore test on May 8, 1953. The Atomic Energy Commission had worked with the USDA Forest Service to acquire 145 ponderosa pines from the nearby national forest. The US Army cemented each tree trunk into a concrete block so they would stand upright. Photo courtesy the National Nuclear Security Administration /Nevada Site Office.



The Encore test on May 8, 1953. Photo courtesy the National Nuclear Security Administration /Nevada Site Office.

Witnessing Operation Teapot



Observers at News Nob witnessing the Wasp test during Operation Teapot, February 18, 1955. Photo courtesy the National Nuclear Security Administration /Nevada Site Office.

“Yes, I was. I was present for that shot [Operation Teapot, Wasp shot February 18, 1955], and Mr. Coffee had explained to me that we were going to be viewing most all the shots that was going to be shot during Operation Teapot. He said, I want you to be at the benches, either at Frenchman Flat or at Yucca Flat.

The benches are a group of wooden benches like you would go to the park and sit on a bench, only there's a series of about fifteen or twenty of them and they're probably thirty, forty, fifty feet long. That's just where all of the people working at the test site, if they had a proper badge to get into the forward area, could view a real atmospheric shot being conducted. He made sure that I had a pair of 4.2 density goggles. They're a lot darker than an arc welder's helmet, because you cannot view an atmospheric shot with the human eye looking straight forward. If you do you're going to get a retina burn. There's two things you got to do: you either got to have a set of goggles or you got to turn your back and close your eyes. When you turn your back and close your eyes, even with your eyelids closed, the world lights up bright light even with your eyelids closed. I mean it just gets *bright* as a light, and it's white. And secondly, when you have the 4.2 density goggles on, you see the very beginning of the detonation And just as soon as the white light starts to decay, and I use the word “decay” or “come down in flash”, in other words, it's on the decline. And that's just a few seconds. That flash is seen as far away as Los Angeles, Phoenix, Salt Lake City. It's a huge flash. It's very prominent when you're on Fremont Street. People would stand on Fremont Street just to see the flash in the sky. And as soon as that starts to deteriorate, you can pull your goggles off because the intense bright

white light has now dissipated and you will no longer get a retina burn. So by the time you get your goggles off you can still see the outlining of the mountains very clear. It's not dusk but it's still quite light. And then finally it dissipates until finally the white light, you can't see the mountains. It's dark now. Most of the shots were fired at 4:30 in the morning. In those days a lot of the measurements was because of photography, and we got our best photography while things were really dark yet, instead of being daylight.

And so, you know, we proceeded up to the benches just outside of Mercury called Frenchman's Flat and Jack explained to me that I needed the goggles on and I said, OK. And I looked at Jack and I said, *This is going to be my first one.*

He said, *Well, you won't be any different than the rest of us. And, you know, we heard the countdown and we saw the flash. Immediately Jack says, You can take your goggles off. And it's just a huge—the whiteness is now dying down, the stem of the mushroom is coming, and the fireball is dissipating and the mushroom is now rising and oh, what an awesome thing, it really is. It's a spectacular scene. If there's such a thing as a good scene within the nuclear testing business, I want to say "spectacular." It's very unique. It's something that you probably won't get to see only a few times in your lifetime as a participant. If you leave the program, why, you won't never see another one probably. I was fortunate to be able to remain in the program.*

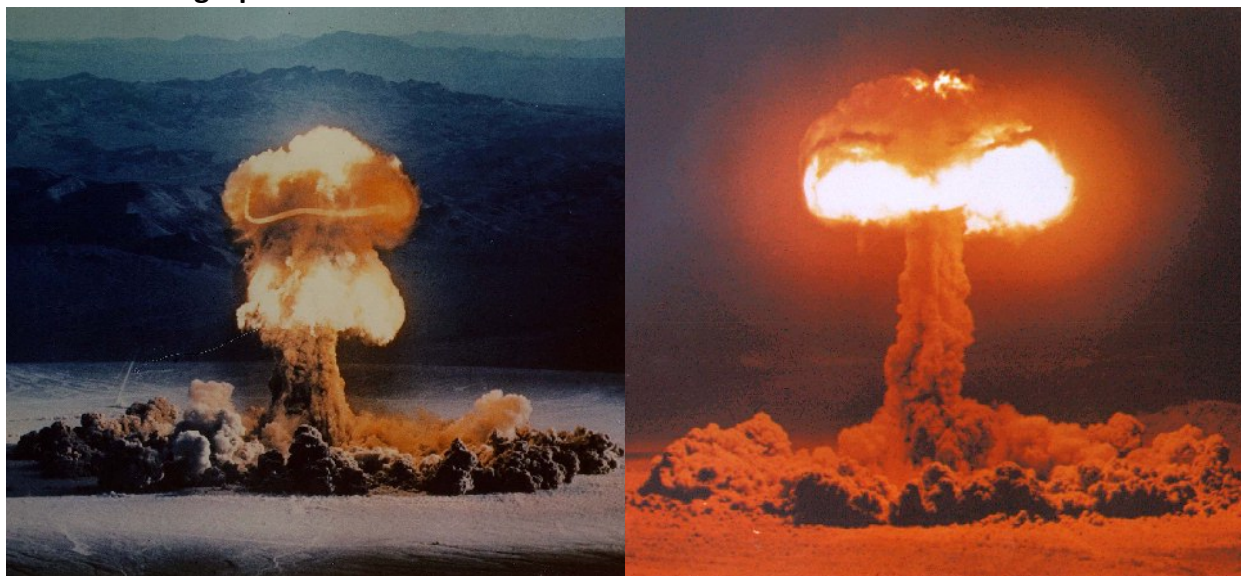
But let's go back just a second. As I got the goggles off and were watching the mushroom rise and Jack Coffee looks at me and he said, *Ernie, why all the sweat beads?*

