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

Interview with Troy Wade

July 14, 2004
Las Vegas, Nevada

Interview Conducted By
Mary Palevsky

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Troy Wade: In early 1968, I was still an employee of Livermore, and I was loaned to the Atomic Energy Commission [AEC] to help write new federal regulations for what we in those days called atomic weapons safety. It had to do with applying what were national standards for dealing with atomic weapons in the military and in the AEC's production complex. Those same regulations had to be applied to the test program, and so Livermore loaned me to the AEC to help do that, since I was involved in that for the lab. And then one day in mid-to-late 1968, a fellow that worked for the AEC at the time named Don Edwards said, `How would you like to come to work for the Atomic Energy Commission?` And as I mentioned the other day, I thought a lot about that and I thought about the things my dad had taught me to think about. I thought about longevity and stability and retirement and benefits—and that was even before it was fashionable to worry a lot about benefits—but I had been kind of brought up that way. And as I mentioned the other day, to go to work for the AEC was indeed a pay cut from Livermore. So if you went back and looked at my arrival in Las Vegas, working for REECo [Reynolds Electrical and Engineering Company], I took a pay cut to go to work for the laboratory and now I was taking a pay cut to become a federal employee. And it didn't appear that I was on the right track, but history's shown it worked out well. Anyway, I became a federal official in late 1968.

What was your title at that point, do you remember?

I was a nuclear safety officer. And it was a very interesting transition for me. I was unaware of the hierarchy, because it didn't exist at Livermore in the classical sense. It certainly didn't exist

at the test site. But when you got into the government, then you ran into—and particularly in those days—the AEC was a very military-like organization and organized in that fashion, and you worked through the system. And I had not been an AEC employee very long when I made my first trip to Livermore as an AEC employee, a trip I had made *many*, many times. And I traveled with an AEC guy, the fellow that I worked *for*, as a matter of fact.

And we flew over and he rented the car and we got to the motel in Livermore and I said, Where are we going to go have dinner?

And he said, Well, I don't have dinner out. I can't afford it on the *per diem*.

And I said, Well, what do you *eat*?

And he said, Well, now, this is a true story, he said—and he had a couple of hot dogs wrapped up in Saran wrap, and he had one of these little folding pots, and he had a package of potato chips, and he said, I just heat up these hot dogs in hot water out of the faucet.

And I was absolutely shocked, but I said, Fine. Well, then, may I have the keys to the car? I'll drive down and find—

He said, No, we didn't put you down as a driver and so, you know, the government's liability interests are not protected since you didn't sign, so no, you can't drive the car.

And I said, Well, what am I supposed to do about dinner?

And he said, That's kind of *your* problem. It's not mine.

So that was one of my entries into the federal government. And shortly after that, I walked into the cafeteria in the AEC building, and there sat Carter Broyles, who was a very **[00:05:00]** senior Sandia test program guy, and Harry Reynolds, who was a very senior

Livermore test program guy whom I'd *worked* with as a Livermore employee. And I said Hi to them and they said, Hey, Troy, you've got a dumb thing going on up in the tunnels, this new atomic weapons safety stuff. You've actually got armed guards patrolling a cable trench in the tunnel—where the cables are actually buried in concrete, so there's little chance that any saboteur can get to the cables or anyone wishing to do an evil deed— and it's costing us a ton of money to have a guard twenty-four hours a day, seven days a week, guarding a concrete ditch. And I said, You're right. I didn't realize that was happening. I will take care of it. So I went upstairs in the AEC building and I went to the office of Bob Thalgott, who was the assistant manager for operations and the senior test manager, whom I also had known with my Livermore hat on, and his secretary, Sophie Alexander, whom I knew. And I said, Sophie, I need to see Mr. Thalgott as soon as possible on a nuclear weapons safety issue. And she said, Sure. I'll call you. And within an hour or so, she called and said, Can you run up here right now? And so I went up and went in to see Bob Thalgott. And I explained to him about having this guard patrolling this concrete ditch and he said, I didn't realize we were doing that either. I will take care of it. I will fix it. And I went back to my office feeling pretty good. I was a GS-14, and Bob Thalgott was a GS-17. And *my* boss, the GS-15, when he found out what was happening, he had a fit. He called me into his office, and he and his GS-16 boss really chewed me out. And they said, This is not the laboratory. GS-14s don't talk to GS-17s. What you should have done was come to me, the GS-15, who then would go to the GS-16, who then would go to see Bob Thalgott, the GS-17. And they said, you know, If you can't live in this—you're going to have to obey these rules, Troy, or you're not going to make it in this environment.

