

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

Interview with
Ann Dye

November 1, 2004
Las Vegas, Nevada

Interview Conducted By
Shannon Applegate

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Table of Contents

Introduction: birth, family background, childhood, education	1
Hired by Federal Services Incorporated [FSI] to work at Nevada Test Site [NTS]	3
Remembers early Las Vegas and Ely, NV	5
Talks about life at Mercury and the NTS	7
Transfers from FSI to REEC Co, working on loan to N-Division, LANL	9
Moves to REEC Co in Las Vegas as senior secretary, Special Projects	11
Recalls relationship with scientists while working at NTS	12
Remembers impressions of atmospheric tests	14
Talks about REEC Co safety policy and radiation safety awareness	15
Discusses work in MAD Building and Kiwi Project	16
Recalls camaraderie and fun of people working at NTS, and then advent of OSHA	17
Talks about work with REEC Co Special Projects	19
Resigns from REEC Co, moves to Hawaii and then back home briefly, and then returns to REEC Co and works at NTS for Harold Cunningham and Dick Land	20
Works for Bob Bostian (Program Manager for LANL), promoted through several positions to become Program Manager for DoD, LANL, and Sandia (REEC Co's first female department manager)	23
Recalls experiences at University of Utah and lessons learned about relationships	25
Talks about position as Program Director for DoD, LANL, and Sandia and problems for women working in these jobs at NTS	27
Meets and marries husband Dick Dye	29
Discusses "discretionary power" of the budget	30
Talks about the different cultures of the DoD and the labs	31
Discusses upgrades in workforce, requirement for college degrees, work experience	33
Remembers what she and her husband talked about outside of work, and the bonds formed by NTS workers	34
Talks about various reactions of NTS to political changes: management, hiring, budgets	35
Recalls union activity and strikes at the NTS	37
Remembers social occasions and relationships with military generals and scientists at the NTS	38
Talks about protesters at the NTS	40
Recalls reactions of local people to testing and employment at the NTS, and observations of atmospheric tests	41
Gives opinion on Yucca Mountain Project	43
Observation of changes in workforce attitudes, especially about women	45
Recalls working for Harold Cunningham and other REEC Co managers	47
Conclusion: women and the flexibility of working in many different roles	50

Interview with Ann Dye

November 1, 2004 in Las Vegas, NV

Conducted by Shannon Applegate

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

Shannon Applegate: *OK, we are recording.*

Ann Dye: OK, so first do you want to know that I'm Ann Dye?

Yes.

My maiden name was Gaufin. I was born in 1939 up in Ely, Nevada, the birthplace, incidentally, of Pat Nixon.

I didn't know that.

I think she was only there for seven days. Her father—

And then she went to Whittier [California], right?

Yes, right.

Yeah, I studied a lot of—she was a neat lady. She really was.

Yes. I liked her much better than I liked her husband.

Yes.

But anyhow, my dad was born and raised in Utah. My mom was born and raised in Ely and lived there and worked for an uncle in his drugstore—for *my* uncle, not her uncle. And this uncle, his wife was my dad's sister. Dad graduated from the University of Utah and worked in Boulder City on the Boulder Dam—well, he worked in the drugstore there when the Boulder Dam was being built. Then he moved up to Ely, met my mom, and they got married. Spent their whole life living there.

What did he major at in—?

Pharmacy.

OK.

He was a pharmacist in Nevada. He was licensed. He was the second-longest license holder in the state.

Oh, did he?

And the State Board of Pharmacy came up to Ely, first time they ever held a meeting away from Reno, to honor him.

Wow!

Yes, he didn't retire till he was eight-two, and then *only* because his back hurt so much.

So how long did he hold the license for?

Sixty-two years.

Wow!

Yes. So he and his partner had a little drugstore, Ely Drugstore, on the corner of Main. I had two sisters, and when we turned twelve we went to work in the drugstore. So I learned soda jerking and—

Oh how neat!

It was fun. Had a lot of good experiences.

You must've been real popular. You had access to the ice cream.

Yes.

Oh how cool!

Yeah, it was nice. Plus another really neat thing about it, you know, when I was growing up, being wild was going out and sneaking a cigarette and having a beer. Well, if kids were going to do that, I was always such a little prude. If I didn't want to do that I'd say, *My dad's making me work.* And Dad never let me down. I didn't have to say, *Well, I don't want to do*

this, I didn't feel like doing it. So it was pretty neat. I don't think I would've been a bad kid anyhow, but I had an excuse without looking like a chicken.

Right. Right.

So then I graduated in '57, and from as long as I can remember I wanted to go to business school but my dad was pretty adamant about university; so I went to Utah State University with kind of an idea that since the poor guy never had any sons, I'd take pharmacy and go along in his footsteps. Well, I went one year up in Logan and I just didn't like it, so the next summer I cajoled my parents until they agreed I could go to Stevens Henager Business School in Salt Lake City.

So I went there and got an Associate of Commercial Sciences degree, which meant I could be a super-duper hot shot executive secretary. And my last year, just months before I was supposed to graduate, one of my class assignments—we took business law, accounting, all kinds of math, personality development, modeling, the whole range—but one of my assignments was to go find a job interview and practice doing an interview. And it happened to be—I think it was at Hotel Utah in Salt Lake City. Federal Services Incorporated [FSI] was conducting interviews and they were the guard service at the Nevada Test Site [NTS], which I'd never heard of. And this job sounded so nice. My interview went extremely well and they hired me.

On the spot?

On the spot. And I took the job on the spot because it was going to be three hundred dollars a month, which was just, I mean that was an amazing amount of money to make. Well, my folks were pretty upset because I didn't—

[00:04:44] End Track 2, Disc 1.

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

OK, we back recording. So just one thing. So they taught you modeling at the—

That was to complement with poise. A lot of us that got in there really came from small towns. I was extremely shy and had a hard time being around people, and it was to kind of help you come out, learn how to stand, walk, talk, have the social graces along with being able to do the secretarial or accounting, whatever you needed to do, to become a well-rounded executive secretary.

So the professional skills that you would need in an interview or with how to deal with these executive men.

Right. And of course I might add, back then, this was in '60, you didn't go to an interview in anything less than heels, hose, gloves, and hat. Can you imagine how strange you'd feel today, walking into somebody's office in gloves and a hat?

Yeah, gloves and a hat, that would be the one that would throw me. So you looked like, I imagine, Doris Day.

Right.

Oh, those were great outfits.

Yeah, it was kind of fun. I always chose a *big* hat, big black hat. I must've had five big black hats.

Why'd you choose the big black hat?

Ann Taylor Modeling said it made my round face look more oval.

So that was the—that's interesting.

Yes, it was fun.

But at any rate, my parents, when I told them I'd accepted a job at Mercury Nevada, said, where is that?

And I said, Well, I'm not really sure but it's down by Las Vegas.

[And they said], Well, how are you going to get there?

And I said, Well, I'm not really sure.

I didn't have a car.

[And they said], Well, aren't you going to graduate?

And I told them I had planned—I could do that, the tail end of it, by correspondence because I had just a little time left.

So they gave me their car for graduation, and we all piled in that car and their new car and caravanned down to Mercury and got—at that time of course nobody could go in. And my dad wasn't about to let me go through that guard gate without being along, and so he got out of the car and told the guard he'd go in with me, and the guard *slapped* his gun and he says, No, I don't think so. If you haven't got the clearance, you can't stay here.

[Telephone rings]

You want to stop?

Yeah.

[00:02:36] End Track 3, Disc 1.

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

OK, so we were talking about you're at Mercury and—

Yeah, so Mom and Dad—that was Memorial Day weekend in 1960. Well, they couldn't get in Mercury, so they came into Las Vegas. It was packed and they had to stay at some stranger's home, and I guess they had a good weekend but were very—

At a stranger's home?

Yes. They couldn't find a hotel room. They finally ended up going to the Chamber of Commerce, and people were opening their homes. I *think* that was about the time of the Helldorado, the old Helldorado celebrations that went on for years and years here.

What was that?

It was parades, and they had a Helldorado Village with a carnival-like thing. There was a rodeo. It was just a big week-long—it was something that the Elks Club put on. But we used to have huge parades down Fremont Street.

What was it commemorating?

Just nothing. Just Helldorado, you know.

It was just a big celebration.

Just a big celebration.

And so people would open their houses up to—?

Yes.

Wow, that's odd.

See, back then Vegas population was only fifty-nine, sixty thousand people. So it was fun.

Now had you been to Vegas before?

I came down here when a cousin got married in Boulder City, and Mom brought some of us down in '57 to see Harry Belafonte, and I've marched in a couple of Helldorado parades, and that was it.