They're just rolling off my forehead, you know. And I have to say to you that here I'd been in the military, I'd been in assembly and disassembly, and I'd been in the administrative and the security side of the house, and recognizing that yes, this is how we brought World War II to an end and yes, it's a very awesome piece of equipment. But I guess in my humble feeling you don't realize how awesome it is until you really see the first one. When you see a fireball, it depends on the kilotons, but when you begin—the first one that I saw, the fireball, you know, I'd have to say it was probably at least 250 feet in diameter, and it's just awesome. I mean you're now watching something that, once we pull the trigger, there is no backing off, it's going to happen." Ernest Williams, Interview by Joan Leavitt, Marcy 26, 2004, Nevada Test Site Oral History Project



Operation Teapot contained another test, called Apple II, conducted on May 5, 1955, that had an associated civil defense program called Operation Cue. A brick two-story house and a wooden two-story house, along with three bungalows (all built with different construction materials) were part of a small town that featured other municipal elements, including a radio broadcast, propane, and electrical transfer stations. Photo courtesy the National Archives and Records Administration.

Contextualizing Operation Plumbbob

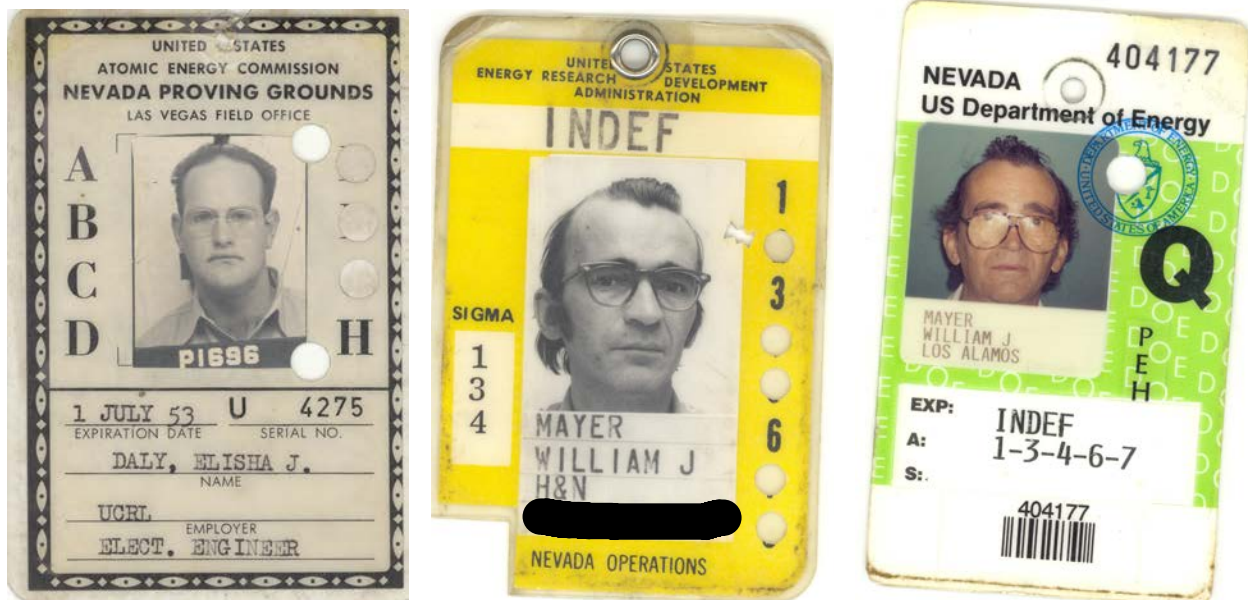


Los Alamos National Laboratory detonated the Priscilla test (left), which yielded 37 KT, on June 24, 1957. Lawrence Livermore National Laboratory detonated the Hood test (right), which yielded 74 KT, on July 5, 1957. Both were balloon tests. Hood was the highest-yield atmospheric test, at 74 KT, conducted at the Nevada Test Site. Photo courtesy the National Nuclear Security Administration /Nevada Site Office.