And so you would know everyone's grades in order to—you would know the hierarchy so you'd know who the next one up was?

And I knew the hierarchy. I just didn't realize that it was that kind of a military operation.

So a few months went by and I was not happy with the change I had made and the way things were going. And I got a call from a fellow named Charlie Williams—who was in Livermore—who was a Livermore employee who had been a military officer assigned to Livermore and later a physicist that later switched over, and was at that time the head of the field test program. And I knew that the guy that ran the AEC office here in town, Bob Miller, was talking to Charlie Williams about coming to work—no, it wasn't Bob Miller. Bob was gone. It was—I'll think of him in a minute. The AEC manager was looking for a deputy manager, and the rumor mill said he'd been talking with Dr. Charlie Williams. So Charlie called me and he said, What do you think? And I said, This is the worst place I've ever worked and the worst *environment* that I've ever been in, and if you don't take this job and come down and try and fix this place, then I'm going to quit and go back to work for the laboratory. Well, he did it. He came down, and he was the new deputy **[00:10:00]** manager—very, very senior federal official—and a bull in the china closet, which was typical of Charlie. And the very first thing he did was call my boss in and chew him out and say, You know, if ever I want to talk to Troy–Charlie had an Arkansas drawl [imitating drawl]—If ever I wanna talk with Troy, I wanna talk with him alone. I don't want the rest of ya here. And things got better. Things got better.

Yes, let me ask you a little bit about this because you've given a couple of incidents, but generally, I'm asking, what are the kinds of things you're concerned about? I guess you're concerned personally for your own work environment, but also with the efficiency of the organization, with this stratification, when you're saying it's the worst place to ever work.

Well, I was not used to that regimentation. And I didn't understand why it was necessary, because my conversation with the test manager, with Bob Thalgott, my ten-minute conversation, had solved a several-hundred-thousand-dollar problem. And it was difficult for me to accept that I had to spend two days to find a way to solve the problem that I had solved in ten minutes. So it was new for me. I'd never been in the military, and this was a military-like organization. And GS-13s didn't talk to GS-15s, and GS-14s sure as hell didn't talk with GS-17s. And most of the people were long-time federal employees and had grown up in this environment and they did it and liked it. I didn't like it, and neither did Charlie. And the AEC was beginning to absorb a lot of laboratory people onto their staff. There were *several* other Livermore people that came to work: Don Schueler, Gene Freeman—I can think of a bunch of people I worked with at Livermore who also ended up in the AEC—Bob Clemenson. And I think we helped. I think we brought the technical expertise the organization wanted, but we also brought the Nevada Test Site, `Let's find a way to get the job done and not worry about all the stratification.` So over the long haul, it worked.

Yes. It's sort of interesting. I'm thinking now of organizational history because of conversations I've had with people like Duane Sewell and others about how clear Ernest Lawrence was, that he was never *going to have an organizational chart or hierarchy like that. He always wanted to be able to say,* `You're the best person for the job. I'm putting you there.` *And these kinds of job classifications of* any *sort would be problematic for him because of what you just said:* `Get the job done.` *So it's interesting for me to hear this sort of culture clash, almost, of the ways of getting things done.*

And I later found that the AEC offices in Washington, if you go back and look at the Atomic Energy Act, it specifies very clearly that while the Atomic Energy Commission was a civilian

agency, there would be military officers assigned. And certain positions were identified as flag officer positions, so naturally, there was sort of the military way of doing business. One of the many things I've learned over the years, of course, was how right President Eisenhower was when he said, `You can't turn over the entire defense complex of the United States to the military, or it will consume every single dollar. The whole gross national product will become subsumed by the military.` And that's exactly, of course, what happened in the Soviet Union. So the decision to make the AEC a **[00:15:00]** civilian agency was a brilliant decision, and the subset of that that had it populated with military officers was *also* a very important element. It *did* tend to make the AEC look like a military organization and it tended, therefore, to have a chain of command that was much more stringent than *I* had ever seen or the laboratories had ever seen. And it was kind of a challenge to find out a way to do things.