Oh, you did? What'd you march—?

I played the saxophone in our high school band.

Oh, you did? That's neat!

Yes.

How big was your high school?

I think there were almost two hundred in my graduating class. Ely was a big mining town then. Kennecott Copper was up there, and at one time we had the largest open-faced—well, it was advertised as the largest open pit mine for copper. And then Kennecott left, and I think Ely was probably eight or nine thousand people when Kennecott pulled out. The town now probably is five thousand, forty-nine hundred, something like that.

Right. But you still knew everybody in town, I would imagine. It was still kind of a small town.

Yes. Especially working in the drugstore, you'd see a lot of people come in there.

Oh, yeah. So you're at Mercury and you're starting your work.

Right.

How old were you?

Twenty-one. Well, I would've been, yes, *just* twenty-one.

Were you nervous to be on your own?

You know, I was in a way, but in a way I thought—I had been *so* shy, it was almost like I could remake myself, so I really looked forward to it. And they had dormitories for the women out there. I'm sure you've heard this from others. There were seven women's dorms. They had a Quonset hut for a theater. There was a cafeteria, a couple of cafeterias, and a rec hall. And everybody was very friendly.

The only drawback was, which I found out when I first came in to Las Vegas, after I got a few paychecks, I came into a store that was on Sahara, which was then called San Francisco Street, and there was a Sarah's Dress Shop. It just carried beautiful clothes.

So I came in and found some clothes and the woman said, Well, where do you work?

And I said, Mercury.

She says, Oh, you're one of those.

And until that time I didn't realize that maybe there was a little bit of a reputation if you *lived* out at Mercury because there were only about twenty-five women out there. And so we all kind of got branded as wild ones. I quit telling people I worked at the test site after that.

Oh really! So you were looked upon as like a wild woman.

Yes, and I was so naïve. I guess there were some really wild women out there. In this dormitory, every Saturday they'd come through and do an inventory of the bedding and everything, and I'd shove a chair up under my door so they'd have to really make a lot of noise to get in, so I'd be sure to be out of bed when they came in. But occasionally you'd see people bailing out of the windows of the women's dorm and I thought hmm, what is this all about? [laughter] It was pretty wild back in those days.

So would they just come into your room?

Yes. They'd knock on the door and then open it and come in and count your sheets and pillowcases.

Really! Now who was doing that? Was it a man or was it—?

Yeah. The Feeding and Housing Department was in charge of the dorms and all the linens and [00:05:00] everything for the dorms.

So how much privacy did you have?

You know, you really didn't have a lot. Well, from the men you did have. Each dorm had a lounge, a group area, where men were allowed. They weren't allowed beyond that, although like I say, I saw some who did get farther. I never had anyone in my room that I was aware of except these inventories. But you had a community shower, you know, just a big bathroom with a bunch of shower stalls and biffies [toilets] and the sinks. And then your own private room. And

when the test site got busy, when they were going to resume atmospheric testing, they brought in Kelly Girls and hired all kinds of people, and at one time this room, which was probably about the size of this kitchen, housed four women. You each had a dresser and they had two bunk beds. And so it got very crowded. But it was kind of fun, you know. All of it was kind of a party atmosphere because you're out here in the middle of no place.

Yes. And all you have is each other.

Yes.

So did you like everybody that—did you like the women on your dorm? Did you make some good friendships with some of the women?

Yes, I did. Yeah, I think I made better friendships out there than I did going through high school in Ely, actually.

Oh, really?

It's odd. Although now I'm renewing some friendships I had in high school, just the past couple of years, through the miracle of e-mail. But yeah, you had lasting friendships.

And how long were you living in the dorm?

I lived there for three years.

That's a long time.

I worked for FSI for about a year, then the woman that I had replaced came back and they wanted her in the job that I'd taken, so I left FSI and went to work for REECo [Reynolds Electrical and Engineering Company], on loan to Los Alamos National Laboratory, which was called Los Alamos *Scientific* Laboratory back then; they put me out in Jackass Flats at the MAD [Maintenance, Assembly, and Disassembly] Building, and that was just absolutely wonderful. It was crazy, it was fun. They built reactors with the hope of—it was the Kiwi reactor—with the

hope of using them someday to lift a spaceship into space. But they were tested nozzle up and, you'd have all these tests and the RADSAFE [Radiological Safety] guys would stand down the road, and if you had to get in an assembly bay they'd wave a flag and lock you in a room so you'd be safe from the radiation. And at that time the dress code was heels and hose, period. No slacks. And this MAD Building, they built an extension to it—I worked in the R-MAD [Reactor Maintenance, Assembly, and Disassembly]—and in the extension they had an assembly bay. You walked in the front door of the building, you went up some steps *right* by this assembly bay, and up into offices that had windows overlooking the assembly bay. It had an alarm system in case anything happened, and they determined if anything happened to that assembly bay, employees couldn't go down that staircase because the bay was right there. Well, I would have to crawl up on a desk—

So it would be contaminated, is that why?

Yes. I never thought of it at the time but it wasn't a disassembly bay. Where would the contamination come from? But they'd have these alarms and I'd have to climb up on a desk in my heels and hose, go out a window, one of those ladders hooked to the side of the building, and climb down. So I started writing memos about this view that—they wouldn't let me throw my heels off because I'd bonk somebody in the eye. And finally when I quit there and moved into town for REECO direct, they built an outdoor staircase.

Oh. Yeah. So at least you got that for the women that proceeded you. Now what did you do?

What was your job?

I was a secretary. I worked for the N-Division people. They were from Los Alamos and they came in—it was kind of a feast-or-famine job, you know, you'd be there alone taking care of classified materials and have a few people that are just caretaker people, but then when they

[00:10:00] started to assemble the reactor, you'd be busy for months on end with all kinds of scientists coming out. I did all their dictation, transcription, took care of all the classified material. And then they'd have the test and go into the disassembly phase where they'd disassemble the reactor and take the parts back to Los Alamos to do whatever analysis they did, and then it went back into the quiet slump.

Did you learn a lot about nuclear science?

Not really. I learned a lot about reactors. When I went out there, the classification was so much stricter than it ended up being when I retired. And I remember when I worked out there, Los Alamos came out with a book on what was called the Rover project or the Kiwi project, and it taught how the reactor worked, and I just thought that was a travesty. That should've been classified. So I refused to hand them out. I just kept them locked in the safe. Somebody else handed them out. But as they declassified things, you know I'd had classification drummed into my head when I first hired in, and I didn't even keep one of the books for myself because I thought it was—

Oh, really. Now who would ask for those books? Who would you hand them to?

I never had anybody ask for one. The laboratory just sent them out and said, Pass these out to the employees. You can give them to your families. But it made me nervous. I just knew they'd come and get me if I did it.

So then REECo of course provided the on-loan help out there. And the Space Nuclear Propulsion Office [SNPO] came in and took over the reactor projects. And I don't know how they tied in with DOE, if they were part of Department of Energy or—I've forgotten what that tie-in was; but at any rate, a job for a senior secretary became available in Las Vegas, so I quit

my on-loan job and moved into Las Vegas and went directly to work for REECo. And I stayed with REECo, then, till the end of my career.

But I started out as a senior secretary in Special Projects, I think it was called, and I was fortunate. They asked me to go to Hattiesburg, Mississippi for a couple of weeks, and I think that was in '63, '64, for a nuclear test. Well, I was supposed to go for a week. I packed clothes for two weeks. Two months later I called my boss and I said, *I've got to come home some day*. But I stayed clear through the test and through some after tests, and then as the [Lawrence] Livermore [National Laboratory] were starting to button the things up, I finally said, *I've got to go home*.

Now why'd they keep you there so long?

Oh, I was such a good secretary, I guess. I don't know. I wasn't doing very much. I don't know why, unless it was egos involved, who wanted a secretary there or, you know.

Now when you were at Jackass Flats and working with the reactors, what was your relationship like with the scientists? How did they treat you?

They were just all very nice. Very nice. There are some that I remember in particular. They were all Ph.D.s. Some of them were so eccentric. I met just a couple that were really well-rounded, could talk about a lot of things. Others were just so tunneled in on their jobs. There was one man who just loved to fight. He'd hand me something in a plastic bag with radiation seals on it and say, *Transcribe this*, and I'm telling him, *I'm not opening that envelope*, and he'd fire me. And then he'd move to the other side of the MAD Building. He'd fire me. I'd tell him, *You couldn't. I don't work for you. I work for REECo*. He just enjoyed being that eccentric. When Los Alamos wanted me to come to Los Alamos on some job [00:15:00] interviews, he was one of my biggest supporters.

Strange.