“OK. Well, Plumbbob is a series of tests that’s going to be conducted at the Nevada Test Site. Plumbbob probably starts in probably January of 1957. It has to be an operation that’s going to be conducted at the Nevada Test Site. Yes. The buildup starts in January of 1957— ... Plumbbob is still an atmospheric condition. Plumbbob is still atmospheric tests. It starts with Boltzmann, and the first shot is May 28, 1957. It’s a tower shot and it’s twelve kilotons. Now please bear in mind, at the test site the largest atmospheric shot that’s ever been fired is seventy-four kilotons atmospherically. And that’s Hood and that part of Operation Plumbbob. That’s Hood, and that’s out in Yucca Flats. Thirty-seven kilotons was fired at Frenchman’s Flat, and that is in Plumbbob, and that’s Priscilla. Those are the two largest atmospheric shots fired at the Nevada Test Site. The largest atmospheric shot [Operation Castle, Bravo test] by the United States of America, or better known as the AEC, is at Enewetak, and that’s fifteen megatons. Please bear in mind, one megaton is one million tons of TNT. One kiloton is one thousand tons of TNT. So they’re huge, you know. But for Operation Plumbbob I left Enewetak to come back to the test site. ... I basically go where the tests are being conducted. If it’s at Enewetak I’m going to be there. If it’s at the test site I’m going to be back at the test site.

Between Operation Teapot, Operation Redwing, Operation Plumbbob, and Operation Dominic which is at Christmas Island, I’ve been privileged to be present for eighty atmospheric shots. At the Nevada Test Site, in Frenchman’s Flat, as a volunteer, as a civilian, on the upwind side in the trench in Frenchman’s Flat, I was a mile-and-a-quarter from ground zero when we fired it.” Ernest Williams, Interview by Joan Leavitt, October 27, 2004, Nevada Test Site Oral History Project

Security Clearances



Security clearances for the Atomic Energy Commission from the early 1950s, the Energy Research Development Administration from the 1970s, and the Department of Energy from the 1990s. Badge images courtesy Marie McMillain, Interview by Mary Palevsky, February 4, 2004, and William Mayer, Interview by Shannon Applegate, July 20, 2004, Nevada Test Site Oral History Project.

“Well, [if] you’re uncleared and that certainly means, you know, you’re restricted in what you could do, but your clearance was put in process immediately. And it was not OPM [Office of Personnel Management] or one of those organizations. It was actually an FBI [Federal Bureau of Investigation] investigation. But it was a full-blown FBI investigation and it took, if you were lucky, four months and more frequently six months, and some people went a year before they got their clearance, just depending on where they’d been and what they’d done. And so I got mine about four months out because essentially my whole life was right here. ...

Essentially you had three levels, and depending on what type of activity you were doing dictated what you were put in for. And so because I had the potential of working with classified material, they put me in for a Q-clearance, which is the equivalent of a top secret. There was also an L-clearance, which was a secret, and then they had another level that is confidential material. And so you had those different categories, and although you were cleared for one, if they wanted to upgrade it they had to go all the way back through the process again because the first time through they only dig as deep as they are required to. But even to just go to work at the site with no clearance, they had to go through a name check and stuff like that. Not that that stopped people from working out there who had checkered pasts, but if they had served their time and had not escaped, then they could work out there. And we had people at the test site in the labor force that had been convicted of robbery and murder and, you know, things like that but they’d served their time and they did good work. Yes, you know, that was the way the process worked. And until *much* later, and I mean I’m talking 1993, thirty years later, I did not understand and appreciate that a top secret is not the end of the hunt, that you have SCI [Secret Compartmentalized Information] beyond that and—...

The old ones, down the one side you had numbers that would be punched out that would indicate what *areas* you could go into, because you could not just automatically go anywhere on the test site. You could have a badge with a Q-clearance and not be able to go outside of Mercury. And then down the other side you had sigmas which identified types of information. And so you could see weapons designs, you could see result data, there were sigmas for the nuclear rocket programs so that you could know specific design information about the rockets, stuff like that. And all of that was on a badge. I mean you could tell immediately if a person could even sit in a meeting or if they had to get up and leave.” Robert Friedrichs, Interview by Mary Palevsky, February 25, 2004, Nevada Test Site Oral History Project



The Atomic Energy Commission entrance portal from the early testing period. Photo courtesy the National Nuclear Security Administration /Nevada Site Office.

“I worked in what they called the field force at the time. I worked on the guard stations. I worked on the motor patrols. We did different jobs. ... I spent about nine years working out in the field that way, working on the guard posts and the various stations. The shortest post we had was twelve hours. The longest post we had was fifteen-and-a-half hours. We worked a four-day week. That was the standard week. There was always overtime if you wanted it. After a while, I didn’t want it. ... After that first eight or nine years, one of the management people came to me and talked to me one day, and wanted to know what plans I had for my future with the company [Wackenhut Services, Inc.]. I said, Well, gee, I don’t know. You got any ideas? And he said, Well, I think you ought to work around these different units and get to know the entire operation better by working in it. And then he said, If you’d like we think we’d like to put you into management. So at that time I was an officer in the union and, of course, you know we were enemies, the company and the union. And I didn’t really know how I felt about that. We talked about it, and my wife said something

to me that I've never forgotten and I still thank her for it. She said, You know, you can do better than spending your life on a guard station. And I said, Well, OK. Maybe I can.