Yes, that's very interesting, because what you're saying about the Atomic Energy Act, the thing that I came away with, of course, was that it remained a civilian organization. That fight ended up being solved that way by Congress and that whole bit. But the fact that there's this military culture within *it is something that wouldn't be obvious to me, so that's very interesting.*

In fact, the act talked about the Division of Military Application of the Atomic Energy Commission would be headed up by a flag or general officer. And that prevails today. The deputy in defense programs is a flag officer. It's changed somewhat today. There aren't as many military officers, or as high-ranking military officers. But the interesting thing—we've talked a lot about retrospective views. I personally now have watched and participated in examinations of this decision that created the Atomic Energy Commission half a dozen times in my forty-year career—about should the weapons program be in the DoD [Department of Defense]—and every time it's been examined, people have supported the thesis that caused the original Atomic

Energy Commission structure. The belief that the *total* control of nuclear weapons should not be in a single agency prevails to this day, and I think it's proven to be a very sound thing. Those guys knew what they were doing when they set it up that way.

Yes. That's very interesting.

Now, another thing we need to talk about sometime is I have watched this whole thing go from the AEC to ERDA [U.S. Energy Research and Development Administration] to the DOE [Department of Energy]. That's another long subject.

Well, yes, let's continue with the time line, and then any insights you have about that, because people are constantly alluding to it, that will be a useful subject for another talk.

Well, as I continued my career as a federal employee, I was a pretty fortunate guy. We got the nuclear weapons safety program going, and I ended up as the branch chief running that piece of the program. And then I was promoted to a division director's status in the Atomic Energy Commission. We called it Test Systems Division, and it had in it not only the nuclear weapons safety stuff, but all of the emergency programs and support to the containment panel and all of the people of the test site. And by the way, it was while I was wearing *that* hat that we founded and started the Nuclear Emergency Search Team [NEST], which was another big, wonderful part of my career. The Nuclear Emergency Search Team got me into some strange places, like forty-five days in the Northwest Territory looking for pieces of satellites.

Right. What year was that, again?

Oh, I'd have to go look for sure. I think—

It's the seventies?

Yes, early seventies. The very early seventies.

Because I did want to ask you, because it's an important event at the test site in the seventies, as far as I can tell, is Baneberry, right? So I wondered if you were around in that era and in what position, and what that was like from your vantage point.

[00:20:00] I think I was the GS-14 branch chief of the nuclear safety branch when Baneberry happened. Curiously enough, I was in Livermore when the Baneberry thing happened. But one of the fellows that worked for me, Bob Peterson, called me and chased me down in Livermore—long before the era of everybody's got four cell phones—and said, `We have a big problem here. It's not a nuclear safety problem, but it is an enormous release and there's going to be hell to pay.` And of course, there was. There was. The way it affected me was that since my—well, no, I guess it really didn't—because at that time I was still the nuclear safety branch chief. A lot of the way that containment was evaluated was *changed* as a result of Baneberry. And I later *inherited* all of those changed procedures when I became a division director.

So nuclear safety means something other than things going wrong with the test. Nuclear safety means—?

Nuclear safety is a very defined program to assure that there is no accidental or inadvertent detonation of the device. It's a program that applies across the whole breadth of nuclear weapons, whether they're in civilian custody or military custody.

So that could be in the stockpile or launched by mistake or—I'm trying to understand what that means.