So it was just *very* weird. Yeah, they intrigued me. One of them, and I don't remember this man's name, but I was told that he'd even shower in a suit instead of sending his suit to the dry cleaners.

He would get into the shower?

Get into the shower. And I did see, myself, he'd go to the Planning Board meetings NVOO would have. Nevada Operations Office would have Planning Board meetings to talk about the directions of the tests, any special problems, it was the big, important group that met to talk about the affairs at the test site. And he'd take his hat off and sit on it. Needless to say, his hat was just as battered. You know, they were just very strange.

So you had quite a mixture of personalities and—

Oh yes.

So you'd have to be able to blend with that, right?

Yeah. It was fun. I really enjoyed it.

Now did you eat lunch by yourself or did you have to take—? Because I'm imagining you kind of off in this isolated area.

Well, you're off in the isolated area but there was a control point. As you went out to Jackass Flats you got to a control point, and then MAD Building was off to the right a couple of miles from that. There was a Livermore area before you got there. It was the Pluto facility. But at this control point—and from there they conducted and watched the tests that they had at the various test cells for the reactor—they had a wonderful cafeteria.

Oh yeah.

Yes, and REECo took care of that.

Oh, really? So they subsidized the cafeteria for everybody?

Yes. And it was really good. So everybody'd go over there together. I don't think I *ever* ate a meal alone.

And did you see any atmospheric tests?

Yes, I just got to see two. I didn't realize the moratorium was on when I hired on down there.

But when they resumed testing I got to watch two. One of them--there were about three women that worked out there in the MAD Building area, and we got in a pickup together to go over to Frenchman Flat, or Yucca, to watch this atmospheric test only. Norma, one of the women, was slow and late.

Norma Cox?

No, it was Norma Hoskin. And so we're on our way over there and we see the mushroom cloud, and a guard comes rolling along and he says, You know, you better get back to the MAD Building. It's coming this way. So that's as much of it as I got to see.

Oh wow! So the cloud was going to come—

Yes, over that area.

So what was your impression of the cloud, of seeing it?

You know, it just looked like a little cloud. It just was nothing very impressive. I *did* get to see one test, but it was a very, very small one, where I actually sat in bleachers and watched it. *More* impressive to me was some high explosive tests they did out there, where they'd line up high explosives in a row, and I think they were probably doing these to look at peaceful uses of nuclear weapons. Like at one time they thought of doing something like a Panama Canal-type thing. And so they'd set off these *huge* high explosive shots and *oh*, impressive, the way the earth'd billow up and around and—just beautiful.

Really? Now were you ever nervous about working, especially in that building, you know, where it could become contaminated? Were you nervous about radiation?

No, I never was. I can remember my mom telling me when I came down here—she and Dad weren't all thrilled and overwhelmed about it—and one of the last things my mom told me before I left is, Don't stand too close to the radiation. But I always felt—REECO always had a really good safety policy, and of course it evolved over the years and got more and more and more—but not safety awareness because they were always aware of the safety, but scientifically they learned more things. So they always watched out for our safety, and I remember Cliff Penwell telling me one day You're going to get more radiation from [00:20:00] an irradium-dialed watch than you will anything we're doing out here. And then I got to see—they would keep us inside, it was a lot more *casual*, admittedly, than it was in later years—but I got to see them bring the reactor into the disassembly bay. And their windows were something like eight feet with this special glass a foot apart filled with mineral oil in between, and they had manipulator arms that American Can and Foundry (ACF) technicians would use to disassemble this. They had little railroad tracks that ran around, and could take the hot cells, the rods, out of this reactor and put them in little railroad cars and go up to special sealed rooms, hot rooms, and those were so sealed and clean. I went into the disassembly bay *many* times after reactor tests, after they'd cleaned it and so I was just never worried about it.

That's interesting. But that must've been fascinating just to watch that.

Oh, it was. Yes, it was.

[00:21:12] End Track 4, Disc 1.

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

OK, so we were talking about that really fascinating, what was it, a reactor that they were working on?

Yes.

What was that called?

Kiwi. Project Kiwi, which is a flightless bird, an extinct flightless bird.

Oh! Yeah. I kept thinking of the fruit.

Yeah, I know. And it was nuclear-powered and they were doing the engine. Then it had a nozzle, when it's in flight, and later—I didn't work on the NERVA [Nuclear Engine for Rocket Vehicle Application] project, I think it was, where they flipped that engine so that the thrust would come down into a, for want of a better word, a ditch—it was kind of like a ditch—and they could see how much force this engine would have in its right configuration. But just to develop the engine, they did it so that all the effluent from the engine went up into the air. And that's why they would watch the—you could never do it today, but that's why they would watch the wind, the weather, before they'd do a test, to make sure that any radiation *from* that test would stay contained pretty much where it was.

So was that on a bottom floor and then you were up on a top floor in the offices?

Yes. Yes.

Was it noisy or was it—?

Oh, we weren't there when they—well, we'd be there when the test--but *where* they tested it. That's where they just assembled it. Then they had railroad tracks that it would take it two miles or more to a test cell away from the MAD Building. And those test cells, they took them up to all the gases and whatever they needed to make the engine run, and do the test from the test cell.

After that was done, they'd set the engine down on its side, bring it back to the MAD Building, disassemble it, and analyze what happened to the reactor rods.

And they would do that in the building where you were on top doing your office work.

Right. Well, yes, except that was in the old part of the building. I also had an office kind of around the corner from the disassembly bay. There were offices in there, but they were so shielded.

Oh, they were—with metal or—?

Just big thick rebarred walls. But that's where the windows to that disassembly bay were. We're talking eight feet.

Thick?

Yeah.

Wow! Now did you have to wear a radiation badge or—?

We all did in those days. Your badge had a little plastic—I hadn't thought of that for years. And it seems to me, if I remember it right, it kind of looked like what the dentist sticks in your tooth when he's X-raying your teeth. And you wore that on the back of your badge, and you had to change it once a month.

And did yours ever—would it go off if—?

No, they wouldn't go off anyway. They weren't real dosimeters. They just measured what you were getting, and then the laboratory—I think REEC's RADSAFE lab—would read them and figure out if you had any exposure. I've never had any exposure. My husband has a little bit, I think, from the forward areas, but none for me.

Now how did you like working with the people there? Were they—did you joke or—?

I've always loved working with people. Oh yes. Yes.

Oh, so was it a lighthearted atmosphere or was it real serious?

No, it was always a lighthearted atmosphere. And I remember that until maybe my last three or four years of work. It was always lighthearted. The more regulations that came in—and of course when you're out in the field it's more lighthearted than when you're in Mercury. And Mercury's more lighthearted than when you're in Las Vegas at the main offices. But my recollection of my whole time out at the test site was that it was—you worked hard, you played hard, you just had a ball. And I was always very fortunate to be in an office where I got to see part of *everything* that was going on. I could go out and witness tests. I could sit in the CP, the control point, to watch anything that was going on. I had a lot of meetings. Sandia [National Laboratories] had a tunnel out there. I went to a lot of meetings in the bottom of a tunnel. I've climbed on top of drill rigs. And it was so fun. And everybody had an attitude where we can do it. Whatever needs to be done, we can do it, and it got done. And then over the years more [00:05:00] and more government regulations, more and more government involvement. OSHA [Occupational Safety and Health Administration] came in, and things that you did before and had fun, now you had to document with reams of paper. You had to come up with what's a worst-case scenario for the worst thing that can happen? It just got to be—I was never affected as personally as some of the field people were, but I got very disturbed with the pressures they were under to explain what they were doing and what could happen if they did it wrong. But up until that time, it was fun. *Oh, yeah. So now you were saying that you—then you went and you worked for REEC Co in Las Vegas.*

Right.

And now how did you get hired to do that again?

There was just a job opening, and the administration out at Jackass Flats had changed, and this was an opportunity for me to get downtown. I guess all of the women kind of felt if you didn't take a promotion when it was offered, no matter how much you liked what you were doing, that it wouldn't come around again. So you really looked long and hard, and I decided to accept this. And this was in a Special Projects group. They were the ones that sent me down to Mississippi. They were involved, they sent support people for Project Shoal in Fallon [Nevada], and that one lasted for—well, it didn't last as long for me as it could've. I had some problems with a person that I worked for who—I don't know, he called me "the girl," "give it to the girl," or if a general was going to call he'd say, Now, this is a general. You'd better act this way. And I was always at work very early, and one day I was only fifteen minutes early instead of a half-an-hour early, and he got after me. So I quit. I decided I'd take a vacation and get away from him, so I decided on a vacation in Hawaii. Now I got thinking if I'm going to spend that much money, I'd better move over there. So I quit REEC Co and I moved to Hawaii for two months.