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

I can't remember how long I was in there, but it was only a year or two, I think, and they promoted me to lieutenant. And I was one of the—I think we had a twenty-four-hour operation in that unit going at that time, so there were four of us that covered that. And we also had, at about that time, a special response team set up. That was shortly after the incident at the Munich Olympics when the Israeli athletes were murdered [1972]. ... And that kind of got everybody's eyes opened up a little bit about terrorism, and it got people thinking, well, gee, maybe somebody would really like to steal one of these bombs. And maybe they can make it go bang and maybe they can't. We don't know. It doesn't really matter. If they got it, they can blackmail us. So security was added. The physical layout of the facilities where these weapons [were] stored, assembled and handled was beefed up considerably. And the amount of personnel protection was beefed up considerably. And there was a lot of money spent in that effort to better protect the weapons and the components." Philip Ulmer, Interview by Suzanne Becker, January 11, 2005, Nevada Test Site Oral History Project



Device Assembly Facility. Photo courtesy the National Nuclear Security Administration /Nevada Site Office.

Underground Nuclear Testing

The Sedan Test

“And I remember one day Dr. Maupin—we were young secretaries and we would sort of pester him and say, We would like to go to a shot. And this was in about 1961, 1962, 1963. He’d sort of just brush us off and so forth. And then one day we all came to work and he said, Tomorrow we’ll all go to see a shot. We have a little shot tomorrow. We said, Oh good. So we went out to the control point and that shot was Sedan, which was a phenomenal shot to see. ... He waited until we had a significant shot to see, and that was very, very thrilling. ... Yes, OK, girls. And then you could call girls “girls,” you know. We were girls, practically, so it wasn’t politically incorrect to say. We’re going to go out to the—OK. And I’ve been so glad that I was able to be there and see that shot. ... What it did, it raised up and sunk. It’s what they call an excavation shot. And this was all part of the Plowshare program, the idea that you could build canals, the small power of a nuclear explosive could make these huge subsidence craters. So that was a big thrill.” Peggy Bostian, Interview by Shannon Applegate, June 28, 2004, Nevada Test Site Oral History Project



The Sedan test on July 6, 1962. Photo courtesy the National Nuclear Security Administration/Nevada Site Office.

“Really exciting, because in those days, it was a little more free form than it turned out to be later with all the additional safety requirements, so you could go out and observe at observer posts, and even some of the large events, like the Sedan cratering shot. I was up on top of Rainier Mesa when that was detonated, which was quite a bit below the valley floor where the shot was. The shot went off, you could see the ground rise up and then the fireball break through, and then the cloud go up, and you got to wondering, is that cloud coming my way, because it was so high above you.” Wendell D. Weart, Interview by Mary Palevsky, April 18, 2006, Nevada Test Site Oral History Project

The Baneberry Venting



The Baneberry test vent cloud as seen by an aerial observation plane, December 18, 1970. Photo courtesy the National Nuclear Security Administration/Nevada Site Office.

“Anyway, we were coming over Control Point Hill, CP they call it, control point, and Baneberry was in Area 2 about, oh, five miles as the crow flies. And I was about half asleep. Cecil McMurtry, he’s still alive. There’s only two of us that I know of. And [Wally] Beaman was sitting in the front seat with Jack, the driver, because we carpooled in vans, and he said, Holy mercy, look at that. I rose up out of the back seat and the whole desert floor just started to bubble. I mean huge bubble. And then it just kind

of collapsed in on itself and come right straight up, and then this is what you see. You could see boulders flying through the air, big boulders, big as pickups, flying through the air. See, it didn’t come up at ground zero. Ground zero was over here somewhere. It came up through a crack that intersected the drill hole. That was a drill hole. There wasn’t mining done there. It was all done with a drill hole, forty-eight-inch cased hole, and then they’d drop the device down on a rack with a drill rig. That was different than the way we did it. ... Beaman said, Hell, we’re done for the day. Let’s go to Indian Springs or Cactus Springs where you can get a drink. So that’s where we went, to Cactus Springs. But man, it was pandemonium. There were security guards driving everywhere with their lights on. They didn’t know what to do. They were trying to route people this way. That was in the day where they let people out fairly close to ground zero. And the last day, since Baneberry, there was nobody past Mercury, except for your scientists up in the control point. But there was nobody out in the forward area. Nobody. They swept all the forward area.” John F. Campbell, Interview by Charlie Dietrich, January 31, 2006, Nevada Test Site Oral History Project

“But anyway, when we were doing underground tests, the whole idea is to keep all the radiation underground. We did a test and we had a bad vent. A vent is when the hot gases and radiation comes—... That was an event called Baneberry. And so everybody realized that was unacceptable and we had to do more. We had done many, many tests that didn’t vent. This one vented, and the big question is, why did this one vent and none of the rest of them did? ... It had to do with the geological [conditions]. There was probably an underground fissure that we didn’t realize was there, and so when the bomb went off it put all this high-pressure gas into a crack in the world that had been there for thousands of years but we didn’t see any evidence on the surface. On the other hand we weren’t looking for it because we’d never run into one of those at the test site. But this is when they decided that we *did* have to look for those kind of things in the future.” Joseph Behne, Interview by Joan Leavitt, July 22, 2004, Nevada Test Site Oral History Project

Tunnel Excavating



Workers in N Tunnel (left) and Curtis Amie (yellow coveralls) with another worker (right) circa 1975. John F. Campbell, Interview by Mary Palevsky, January 14, 2005, and Curtis Amie, Interview by Mary Palevsky, January 21, 2005, Nevada Test Site Oral History Project.