Yes. There's a *national* program that has pieces both in the civilian side—what is now the DOE—and in the military, where you do *all* that you can to *assure* that there is no path to an inadvertent or deliberate detonation of a nuclear explosive. And this could range from having an accident with it when you're taking it from a dock to load it on a submarine, or a disgruntled

police officer firing his revolver into it. And in the case of the test site, to make sure that there was no way that a lightning strike, for example, could have an effect on the device to be tested. It's gone from atomic weapons safety to nuclear weapons safety. And part of it is the two-man rule: no single person is ever left alone with a nuclear device, whether it's civilian or military. A program that [has] served us well over fifty years now.

Yes. And just so I can understand, this is a different world than no mistake in thinking that an attack has to be launched because of some—no one's sort of pushing that ultimate button. That's a different—that's a political thing.

That's a different—yes, ma'am. This is the physical safety of a particular unit, civilian or military.

OK. Got it. So that's correct. You explained that perfectly. Thank you. So with Baneberry, the containment world changes. That's also another, I think, important thing to understand historically in the history of nuclear weapons. And maybe that's another subject that we can hit on later. But you're saying at some point, that becomes under your purview.

Yes. Yes. There was a very long time, most of a year, when we didn't do any tests until a detailed review of what went wrong with Baneberry could be conducted. And it was, and it suggested perhaps a little complacency, but it also suggested that there were some—we can talk about this at length, and there are experts, too, much more expert than me. But the bad guy on Baneberry was a geologic feature, a band of montmorillonite clay, which people knew was there but did not recognize that it would absorb so much water. And the after-the-fact review said in order to keep drilling **[00:25:00]** you use drilling fluids, and there was a lot more water used to drill the Baneberry hole than there ever had been used on any other hole. And that was because this clay was absorbing the water. And then after all of the preparations for the test were

complete and the Baneberry thing was fired—as the shock wave was running out from the explosion point—when the shock wave got to this band of montmorillonite clay, it actually picked up speed as it went through the band of clay because it was saturated, and all the containment calculations had looked at *dry* montmorillonite clay. And so it turned out to be a weak point and it failed and the thing got to the surface. And it took a *very* long review to establish that that was the problem and to put into place procedures that wouldn't let it happen again.

What was the atmosphere among people at Livermore early on after this happened? Was there panic? Was there confusion? Or how did scientific types think about that?

Well, I think there was more panic in the Atomic Energy Commission than there was at the laboratory. You know, the laboratories tend to say, `Hey, something went wrong and we'll go find out what happened and we'll fix it so it never happens again.` That's how the labs do business. The Atomic Energy Commission, on the other hand, had to deal with the *politics* of the release. And when you have a release *like* that, it's an ace in the hand of the people who oppose nuclear testing or oppose anything nuclear. And if you're in the AEC, you have to deal with that. If you're in the laboratories, at least below the director in the laboratories, you're *shielded* from all of that. So kind of different points to view what happened with Baneberry. To me as an AEC employee, it meant that the *structure* of a containment review was changed and much more *stringent* reviews of the geology, for example, much more stringent as-built measurements. When you were actually doing something with a hole where you were about to shoot, you had to *exactly* measure every gallon of water you used because the people who had done the containment calculations to begin with had said, `We have to see this much moisture,` and you had to assure that there wasn't any more than that. Much more stringent,

much more bureaucratic—but necessarily so. And shortly after all of that *new* stuff was in place and we were back to testing, then I got this promotion to this division, which didn't have responsibility for containment but had responsibility for assuring that the Containment Evaluation Panel [CEP] had everything they needed. So we were the arms and legs of the Containment Evaluation Panel.

In the early seventies, then I was selected to be assistant manager for operations for the Nevada Operations Office [NVOO] in the Department of Energy, which meant that everything at the test site was my responsibility—all of the federal people out there, all of the federal safety **[00:30:00]** responsibilities, lots of interface with the laboratories. And that's where I got to be test manager, test controller, which *I* believe was—there are many, many high points in my life, but certainly one of them was being the test controller, *the* federal official responsible for the test, the guy with his finger on the button, so to speak.

Right. Now, this comes with the position of being the assistant manager or are they two separate—I'm trying to understand. Organizationally, are they not necessarily the same?