How old were you when you did that?

I was about twenty-five, I think.

That's so cool!

It was really great, wasn't it? Again, I almost drove my parents nuts.

Yeah, I would imagine.

But fortunately they bought my car from me so it was available for me two months later when I came back. But some friends here in Las Vegas had arranged for me to interview for a job over there with Holmes and Narver, and I was offered that job. Another friend knew a man who did shipping from Hawaii to the Johnston Atoll. He hired me and I accepted that job, and he talked about—[sound of leaf blower]. Do you want to—? Is that going to bother you?

I think that's fine.

OK. Anyhow, he was very concerned about young women coming over to Hawaii. They spend all kinds of money to get them trained to do a job, but then they go home. So I accepted the job. I said, I'm going to stay here forever. And I thought about it over the weekend and I thought man—this was August, September, something like that, and I thought man, I'm going to have to go home for Christmas and can I afford to do this and do I really want to stay here? And Monday morning—after I'd accepted the job on Friday, Monday I called and I said, You know, I'm really sorry. I don't think I will be staying here. So I didn't accept that job. Instead I just stayed and played for two months till my money ran out, came home, called Harold Cunningham with REECo—[sound of leaf blower].

Here, we'll pause—

[00:09:20] End Track 5, Disc 1.

[00:00:00] Begin Track 6, Disc 1.

OK.

So I came back to—well, I didn't call, I just came back and went to Ely and told my folks I'd like to buy my car back. I was offered a job with Kennecott in Ely, and so I told them I'd like to think about it. And about that time my folks were talking about well, you'd have to live at home. And I said, Oh, you know, you don't want me back there. It'd be hard for us to—
Now why would you have to live at home? Was it a social thing or is it money?

It was a social thing.

Oh, you couldn't live on your own?

No, that would—what would people think-type thing.

And what year was this? Was this—?

That would've been '65, I think.

And that's so foreign to somebody of my generation.

Isn't it, though? Yeah, it is. Well, and another thing, too, here I am, I'm an old lady at twenty-five and I'm not married, you know, what are people going to say? You're out living alone and—

Were you feeling pressured to get married or—?

My mother always used to say, I'd rather have a happily unmarried daughter than an unhappily married daughter, which is a form of pressure; and then my middle sister got engaged and got married and that added more pressure because here's the spinster. You know back then you were a spinster, and it wasn't really normal. And it had stopped bothering me. You know I just figured I would probably never, ever get married, so what the heck?

Were you dating and just—?

Oh yeah.

So you just didn't find the right—

Yeah.

But you couldn't live on your own. So how were you going to be able to live in Hawaii?

Oh, they weren't happy about that either, but at least there they couldn't see me. So anyhow I told Kennecott I was going back to Vegas—well, then I called Harold Cunningham and asked if I could come back and he said sure, and got a job for me. I don't remember the name of that office, but I worked for a guy named Charlie Woods who was very nice, and again I was a senior secretary. And then from *that* job, Harold Cunningham became the Field Operations Manager, and he had all the field operations offices. He had field operations office, DoD [Department of Defense], Sandia, Livermore, Los Alamos, under him in the REEC organization. He had the

equipment maintenance. He had a department called Operations Materials that ordered and got all the materials for the events, construction. They took care of all the drilling, the mining, the electrical, and heavy equipment. He asked me to be his executive secretary. And that job was out at the test site, so I lived in town and I commuted out to the test site every day. At that time I drove. I didn't like riding the bus. I don't know, there was always some old guy that'd want to sit next to you, you know, put his head on your shoulder and oh, I just couldn't do it.

An hour one way and an hour back. That's a long trip.

Yes. I didn't like commuting till I met and married Dick [Dye]. But anyhow, that was a super fun job. There again, I was so fortunate in the job I had. I could go out to the field and see what the Field Operations Department did. They'd get a heavy crane and I'd get to go out and learn all about it. I got to go to event sites and see what they looked like, how they did the construction. You know it was just really a wonderful job.

And that's when you're working for REECo, right?

Right.

And who was your boss again? I'm sorry.

Harold Cunningham. And then it was about in—there was a reorganization in REECo and I got promoted to either administrative assistant or senior administrative assistant. My offices were kind of between—I think Cunningham got the job as Deputy Manager of REECo or something, but I worked for him and for Dick Land who was made manager of the Administration Division. Did administrative-type things and I couldn't tell you what those were. [00:05:00] I can't remember. But yes, the way I remember it, it's probably still more maybe secretarial in nature, actually.

And from there, then I went to work for Bob Bostian who was the Program Manager for Los Alamos. And we started out with seven program managers. To explain what they did, DOE would give us, REECo, a financial plan to do the REECo support for your—well, for everything that they did out at the test site and REECo, as I'm sure you know, had housing, feeding, medical, road maintenance, the whole shebang. Then they broke this down into seven program managers. One supported each laboratory, and the portion of the financial plan to go for support for that laboratory would come in to a program manager. We would look at the projects that a laboratory had, how many events they wanted to do. Through cost analysis that we'd done over many years, we knew how much a man week cost, we knew what the equipment cost, what they would need to do this job, we'd price it out and say, Ok, you can afford to have ninety-five people for this length of time.

So I started out in that field and I went from planning coordinator to senior planning coordinator to assistant program manager. And then I went back *out* to the test site and became Program Manager for what was called DOE [Department of Energy] and Equipment Programs. I took care of the funds for the housing, feeding, operations equipment, oh, general plant projects, maintenance and operation, not the field tests but the support things. And I stayed there until '72 when I was—well, I got that in '72, so it must've been about '78 or '79 I was offered the job as Program Manager for DoD, Los Alamos, and Sandia, and I had special projects, the Tonopah project. I was REECo's first female department manager.

That's impressive.

Yeah, that was really interesting. I liked that. Of course my heart always was back with that executive secretary. I loved that. I loved being able to think of something that an employer would want before they knew they wanted it. I always liked to see correspondence come in and know how they'd answer it and write the answer. I just loved that kind of thing, and you kind of lose

that as you move up. But it was very interesting to be the first female to get this job, and there were a lot of people—not a lot, there were some people who couldn't wait to see me fall flat on my face. I was told that to my face once.

Really?

And so it was interesting to see how things changed. I got along well because of my prior experience. I spent a *lot* of time out in the field. And I was kind of a novelty, you know. One of the Sandia directors was just so tickled pink. He took me through every recording trailer Sandia had out at the test site to say, *You better be good to her. She handles your money.* And mostly that's the reaction I got, but then gradually the feel—at first, too, when I'd go to meetings with the field operations offices, the old miners up in the tunnels, I was weird because I kind of stifled their meetings. And back then, men were polite and opened doors for women. You were a *woman* rather than a manager. And so finally I kind of learned to talk their language with them and they figured if I called the shots in their terms, they listened to me.

So you'd have to get gruff with how you talked and—

[00:10:00] Yes. Sometimes not always really ladylike, but I like to believe that I became one of the people they respected and admired because they knew that what I said was gold and that I wasn't going to take offense if somebody wanted to make a remark that today would be called harassment. If I liked it I wouldn't say anything; if I didn't I'd let them know. I didn't go to the EEO [Equal Employment Office]. That's another change I've seen. It just boggled my mind that a lot of women would make an issue of something that you should be able to handle on your own if you're an adult.

Right. So they accepted you more when you spoke their language and when you kind of acted like one of the crew.

Once they figured out they didn't have to be afraid of, you know, if they swore that I'd report them or that kind of thing.

I didn't even think about that, that there were some women that could've used their language against them, and so maybe that's why they were hostile towards having—or not hostile but uneasy when women were around.

Well, and you know when I went out there, too, it wasn't only that. We'd go down and have meetings inside a tunnel. I always like say my husband had a train in G Tunnel, but we'd have budget meetings down in there. Well, when I first went out there in the sixties that was *extremely* bad luck to have a woman in a tunnel. That was a *miner* thing, and they got over it and then it became a novelty. Then it became a fact of life.

Right.. Now do you think you had a better experience with miners because of growing up in Ely?

Did you come in contact with miners up there? Oh no?

No. Oh, I probably did but no; I worked at University of Utah for a while for a very, very eccentric doctor. And, well, my folks gave me a good education and a good work ethic. This guy one time—he was a cancer researcher and had eyebrows that grew about halfway to where they should be but they stuck out, I mean *really* far, wild white eyebrows. And he'd stick a cigar in a pipe and smoke the cigar. I always knew his eyebrows were going to catch on fire.

That's quite a picture.