“And then we would drive, oh, let’s see if I can read this here, tunneling, there was about 4,400, say 4,500 feet of tunnels that would be driven for this particular event. Each event would take somewhere in the neighborhood of about four to five thousand foot of tunnel driving, of different sizes. They weren’t all the same size. We’d start out somewhere around an eighteen-by-eighteen or a sixteen-by-sixteen heading and as we advanced the tunnel, we would mine for containment plugs. There had to be huge concrete plugs inserted into the mountain that we could get access in and out with our tunnel trains and locomotives. They were all twenty-ton diesel locomotives that would pull the mine cars for hauling the concrete underground and the debris or muck, we’ll call it, outside. ...

Well, we would have to mine the portal in the beginning, but they would do that—from the portal to the nearest test bed was somewhere in the neighborhood of 2,500 feet to about

3,000 feet, and then we would start what they call Y-off or branch-off with a test over here and one up there and one over here. ...

In one case, at N Tunnel, we even used the same drift, the same line-of-sight pipe. All they did was bring the ground zero closer to the portal, or closer to the entrance of the tunnel. I think the Miners Iron and Diablo Hawk, those two, they used the same test chambers, line-of-sight pipe, and all that stuff. Ground zero was, say, at seven or eight thousand foot from the portal. The next ground zero would have been probably 1,800 foot to 2,000 foot closer. Because the earth wasn't disturbed very much, the ground fall and the damage from the previous test was more or less contained back there, see. ...

They had several tunnels. In early days they had A Tunnel, B Tunnel, G Tunnel, E Tunnel, T Tunnel, I said N Tunnel, and then P Tunnel. P Tunnel was the latest, and that's the one that they keep in readiness today, if they were to go back testing. That was one of the requirements of the moratorium, that we could stay in readiness, and so there's a test bed already mined. All they have to do is start to field the line-of-sight pipe and the experiments for the scientists." John F. Campbell, Interview by Charlie Dietrich, January 31, 2006, Nevada Test Site Oral History Project

The JVE and Big Hole Drilling



"We shared that containment program with the Russians in the 1988 Joint Verification Experiment [JVE]. The Russians looked at it and they said, oh, this is wonderful, but their next question is, but we can't use this. They can use it for the tunnel part, but because their vertical conditions are so different, having water so high up [high water table], makes all the difference in the world in how they conduct a test. ... Our drilling program, starting again using oil field techniques, we went from that technique very quickly to what we called a dual drilling string and flat-bottom drill bit. ... The Russians are still, for their test program,

are still at about a one-meter-diameter hole, and that matches their submarine size. Their submarine [for immersion in the high water table] is about two feet in diameter and not very long, but they don't do very complicated diagnostics in them. They just basically lower this in, drop rock on top of it, about three-quarter-inch crushed granite, and a little bit of cement in various places, and they detonate these things. They do get leaks out of their system. Our

holes, though, we use this flat-bottom drill bit and our typical holes were anywhere from eight to twelve feet in diameter. We could drill them down and we had capabilities to depths of over five thousand feet. ...

What we did, what we did at the Nevada Test Site, is hydraulically take a ten-foot hole and we make it look like a seven-inch-diameter hole, and we do that by circulating fluid, air and water, in between two sets of pipe. ... The Russian system, since you got these multiple motors, and you think about an oil field dripping on the bottom, and these mud motors are turning these individual drill bits, and then this rig is turning this entire thing around. ... Here we pump about three hundred gallons per minute of fluid, they pump between seven and eight thousand gallons per minute of fluid in order to get the cutting out. ...