Oh, he was so neat. He was just really cool. That's where I was working when I quit and came down to the test site. But he always thought you ought to be curious about everything. I'd go into work one day and he'd bring in something for me to take up to the third floor of the medical building to run some mimeographed copies. You don't even know what a mimeograph is.

I barely remember.

So one day I went up there and my table where I'd sat down my work, there's a cadaver, a male cadaver, on this table. And my first inclination was to turn around and run out, and then I got to thinking Dr. [Stanley] Marcus put that there. So I worked, did my copies, and I went down to my office and just did my thing, and he pretty soon he couldn't stand it. He came in and he says, well? And I said, Well, what?

[00:13:37] End Track 6, Disc 1.

[00:00:00] Begin Track 7, Disc 1.

So he said, Well, what'd you think of the body?

And I said, Oh, nothing.

And he said, Oh, well, I've scheduled you for an autopsy tomorrow. You get to watch an autopsy.

That kind of [thing]—it was wonderful. It was just really neat.

But at any rate, every morning, most mornings, on my way to work when I was going to business school—I worked part-time at the university—there's be a little old man there picking up scraps of paper on the campus and putting them in a bag. We got so most mornings we'd get a cup of coffee and sit down and chat before I'd go into the office, or afternoon, whatever it was. And he was just interesting, just unassuming. And so one day Dr. Marcus said, Come on, we're going up to the pathology lab. I think the man's name, the doctor's name, was Dr. Goodman, was going to perform the first transplant of an artificial kidney in a cat and he wanted me to be able to see that. So I went up there, and they had this cat sedated and it was standing and they had a little square opened in his back and they did this surgery. The cat, incidentally, lived for years afterwards. They reversed the surgery some months later. But as this world famous pathologist, Dr. Goodman, did this—I don't know why a pathologist was doing it but that's what he was—he looked up over his mask and he winked at me. So I thought, hmm. He

took his mask off and it's my little guy that I thought was the gardener or something. So we went downstairs and I told Dr. Marcus, I said, Oh, I'm so embarrassed! I said, I've just been talking to him like he was an ordinary person. And he said, He is. He says, You do the best of your ability that you're doing your job, so you're great. He said, He does the best at his, and he's great. You're equals.

Oh, what a great lesson.

And that's how I always tried to be around people, and I think that is *part* of the reason I got along with people out there. When I retired, I met a man that I did not remember. He didn't come to my retirement party but he was in the cafeteria out there when we had it, and he came up to me and introduced himself and he says, I just want to thank you. He said, The day I reported to work— and we were at the REEC Co building downtown, so it had to be after 1970—he said, you were the only person that smiled at me and said hello. And he said, I've never forgotten that. And that's kind of how I feel about people. It's just fun to meet people.

Right, and to be friendly with everybody, because you never know who you're going to be talking to.

Yeah. Oh, when I got the job as Program Manager for DoD, Los Alamos, and Sandia, one of my old, old friends who—she'd worked for me a different times, we'd been friends for many, many years, and she called me and she says, Oh, thank God I *know* who's going to be boss. Now I can quit being nice to everybody.

That's funny. So when you were manager, how many people did you have under you?

Oh, not very many. I had—oh man, you'd think you'd never forget these things—I probably had anywhere from a half-dozen to twelve is all. But we handled, I think it was like 70 percent of REEC Co's budget that came in, you know, where we would—we'd give presentations to DOE

about what was going on. We monitored work orders to make sure work orders weren't overspent. Each of my people would—and I got involved in it because I wanted to know everything that was going on and I'd *done* it on the way up, but they would meet with the laboratory and say, OK, what are your plans for this year? And they'd draw out what they wanted to do, and we knew how many people that'd take, and we'd come back and say, OK, that's going to cost you such-and-such. They'd put in their pitch, or we'd put in our pitch, for a budget submission to get *that* amount of money, and then if it came back, well, you can have only half of that. Then we'd go back to the labs and tell them, well, you can only afford so many people, da-de-da-de-da.

Did you get any help when you took that job? Did other people help you out with it or—? You [00:05:00] said that some people were wanting to see you fall on your face. Did you encounter any obstacles or—?

No, I didn't. I had one man who was pretty high up in the company met me in the hallway one day and he says—and it wasn't my face he thought I was going to fall on, it was the other end.

Oh, oh, I'm sorry.

Now I can watch you land on your da-de-da-de-da. But he didn't stand in my way, no. I don't remember anybody ever trying to sabotage me. But people were just—I think in the past, and again this goes back maybe to the test site itself where there were so few women and so many men, that out in the field there were some problems. And they weren't problems like women getting raped or attacked or anything, but say a manager would get involved with a secretary. And so a lot of men just didn't want the women out in that environment because it caused them headaches. But it was just human stuff.

Right. Now did you meet your husband at the test site?

Yeah.

And how did you two meet?

Well, I took care of their budget and we got to know each other. He'd have a lot of meetings. G Tunnel was kind of his baby, and so we'd have a lot of meetings out there. And we started dating, and that was pretty interesting because by then I was the program manager for—well, when I started dating him I was Program Manager for DOE and Equipment Programs. *But* by the time we got really serious, I was Manager of DoD, Los Alamos, and Sandia Programs. So I didn't even tell anybody we were dating, and I think some of the Sandians knew and some of my very close friends, but that was it. So on a Wednesday night we made plans to get married on Thursday morning, and we went down to the Marriage Bureau and got married, and asked for a long weekend off and had our honeymoon, and came back to work on Monday.

And so he went to his office and he says, Oh geez, he said, a terrible thing happened over the weekend. He said, Gaufin got married to somebody.

And they said, No! Who?

And he says, Me!

And I went into the office and asked them, How do you change your name?

And they said, Well, why?

And I said, Well, because I got married over the weekend.

Well, then Harold Cunningham got thinking about it and he thought, does this present a conflict of interest? You know I handled no cash money. I had to go through all kinds of things.

And he said, Is Dick going to have—[is] Sandia going to have an unfair advantage? And I said, Hey, you know, if you think my new husband and I have *nothing* better to do than talk about Sandia's budget, you're older than I thought you were. So he went to bat for me and we got to stay married and keep our jobs.

Oh wow, so there was a chance that you might have been moved.

Yeah, it was, and that didn't occur to me. I was in love, I was going to get married anyway, but it was kind of interesting, but it worked out fine.

So how much discretionary power did you have with the budgets? Could you sway the budgets for one lab over another, or how did that work?

You know, it never really—well, out of the total pot, yeah, if you put an argument forward that one needed more than another one did; I think overall it could be managed at the DOE level.

You'd have to have a pretty good case for doing that. And that's where we came in, where we'd say, Hey, look, we're going to do this tunnel or this drilled hole and it costs \$2,230 per man week and it's going to take twenty-two weeks because it's this deep, they cannot [00:10:00] do that unless they have this money. And DOE would listen to you and generally try and come up with something. Sandia had a much smaller budget. Their problems mainly came in on the general plant projects. If they wanted a building and there was no money, there would be a committee that looked at that. So they'd have to do their own fighting, but we would look at it when they got going and say, You've got to put the brakes on here, you're going to run out of money and they'd say, Well, we can't because of this, and we'd work up a justification and try and get them some relief. So there wasn't a lot of discretionary power there. You just had to learn to figure out what was real in the way of their needs and then plead a case, and DOE would decide what they were going to decide.

OK. And what did your husband do for Sandia?

He was the Assistant—what'd they call him? Resident Manager. But he's an electrical engineer, so he took care of any of the projects that came into G Tunnel in particular, but he did just about

everything that Sandia did. They'd have people come out to do tests in the tunnels or tests in various sites, they did "shake table" tests, too.

Now did you work with all three of the labs?

Yes.

Did you have a preference over—I mean did the labs have different personalities with the people, or a different culture, or were they all pretty much the same with how they acted?

DoD, of course, was mainly your construction, just kind of rough, down-to-earth, including the Field Operations Manager who was an old Ely boy. And then your labs tended more to the kind of eccentric, a little more cerebral. RADSAFE, of course, was just *nu-de-nu-de-nu-de-nu-de*, you know. Yeah. But they were all pretty different.

Why were they like that?

Well, there again, very cerebral and—

Oh, OK.

Yeah, and then as far—I worked part-time, when I was down in Mississippi, for Livermore, which I found to be quite different from Los Alamos in the fact that, after work, would like to sit around and discuss philosophy. They were just—when I was fortunate enough to get invited, it just terrified me because I didn't know philosophy from a hole in the ground. But they would meet in somebody's room and sit around on the floor in a circle and just kick ideas back and forth.

Wow! That was Livermore people?

Yes.

That's really interesting! Did you enjoy that?