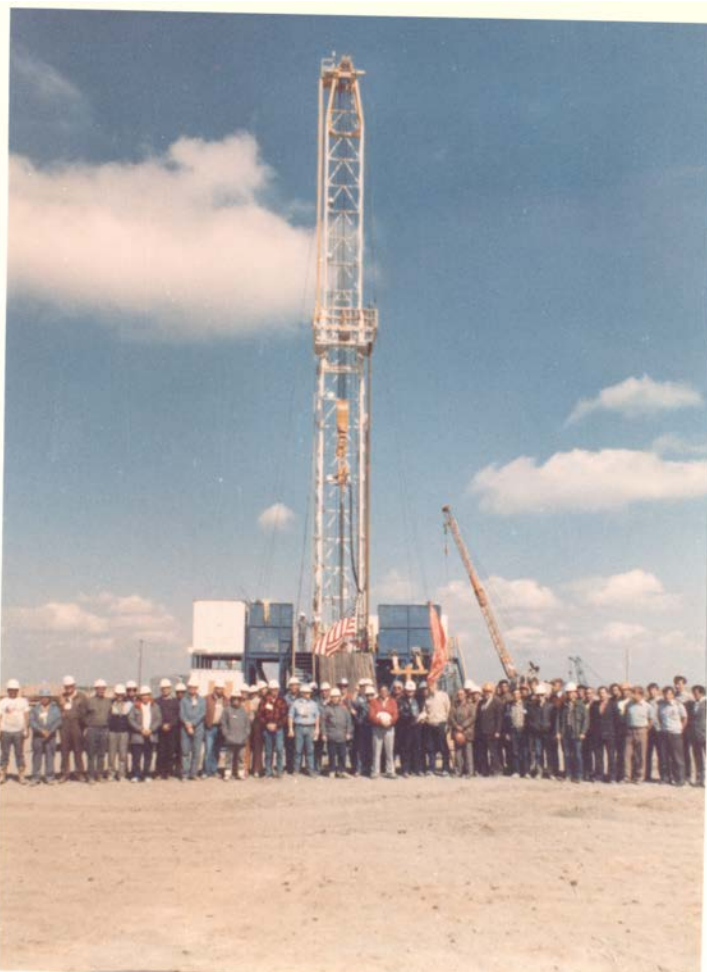


Large emplacement hole and large-diameter drill bits circa 1990. Photo courtesy the National Nuclear Security Administration/Nevada Site Office.

So the drilling program developed the tools and systems to very economically—and by the way, to give you kind of a reference point, where we drilled on our flats, which is relatively soft material, we drilled at an average of eight feet per hour with a ten-foot-diameter drill bit. In hard rock the equivalent of granite, we drilled at three feet per hour. The outside world, and that is even the free world besides behind the Iron Curtain portion, drilled at about one-tenth of those rates. So we developed technology that was absolutely phenomenal. We actually went from drill crews of having forty, fifty drill rigs operating at any given time to where we had two rigs operating, one for Los Alamos, one for Lawrence Livermore. We eventually got down to the point toward the end of the test program, because our number of tests had also fallen out, but our excavation rates had gone up so high, I had one drill crew, they spent six months working

for Los Alamos, six months working for Lawrence Livermore, because they got so efficient on their drilling programs. ...

When I've talked with Marat [sp] who is the head of their drilling program and I told him, I said, For your first two hundred feet or so, that's a little over a hundred meters, I said, you're cutting about the size of pea. And he looked at me and he said, Ja. And I said, When you get below that, I said, you get down to where your cutting is less than a millimeter. And he stopped and looked at me very close in the eye and got closer and he says, How do you know that? And I said, Because your hydraulic system, your circulating system, can't circulate out anything more than that. And Marat wasn't one of the folks who got to come over and see our drilling program here, and so he asked me, he says, Well, how do you guys do it? And when I told him that we drilled three-to-four-meter-diameter holes, and I told him the rates that we drill it, he was absolutely flabbergasted. To get to the straight and plumb requirements, our diagnostic rack that the scientists would design, typically they're somewhere about eighty-five to ninety feet, but they have been over three hundred feet in length. And each one of those diagnostic racks has a series of line-of-sight pipes that are lined within six-thousandths of an inch of looking at a very particular part on that device." Patrick Rowe, Interview by Joan Leavitt, November 5, 2004, Nevada Test Site Oral History Project



Emplacement hole drill rig. Charles McWilliams, Interview by Joan Leavitt, July 9, 2004, Nevada Test Site Oral History Project

"This is our drill rig in the Soviet Union. ... And I don't know if Nick [Aquilina] told you, but Vern [Witherill] had them raise the U.S. and Soviet flag up on our drill rig over there [the Soviet Union], so we had to raise it up over here on our drill rig. ... Nick, was fit to be tied. He was not happy about that. For me, it was an emotional thing, because until we raised that flag, these were just people. Now, I grew up going through the Cuban missile crisis. I'm a little kid. I remember watching TV with Khrushchev beating the table, We're going to bury you. So I'm fighting the Evil Empire all these years, and when that Soviet flag went up on the test site, it just [snapped fingers], What are we doing? ... We got past that,

but it took me a few days, even just sitting down across from them, to emotionally get past— ... here was a lot of things we had to—with the roughnecks and the miners and all that—that had to be really careful, real, real careful because—and you also had to worry about the Soviet safety.” Charles McWilliams, Interview by Joan Leavitt, July 9, 2004, Nevada Test Site Oral History Project

Icecap and the End of Nuclear Testing



The remnants of the structures covering the shaft excavated for the Icecap test. Photo courtesy the National Nuclear Security Administration/Nevada Site Office.

“The reason that test wasn’t conducted was solely because of the timing of the presidential directive of testing. We thought we were going to resume testing after a three-month period of time; after September of 1992 we thought we were going to resume testing to do our last fifteen shots, and I’m probably confusing you. Congress and then the president’s approval, in attempt to stop testing, in 1992 passed legislation that said, We are asking the Department of Energy to cease testing at the end of September 1992 for a three-month period of time. During that three-month period of time, you are directed to prepare a fifteen-shot program, five

shots per year, for three years. These will be the shots that you feel you need to do to complete whatever safety or new devices you are designing. That’s kind of what Congress told us. So we thought our last test would be in September, that we would do what we were directed for three months, and then we would resume for three years to do these five, five, and five tests, fifteen tests. But then President Clinton at the end of the three months kept extending that until finally he said no more testing. ... Icecap, which was a British test that we were conducting for the British. They paid for it, it was their device, but it would be our people would conduct the test. It was Los Alamos in this case. And we never conducted that test. What you see out there now, and then, was the experimental stuff. The device never came; it was never put in there, so it’s just the experimental stuff, the diagnostics. The hole’s there.” Nick Aquilina, Interview by Joan Leavitt, April 6, 2004, Nevada Test Site Oral History Project

Protest at the Nevada Test Site



Protesters along the Mercury Highway, 1957. Dorothy Ciarlo, Interview by Suzanne Becker, August 18, 2005, Nevada Test Site Oral History Project.