I did. One of them, and I don't remember the man's name, but one of them would sit in there and throw himself into what appeared to be a trance, you know, and meditate, and then he'd eventually come to and join in the conversation. They were just very different.

And then what was Los Alamos like?

Los Alamos, their field people were kind of down-to-earth, the engineering types, but there again you met the very eccentric Ph.D.s that out of all of them I just remember maybe a couple that were well-rounded, could talk about anything, had fun, joked, laughed. The rest of them were just so far into their nuclear physics and its just—they're amazing. Sandia, one of Dick's bosses was a Ph.D. named Jerry Kennedy, and he was one if you—everybody wanted to have him speak at their retirement party because he was *so* funny. I mean he had this brilliant mind—but he was funny; you had to know how to take it. I mean he was just kind of off-the-wall funny. And he was married to a Ph.D. who worked for Sandia. I don't know what her field was. Little bitty thing. Jerry's a big guy. And she's as quiet as he is outgoing.

Oh, that's interesting.

Yeah, just totally different people. They retired and bought a home, bought land, on Saint Eustatius in the Netherland[s] Antilles. And we correspond by e-mail all the time. He's come for a [00:15:00] couple of golf trips, and they've come and joined us on the coast a couple of times. And she's a little more outgoing now than she was then. But you know he was just very much in demand as a speaker. But just to *look* at him made you want to laugh.

Oh, really? He just had that presence about him.

Yes.

Well, I'm going to chan—

[00:15:20] End Track 7, Disc 1.

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

OK. So you were working on a report?

Yeah, and this happened a couple of times where I'd think nothing of staying all night to get this done and then handed to my boss in the morning, you know. I didn't do it often but you'd do it, and it was fun. It was *different*, off-the-wall, you know.

But you were part of a team.

Part of a team, yeah. And I can remember—you talk about having a fancy degree to get anyplace. My little A.C.S. degree that nobody had ever heard of, and I don't think I've ever heard of since, I was able to whip that out of my pocket, and I needed it to become Program Manager for DoD, Los Alamos, and Sandia.

Oh, you needed to have a degree.

Because by that time, and I think that was in 1982, it was starting to get to the point where they were trying to upgrade the workforce. And there was still fun after that but as these requirements became more and more stringent—and you know it's funny, in my hiring of people I found that some of my very best, most sensible, most reliable workers had had no college. They just had a lot more common sense than some of those that had gone on to get an advanced degree. And I'm not saying everybody's that way but—

Right. But the work experience does give you a lot.

Oh, it does.

It gives you a lot of, I think, more practical experience sometimes than a degree does.

Yeah, and that's just like these scientists. I mean they're *brilliant*, brilliant men, but that's all they knew. They really weren't whole human beings, to my way of thinking.

Now when you got married, would you and your husband talk about the test site or—?

No.

No? You just never even—?

No. We talked about the next vacation. He always wanted to take three weeks and I said, They can't do without me for three weeks. And he'd give me the old story about the bucket of water. What happens when you take your hand out of it? Nothing.

Oh. That's good.

Yes. So we'd take our three weeks' vacation and go. I don't think we ever talked about the job.

Well, the only time we kind of would is [when] Sandia would have get-togethers, and here this is that bond you're talking about that the early test site people have. After a day's work we'd meet at one of the dorm rooms at one of the Sandia dorms and have cocktails and—then we've called them pupus, some hors d'oeuvres, and just sit and talk. And it was kind of irreverent—we'd maybe talk about somebody who was sitting right there and some dumb thing they did, you know—and then all go to dinner together. But it's these people just—oh, let's see, we came back into town first week in September. Second week in September, some people that Dick worked with in Sandia came to town, so we got a group of us that are still around together and went out to dinner. You know we've just got these unforgettable bonds that are really nice.

And do you think that that was because what you were working on, that you all believed so—I mean was—?

Oh, I know we all believed in what we did, and I believe to this day that we really made a difference out there.

Now would the test site be watching political changes like elections closely? Would they be concerned with, I'm thinking about with different parties that would come into office?

I know that when JFK [John Fitzgerald Kennedy] came into office, he came out to the MAD Building. He was very interested in the reactors, and of course the reactor program, as I understood it, was kind of set up, it had an end goal. They wanted to be able to lift a payload into space. But also it had a dual purpose. We were in a moratorium. We had to maintain a state of, [readiness] we're going to be ready to test again in x-number of months. But it was a means of keeping the scientific minds there and busy, keeping them on board. But I think people were concerned that maybe he might try and do away with testing entirely. And over the years you had these things. We always used to joke that you never knew if you'd have a job tomorrow, because they never had any sidewalks out at Mercury when I first went out there. Man, a bunch of us felt really secure when they started putting in cement sidewalks, concrete sidewalks.

[00:05:00] *It was permanent.*

Ues. That probably happened at a higher level than what I saw. I think politically, from my standpoint, we knew that whenever somebody new got into office, they'd figure out a whole new way to justify the money you were going to spend. And we went back to—who was it that had zero-based budgeting? Was that [Richard M.] Nixon? Somebody. You've got to start from scratch and figure out your budget. So people'd rattle chains and try and change the way you did things. And a change in administration could mean no more testing or maybe aim towards testing or you're not going to get some funds that you thought you were going to get because they're going to go someplace else.

Right. And did you get to meet President Kennedy?

No, but I got to look at him from the roof of a building.

Oh, you did? Did he have a whole entourage?

Oh, yes. Oh, yes. That was very carefully staged.

Was that exciting that day that you—?

It was. It was.

Yes, I would think that would be pretty exciting.

I was kind of one of those that was a little awestruck with having a *young* family in the White House with a little boy crawling under the president's desk.

Now were there any administrations where you felt the change more dramatically than others?

Oh, yes. Carter.

Oh, really.

Oh, yes. At that time REEC Co had a different general manager, and it was more don't write memos, trust your brother. You don't need to document everything. We love one another. Take your shoes off, sit on the floor, and have a staff meeting. Do the EST thing. They'd have these meetings where the managers'd go out and, what is it--what was EST? It was sensitivity training, extra—something sensitivity training. And this one little manager we had would come up and put his arm on your shoulder and tell you how good you were. I mean it was just—I said, Man, if you think I'm going to one of those meetings, you better find yourself a different manager. But I think that was all during the time of Carter, and it wasn't unusual in our building to see our then-general manager, who wasn't general manager very long—not as long as Carter was even president. But it was lofty aspirations but it didn't work.

Right. So would the hiring levels change with, you know, the positions, would they change with the different administrations or would they—?

No. Well, I don't know. Maybe they did. You know REEC Co was a privately-owned corporation, and then when EG&G took it over, there was stuff that went on at the corporate level that I just never did see, nor did I want to.

Did you see changes in the budget with the different administrations, like how much money was coming?

Yes. Yes. REECo some years would have like maybe ten thousand people. I can't remember. I used to know the numbers. And then because of budget effects, would drop down to as few as two thousand, you know, fifteen hundred. So yeah, you very much did see philosophy reflected in a budget.

And did you ever experience any of the—I knew that there were some strikes out at the test site, some of that. Did you experience anything with that?

Yes. Not a lot because I think I was mainly in town when they were going on. But I can remember in the early days, *very* early days, I think the guards went on strike one time and it was just like a big party. You got to talk to them on the picket lines and walk through and go to work. And then in the sixties there was a strike that some of the men—none of the women but some of the men in our office, which was a Special Projects office—were asked to drive trucks full of supplies out to the test site, and they would come back and say things had gotten a little nasty, like workers would try and hit their truck with their picket signs. I know one time one of them went out and there was a chain stretched across the road, and he just turned around and came back. So I think they'd gotten to the point where they weren't as much fun as that first one we saw.

Right. They weren't as lighthearted.

Yeah. And I was always in a position—I've just been very, very fortunate with the jobs I had. I was always in a position where I was exempt from—I could not be in a union. [00:10:00] I'd have an exempt job classification. And I think it gave me a lot more opportunities to go places

and to see things. I *always* had a job where I knew most of what was going on out at the test site, or a *whole* lot of it, and it was just exciting and fun.

Now you alluded earlier that you talked to generals on the phone?

Oh, yeah.

Did you really? How was that? Were they—?