"Right, yes. And these two, I don't remember him, but this man I remember very clearly. His name was Albert Bigelow and he was a very impressive man to me. He had been I think a Naval commander in the Second World War, and whereas all the others were sort of lifetime pacifists that had never served, been in the service, he had. And he had had some involvement with Hiroshima. I don't know what it was, but I know that he also had hosted, through his Quaker wife I think, the Hiroshima Maidens. Through his own knowledge of the Hiroshima blast plus this more recent experience with the Hiroshima Maidens, he became very upset about nuclear weapons and the making of them. ...

But he didn't have a history as being a pacifist. So he really was different from the rest of the [protesters]. So he had actually been in the military and he came to his pacifism a little bit differently than you did. Exactly, which lent a lot of credibility in a way. Everybody was always very interested in him. And I think he was an architect. He had a very successful mainstream career and was a good-looking man. ...

The guards were around but I don't remember having any direct interaction. Not with the workers. ... My recollection is they were very polite and very well trained. They were contained. ... They [the folks that crossed the line] were arrested as soon as they crossed the line. ... They were taken to Nye County. I wasn't there so I don't know. But this is a picture of it. ... They went to Beatty. ... They were released. They may have been held for a few hours, I don't

know, but I think they were released pretty quickly. And they were released on a five-hundred-dollar [bail]. I don't think they had to pay a penny. They were arrested for trespassing, and then as long as they didn't trespass again, they were released. And they had a lawyer, and I wouldn't have remembered his name but it's in those clippings, named Francis Hisler, who represented them. I'm pretty sure actually he came and was physically present. ...

This is Lawrence Scott, the director. And then this is Albert Bigelow. ... Oh, this is a man named David Andrews who was a minister, I think from the South. Lovely man. He drove out with us. And there was a man whom I don't recognize here named Jim Peck who participated in many, many peace and civil rights demonstrations over the years. I think he's a well-known figure in New York as an activist, a kind of lifetime activist. And the others, I know there were a few that were Mennonites. Most of them were Quakers. David Andrews was a minister but I don't think he was a Quaker. With the exception of Albert Bigelow perhaps, there weren't any, how shall I say it, just political people. ... Lawrence Scott was a very religious man. I think there were other people like Albert Bigelow who was not particularly religious. But in a sense I had the feeling, you know, many of them came to their convictions from religious grounds, and their commitment, but there was also a political sense to it. I think actually the American Friends Service Committee in New York was not just—it wasn't really religiously—I think it was more politically based, what we would now call progressive. So it's kind of a merging, maybe. But I think it was very much a planned strategy, if you will, because it was safer to come at this from a religious point of view.” Dorothy Ciarlo, Interview by Suzanne Becker, August 18, 2005, Nevada Test Site Oral History Project



Albert Bigelow crossing the line at the Nevada Test Site Gate 100, 1957. Dorothy Ciarlo, Interview by Suzanne Becker, August 18, 2005, Nevada Test Site Oral History Project.



Images from the 1987 protest along the Mercury Highway. Jerome Zawada, Interview by Suzanne Becker, August 9, 2006, Nevada Test Site Oral History Project.

"My first time here was in 1987. ... And I fell in love with the desert here, too. I came in spring and it was like a weekend that was called a Franciscan Weekend, that people were taking turns, different groups. ... Anyway, what happened was that I crossed the line, over, and at that time in 1987 yet they were—what happened was that I didn't want to come, I couldn't come back here for financial reasons. That would be too costly. I didn't have that much money to work with. So I thought that I wouldn't give them my name when they processed us. So they took us to Beatty then at that time for processing, and my companions were given a date for a trial or something, which eventually was dropped. They didn't have to come. But I didn't know that. None of us knew that at the time. And so I gave them a John Doe, I didn't give them—and they were pretty irate, whoever processed us, and after they blackened my fingers for the fingerprints, then I says, Could I have something to wipe my hands off? They just picked me up and threw me out the door and they says, We're not going to even bother helping you out one bit because you're not cooperating. Well anyway, but they gave me a date and I said [to myself], Well, I can't come back here, so what I did was I called the judge the next day and made a deal, the judge here, or magistrate. ...