When I first went out there and I was working for Los Alamos—well, and that was with REECo, too—they were always very, very nice people. They were nothing like this man I worked for who said, He's a general. You'd better watch out. They were just people. But there was a place out there called the Mouse House, and I'm not sure what they did. I don't remember now, but oh man, they had some good parties, and you'd go over to the Mouse House and there'd be all kinds of generals, all kinds of stars on their shoulders there, having a party. I can't remember. You'll have to find out from somebody else what the Mouse House was. It was right in Mercury, and I don't think it was involved with the CETO lab, Civil Effects Test Organization [Operation]. It seems like they probably did—well, maybe it was civil effects. The guy that I associate with the Mouse House was a Los Alamos—Dr. Payne Harris, and he was a medical doctor but he did research and did—I know they looked at dosimetry badges and the little pocket dosimeters. So I guess it was like a radiological safety-type thing. But you'd hobnob with some very high military people, and they were just people. They were very nice. I never could understand this other guy's kowtowing to them. I'd be respectful of them, certainly, but they were just fun people, for the most part.

Who was the most interesting person you think you—do you remember meeting that just left such an impression? You know, either they were so high up that it was impressive to talk with them, or—

Of course, one of the most impressive people I ever met in my whole life was this Doctor Stanley Marcus at the University of Utah. He was just wonderful.

Oh. The one with the eyebrows.

Right. At the test site, there was a—he was a Ph.D. with Los Alamos and he always impressed me so much because he was a brilliant man, but he was kind of a young guy. He was married and had little kids. Loved baseball, liked football, normal, but here's this brilliant, brilliant mind, but he was so involved in everything. I always place him at the top of my list of people that you could really look up to.

And were the scientists looked upon as being like these really impressive figures in the sixties?

You know, I don't think so. They probably were at some level, but they were just, you know, they were—I don't even know how to describe it. They were so eccentric—it was something out of this world, yes, and you kind of thought of them that way. Although they could party and have fun, too.

Did they ever join in or were they kind of their own group?

No, they joined in.

So would everybody mix with the different groups or did people kind of—?

They were kind of individual groups. You'd have your little Mouse House party, you'd have your little—the Mouse House would have people from the weapons side. The parties out in Jackass [Flats] would be mainly the people out there, your American Can and Foundry people, your Los Alamos N-Division types. Those people kind of partied separate from the Frenchman Flat types and Yucca types.

[00:15:00] *And the other thing I was going to ask you is, did you ever encounter any protesters at the test site?*

No, I didn't, thank heavens, but I've talked to people who have; some very *disgusting* stories.

Oh, really. So the protesters weren't always respectful with—?

Some of the guards used to talk about not wanting to get on the bus with them. And I don't even know if I should say this, but their physical hygiene and things that they'd do to make the seats of the bus or themselves somebody you wouldn't want to touch were just disgusting.

Now why would they do that? Was there a reason for doing that or they don't know?

They just didn't want to be arrested. I think everybody's got a right to protest. I sometimes wonder about certain protesters, if that isn't maybe their life, that they can't wait till that little encampment out there outside the gate, and I mean they really—you've read about the Burning Man get-together up by, oh, where is it? It's up by Reno someplace.

No, I haven't. What's that?

You know, *anything* goes: drugs, people running around naked. I'm sure there's some normal people there, but all kinds of depravity. That's *kind of* the thing I sensed with what I hear people saying about the protesters out at the test site, rather than protesting for the sake of protesting sometimes, I think.

Yeah. That it was just kind of like a free-for-all activity out there.

Mm hmm. Yes.

So did you ever think about the different views with nuclear weapons testings and things like—like did you ever encounter anybody here in town that—were they mostly impressed that you worked with the test site or did you ever experience anybody having a negative reaction or—?

I think most of the people in town, with the exception of that one time in the dress shop where they said, Oh, you're one of those.

Yeah, you're a wild woman.

I think the atmosphere was mostly positive and we were such a big, huge part of the economy around here, *plus* you look back at the old newspapers. I mean there was a big thing about a nuclear test. The town would make a big deal out of these nuclear tests. When I was a kid growing up in Ely, right after testing started we could drive out of town about twenty-three miles to Ward Mountain which was, oh, about 7,200 feet. Dad would drag us out of bed, they'd say there was going to be a nuclear test tomorrow morning at four a.m., and we'd go up there, and half the time they were cancelled. I think I only got to see about two. But Ely, the way the road is now, is 244 miles from the test site. I think if you go out through Groom Lake and up through Alamo, it's closer than that. But there were people [that would] be crowded on this mountainside and you could see this big glow in the sky. And then about ten minutes later you'd get the *ka-BOOM!*

Really! Oh, that's cool!

Yes. But it was a big deal and who knew, years later, those people up in that area are the Downwinders.

Right. But it was a big deal even in Ely to go see the atmospheric tests.

Yeah. I can remember, too, being in the drugstore and if somebody'd get some film that didn't develop the way they thought it would, they'd blame it on the tests. It's those damn nuclear tests.

Oh, really? Oh, that's interesting.

And you can read—I mean film sticks in my mind. I remember seeing articles from New York City that, you know, they've ruined the film, exposed all our film, doesn't it say that?

But I think in later years, most people don't even *know* what the test site is. Maybe a handful of times I've been able to sense, although nobody's attacked me verbally, that maybe

people didn't approve of what was going on out there. But I never had a doubt in my mind that it was the right thing to do.

Were you ever concerned about growing up in Ely, that the cloud—would the cloud come that way or—I mean would you all see it or—?

[00:20:00] No, I never did. My mother, who did die of ovarian cancer in '97, I think it was Sedan that they could see that cloud come up over Ely. She always swore when she got sick that that was the one that killed her.

But they actually saw the cloud?

She said so. I wasn't up there. I don't know whether—how do you know which cloud comes from which place?

Right. That's interesting. I wouldn't think that you'd be able to see it from that far away.

Yeah, it was just a glow. You couldn't see the mushroom cloud or anything. It'd be *pitch* black up there but you could see just this, on the horizon, this *big* glow.

Wow! And then you'd hear the boom?

About ten minutes later, you'd hear the boom.

Would you feel anything or just hear that boom?

I think I just heard the boom.

That's really interesting.

Yeah, but it'd take that long for that sound to get up there.

And do you have any opinions on Yucca Mountain?

Yes, I certainly do, and here again, it's a whole new world out there. They've got a lot more restrictions and everything, but I think you've got the same type of people basically working out there that believe in what they're doing and wanting to do a good job, keep their people safe. I

feel that the test site will never, ever, *ever* be able to be used for anything else because it's dangerous in areas of it, and that it is safe as a nuclear repository. And I think the state is foolishly spending money fighting it and that they should be negotiating to get a deal kind of like the Alaska Pipeline, where every man, woman, and child gets something, some benefit from that being there. I've witnessed also—and this was Sandia, and Dick can tell you stories about that—but I witnessed tests on these casks that Sandia developed. And I don't know *why* you don't see more in the news about it. But I went out and I saw the casks to transport nuclear waste being run into by a train powered by rockets on a track and bouncing through the air and there'd maybe be a bend in the side. I mean the tests they did on those things, they tried to burn them up, they tried to drop them from airplanes, you know.

So the news that we're hearing about how dangerous it is to truck it through close to town, those casks are real secure and—

Oh, yeah. And they talk about terrorists. If you go in the gift shop [at the Atomic Testing Museum]—and I worked at the gift shop for a little while but it's so terrible to drive over there now I haven't been back—but they have these little pellets that, you know, it's not like *liquid* that's going to slop over and fall on your highways.

Yeah. See, I imagined liquid. I imagined like it leaking, like oil or something.

Yes. I think there were problems, just from what I read in the newspapers, around Hanford [Washington] where there were barrels of stuff, but you know I'm not sure. That may be something like they park in the low level waste area of at the test site. But these, as I understand it, are solids. I just feel that there's some people who probably don't care what's going on as long as they get paid, but I think by and large the people that need to store this stuff are not going to

want to put the whole country in danger. And I think that Nevada is wasting money fighting it because, in my head, just knowing the way politicians work, it's all but a done deal.

Oh, the whole Yucca Mountain thing?

But I've been known to be wrong before. I might not see any shipments out there in my lifetime, but I think it's going to be a repository.

Well, they've done so much work on it already, haven't they, in getting it ready and—?

Yes, but you know when I became manager for DOE and Equipment Programs, that is what it was called, one of my jobs was working with RADSAFE. It was just before they were setting up Pile Driver, the old Pile Driver site, as a nuclear waste demonstration shack. And [00:25:00] we got a shipment of something from Turkey Point, Florida—

Turkey Point? What a name!

And I remember Turkey Point. I don't know where it is now or anything. But anyhow, it was going to be in ten years that we'd have a nuclear repository.

Oh.

Where is it? Yeah. And it gets farther out and farther out. You look at the WIPP [Waste Isolation and Packaging Plant] project in Carlsbad, New Mexico. I mean they fought over that for years and years and years, and now they're getting shipments. But, you know, it's something that's just going to cost a zillion dollars and then it's going to happen, so why fight it? You know, what are you going to do at the test site? You think about it. All those shots. You can't clean them up.

So there are still areas out there that are contaminated.

Oh, I'm sure that there are. Well, if you dig down into the ground, they certainly are. I think some of the craters you can walk in now, but you know there's just so much stuff out there, I

can't feature that—you know if they tell me it's cleaned up and would I want to build a house out there? Not me, kid. I ain't going.

So was there anything else that you can think of as you've been—that we didn't touch on or that's come up?

I can't think of a thing. I think the main things are that—oh, what you said earlier, back then you worked hard and you had an opportunity to go places. I think I've seen a *huge* change in the workforce between today and yesterday that I guess I feel some of the women are a little namby-pamby, that you can't handle things that are tossed out your way. Of course maybe I'd be different today, too. I don't know.

Oh, so the women that work out at the—that work for—

Yes, worked for REECo or, you know, I talk again about how the people in the field treated me.

I can remember a guy coming up and whacking me on the bottom in the cafeteria. Eh, you know.

Really. That wouldn't go over today.

No. No. He'd be in *jail*. And I remind him about that frequently. I'll say, Oh, do you remember that time?

Oh, do you? So that didn't make you feel uncomfortable or did you just shrug it off?

It *did*! I got mad at him, but I handled it. I told him I didn't want him to do it again. I didn't think it was funny. But I had a smile on my face, and I didn't go report to my boss that he did it.

You didn't cause trouble unless—

Yeah.

And then would they be pretty respectful in not doing it again?

No.

No?

No, I don't think he ever did that again.

Were you real conscious of like what clothes you wore, you know, to make sure that you didn't wear anything too provocative?

Oh, man, this is embarrassing. I lost a *ton* of weight when I was about thirty-five, and man, did I think I was just neat stuff. And I am *embarrassed* to say that I wore the micro minis. And you know everybody was doing it. I was probably one of the older ones. But I think back on that and I look at the pictures and I—well, and I look at the kids today and I think how can you wear that? How could you sit down? But even those, though they were short, never had anything hanging out. I didn't wear anything sexy. They were business clothes, just *really*, really short business clothes.

And did they—I mean I'm sure that they had dress codes, right?

No. The first dress code I ever remember was probably—well, it was when the second female department manager came in. She tried to establish a dress code.

Oh, really? That was interesting, that it would come from a woman.

Yeah. So that was not long before I retired. I think each department—I know [telephone rings].

[00:29:36] End Track 2, Disc 2.

[00:00:00] Begin Track 3, Disc 2.

I remember one time the daughter of one of the scientists came to work for me for the summer, and she was about as eccentric as her father. And I was out at the test site and I got a call from, I don't know whether it was my manager's office or the company general manager office, that I'd better come in and talk to her because she had on an outfit that was see-through and nothing on under it, and I thought, oh man, and I'm just being an executive secretary again.

So you had to talk to her about that?

So I went in and talked to her about it. And I think that's how the dress code was handled that day. You'd call an employee in and say hey, this is a little bit much. But I don't remember there was ever a formal one. Once we could wear slacks I always wore my slacks and hose and a girdle, very businesslike outfit, except for when I was thirty-five and a size ten.

Then you wore a micro mini. And then you were going to wear those to the office. Well, I don't blame you on that.

Oh! Terrible. But it was such a positive experience. If I had it to do all over again, I would do it *exactly* the same way. It was a wonderful time, a magic time. And all of us that get together for these breakfasts and lunches talk about that, how it was just fun. You were a team, you *did* the work, you played hard, you worked hard, and you had fun.

Oh, the one thing I was going to ask you was working for Harold Cunningham. How long did you work for him?

Oh, gee, I worked for him—he was the one that, when I came back from Hawaii, got me the job, and so I became his executive secretary in '65 and I worked either *for* him or very close to him until he retired. I can't remember what year that was. In fact, we still e-mail each other. He's living in Santa Fe [New Mexico] now. A couple of his kids live there. I haven't seen him for years and years and years, but we e-mail back and forth.

And what was he like to work for?

He was a very nice—he was the one that really kind of got me started on the road up. And he was a very fair person. I remember watching him in meetings. He'd kind of lean back in his chair as people were hashing things over or arguing about how something should be. You'd almost wonder if he was about going to go to sleep. And then he'd listen and he'd sit up and he'd come

back to you and say, OK, I've heard this and this and this, and this is what we're going to do, and anybody got any problems? He was just a very fair person.

Was he pretty accessible like—?

Oh, yes, very accessible. We were lucky. All of our managers were—I can think—that one that liked to huggy-kissy, sit on the floor with your shoes off, was a little bit more accessible than I'd like. We had one for a short time who was not accessible. I don't even know what happened with the man but when he came into the company, and I won't mention his name, but he did what we called the Spanish Inquisition and got rid of a lot of managers. He was another one who came in the office one day, into Cunningham's office when I was his executive secretary, and so I stood up and asked him if he'd like a cup of coffee, and he turned to his assistant and said, Tell her to get me coffee with cream.

Oh, my goodness.

Yeah. And he was not liked around the office very much, or the company. [laughter]

Yeah, I can understand that.

But for the most part—Davy Crockett, J.R. Crockett was the first manager I remember, and I think there was one before him but he's the first one that I had close ties to. Ron Kiehn, Harold Cunningham. Dale Fraser. They were all just very, very accessible and people-oriented, concerned about the people.

And it sounds to me like you learned by just kind of going with things and picking it up as you went along.

I did.

So they gave you opportunities that way? Would you seek out to learn new skills or would they try and guide you on a path to acquire these skills?

[00:05:00] I think a little bit of both. I was always pretty nosy about what was going on and wanting to know *why* it was going on and how does that work? But I think they helped to put me in a position where I had the *opportunity* to do that, to express my own natural curiosity. And then like when I became a planning assistant, they had formal ways of figuring out what a man week cost, what a man hour, what a man year, how to set up equipment rates, how to set up work orders; so they guided you that way so you had those tools, but then you also had the opportunity to suggest changes if you could see another way to do it.

Oh, that's interesting.

Yeah, a lot of that evolved that way from people that were working up the ranks and working with these things. They'd say, what *if* we did it this way instead of that?

So what would you do for Harold Cunningham?

When I was his staff assistant?

Yes.

Like I say, as I recall that, I think it was—well, you know, for one thing I'd set up meetings, and when we moved from Wall Street over to Wyandotte, the building that is no longer there—I didn't know it was going to go away and when I found out it was gone, I was just so surprised. But I set up and ordered, coordinated, all the office décor, the desks, I was in charge of ordering those, what wallpaper do you want on your wall, that kind of thing. But I still—I would manage his appointments, schedule appointments for him, still very much secretarial-type, or things *I* did as a secretary. I'd screen the correspondence that came in and decide what he needed to see and what he didn't.

Now was he a pretty hands-off-type of a manager or—?

He let you have your way. I don't think I ever remember when I'd kept some correspondence, I'd look at it and, I don't know, I just knew what to save and what not to save, I guess, but I'd put stuff together and formulate a response for him. I don't remember that he ever changed anything. And sometimes he did his own, too. I didn't do all of it for him. But he gave you the reins. If you wanted to do it, fine. And if he agreed with it, it'd go through.

Well, that's cool. I mean that's some—

It's funny, but all these years later I can't really differentiate between what I did as an executive secretary and what I did as an administrative assistant.

So it was all pretty much the same. Well, it sounds to me like, too, a lot of the women that I'm talking to, they've had to be able to fit many different roles. It sounds like you did a lot of different things as they came up. It wasn't like you were trained for one particular job.

No.

Other things would come your way and you'd have to learn how to handle it and be very flexible.

Which is great.

It sounds fun.

You think now—well, and even to a certain—see, I always had a—well, the program managers, we started out with seven of them and then through budget cuts and shifts, we ended up with three of us. Three of us downtown and one out at the test site. But the three of us downtown shared a secretary. When we got our first computer in the office, I went out to UNLV [University of Nevada, Las Vegas] and took a course in basic programming, because you couldn't buy a computer off the shelf. You had to write your program. I had an eight-page program to track costs by month and straight-line the budget. But we got our computers and I found that secretaries began to be obsolete except for filing pieces of paper and maybe making

appointments, because the managers then—I always thought better with my fingers, you know, I can type very quickly and so the good old executive secretary really isn't there. You're talking about something that now would be a true administrative assistant, probably.

Right.

Which I probably still would like. Anyhow—

[00:10:00] *Well, is there anything else you can think of?*

I can't think of a thing. I've just talked myself out of that.

[00:10:07] End Track 3, Disc 1.

[End of interview]