But he [William Sullivan] was very cooperative and he says he would take care of my case on the next day, on the Tuesday afterwards. And he agreed to it. And I gave him my name then, and I had a hearing and I was sentenced to five days, and I was taken up to Tonopah to

the—it was kind of like a brig or something that they had there. And so I was there. And it was a wonderful time. It was a wonderful time. I really cherish that whole experience. I felt so close to the people there and I sensed the presence of God very keenly, very strongly, and I just found it very meaningful. I wrote a story about that afterwards.” Jerome Zawada, Interview by Suzanne Becker, August 9, 2006, Nevada Test Site Oral History Project

“Whoever came and said they wanted to be arrested, we would say, well, you have to go through this little afternoon training first. And we kept saying, they’re [the authorities at the test site are] not our enemies; they’re our friends. And we had wonderful examples, too, of the cooperation and the friendship on the part of the authorities. At one time we had the people standing—and when you go into the test site there’s a kind of a curve in the road, and one of the authorities at the test site, they were called back to Washington and said, Well, you have to do something about these protesters, because they had put up a sign, “Caution: Protesters on the road.” Rosemary Lynch, Interview by Suzanne Becker, June 8, 2004, Nevada Test Site Oral History Project



Mercury Highway road sign. Rosemary Lynch, Interview by Suzanne Becker, June 8, 2004, Nevada Test Site Oral History Project.

“Then gradually the place evolved and they built the pen for people. I was present at one week, I can’t remember what year it was, but it was a much broader event and there were five thousand people [joint action with American Peace Test March 12-20, 1988]. You probably know about that. We camped there [Peace Camp outside the NTS] for five nights or four nights, and so there was constant input all day. I was one of the people who was actually driving the rented vans up to Tonopah, where people were being brought up by buses and just dumped, so we would go up and bring them back. ...

There were, I think, a whole bunch of groups that came together for that one. Yes. It was in March, I believe, the end of March. It was bitterly cold at night, but the day would warm up. And we had powwows with the Shoshone people. You could select what you wanted to do. And at one point, twelve hundred people went over the line at once, and we were constantly trying to collect them from Tonopah, so I was on the volunteer team for that. ...

“I remember not doing it [crossing over the line] simply because I was one of those people, and I said, well, this year I’m not going to. I remember one man who came to celebrate his ninetieth birthday there, and his determination to be arrested, and he was. He was from Oregon. One of the first people to be put in prison in World War I as a conscientious objector. ...

Yes, so you really met wonderful people at it. That was just very inspiring and awesome in the sense that there are so many good people, and the commitment to be there. And there was always very good relationships with the sheriffs and their people. There was never any Army or anything present. It was just well organized, the community and people, food—all shared for the whole time.” Megan Rice, Interview by Suzanne Becker, June 22, 2005, Nevada Test Site Oral History Project.



The “Shadow Children” from the 1987 protest. Jerome Zawada, Interview by Suzanne Becker, August 9, 2006, Nevada Test Site Oral History Project.

"I know I violated their law a lot of different ways but they never could take me in front of the judge. I remember we blockade all the road that's going to the test site one time, and then they have to come clear around on the other side to where the power line was in order to bring the workers in. And we couldn't let them come out either. Violated their rules and regulations thinking they're going to take me to jail, then I'm going to tell the judge, *Tell me the truth.* Where is your paper saying that you own the land? But they never could. That was always my thing. I think that's the reason why they could never take me to jail, because I'm always asking that question." Corbin Harney, with Rosemary Lynch, Interview by Mary Palevsky and Suzanne Becker, August 4, 2005



Corbin Harney at a 1997 protest. Photo courtesy John Paul Miller via Corbin Harney, Nevada Test Site Oral History Project.

"It was amazing. As we drove in, there was highway patrol, police, security, lined up. We went in the Mercury gate; they were lined up the way down with their vehicles. Jerry Millett was taken aside. He met with, probably, the Nye County sheriff. He was told that the rumors were people had knives hidden in their ankles or in their boots, that they had cayenne pepper ready to spray at the police. They were told that it was the Indians.

Well, I mean of course it wasn't true. We didn't even know we were going to lead the group on the test site. Jerry wanted to go alone so we stayed up late that night trying to figure out who was going. Carrie Dann's sister had told her, *Do not get arrested.* The final word was, *We're all going together.* We had no clue exactly what was going to happen except what the American Peace Test group had told us, and we put our faith in just staying together.

As we walked down towards the cattle guard, the entrance right there at Mercury, police were lined up two and three. They were standing with their arms behind their back looking very official at us as we walked down the road. There might've been about eight of us total. Martin Sheen and some Catholic priests were there with us. But Jerry as chief was the first to cross the line. He told them that this is Western Shoshone land based on the Treaty [of Ruby Valley] of 1863; that we had the right to walk across our land and that we opposed nuclear testing. They immediately arrested him, took him and pulled him across and we all went across with him. They loaded us into some buses and took us to Beatty and we stayed there until they released us. ...

I think it was frustrating. A little bit frightening at first. But I think it was more infuriating because of the reaction of the police officers. I think they thought it was a joke. ... And being accused of carrying knives and pepper spray, it was all hype. But I think the fear subsided as soon as they had the plastic cuffs on; many of us were able to slip them off and we all were together. I think it was most frightening for Jerry; he was the spokesperson, he had to lead it... And his experience, for some reason—and I don't know this for a fact—I think it brought back visions of Vietnam. He was in Vietnam and it was really frightening to him. He was more worried about the rest of us and really did want to go in alone, but we weren't going to let him do that." Virginia Sanchez with Patricia George, Interview by Mary Palevsky, September 11, 2004, Nevada Test Site Oral History Project



Along Mercury Highway during the 1997 protest. Photo courtesy John Paul Miller via Corbin Harney, Nevada Test Site Oral History Project.