No, they're not necessarily the same. You don't have to be a GS-anything to be a test controller. The boss is the senior manager. The manager of the office has to believe that you have the street smarts to become—and I actually learned at the arm of a fellow named Bob Newman. Bob Newman had been a long-time Los Alamos test director. He and Bob Campbell. Bob Campbell and Bob Newman were Mr. Field Test for Los Alamos. And then Bob Newman moved over to become a federal employee and was a test controller, and I became a test controller in training at the arm of Bob Newman. But there was no formal selection process. There is now. There is a formal selection process, but in those days it was, you know—being a test controller is kind of a strange job. For a few hours or a few days, you have the authorities of the President of the United

States, and you have a full range of people working for you—and you know from history all the things that can go wrong, like Baneberry—and so the boss has to decide if he thinks you're the kind of person that can deal with that. And they thought I was, and I proved that I could do it. Those were the high points in my life.

Now, that's interesting. Let's stay here a little bit. Again, so I can understand the organizational structure with the Nevada Test Site, you've got test directors of both labs, say, of Bob Campbell or Bob Newman, as you just said, and they ultimately come under the government official that's the test controller at the test site, is that how I'm understanding that correctly?

Yes. Let me play that back to you a little bit, because it's interesting and it's one of the things that makes the test site so unique. You have all of these organizations—Livermore, Los Alamos, Sandia, REECo, EG&G [Edgerton, Germeshausen, and Grier], Holmes and Narver, and the federal government—all with their own organization charts and their own chains of command and all of this. To conduct a nuclear test, *all* of those *merge* into a thing called the Joint Test Organization, the JTO, and that's headed up by a federal official, the test manager or the test controller. And the beautiful thing about it was that you lost all of this chain-of-command stratification thing because they all went together as the Joint Test Organization. And you had test managers and test directors and the electrical guy, and it didn't make any difference what organization you worked for; your job was to get this particular test done. And once again, you ended up out at a ground zero at the test site, where the operation of *lowering* the nuclear device into the hole was going on. And you would have feds working side by side with Ph.D. physicists, working side by side with geologists, working side by side by electricians, and nobody was rank-conscious or organization-conscious; it was the Joint Test Organization. Pretty unique way of doing business and very successful.

[00:35:00] *Now, this raises several interesting questions which we'll touch on here. But one of them I'm curious about is, you're talking about nuclear weapons, the most destructive weapons ever known to man, and you're describing really what comes across as a real pinnacle of democracy, capitalism, free spirit—you know, entrepreneurial kind of everyone does their best for this thing at once—in the service of a really destructive weapon, in the context of the Cold War. So my question is how much of a sense, day-to-day, do you have within this larger bureaucracy of the Cold War mission? You've talked about the importance of the test site in the Cold War. Is that something that's actually in your consciousness* as *you're working? Because I guess the question for an outsider is, how are you thinking about what the actual result of this is, which is a terribly destructive device? So that's the question. You know what I'm asking here.* Well, of course, I can answer that more easily than most because of the different things that I did and the things I learned. Certainly, as I *rose* in the government hierarchy and began to travel *to* Washington and to go to reviews in Washington, I became much more aware of the civilian-military mix that was in all of this. And I became aware for the first time of the importance of *détente*, what it really meant. And I think people like Troy Wade, who had assumed a pretty senior position in the AEC, carried those notions back with him and talked with his staff here and said, `You know, guys, this is really important. This test that's coming up, Test Hoop-Snoopy, is a test of a warhead for a particular submarine system, and it's going to be very important, and we got to make sure that this is really done properly.` And then those guys would go talk to REECo and to EG&G and to Holmes and Narver. And the labs brought their own feeling of national need and patriotism. And so although, you know, the electrician out at the top of the hole who was out there because the union hall had sent him out there and it was one of the best jobs in the world, also understood this was an important thing for the country.

Great. That answers my question.

Well, let's see. As assistant manager for operations, I had responsibilities that extended beyond the test site to places like the kinds of things that were going on in the Pacific at the time—Johnston Island and the cleanup operations out in the Marshall Islands, and a growing program in responding to nuclear incidents and accidents, and nuclear accident exercises. And I *was* the assistant manager for operations when I got involved in Kosmos 954, in the Russian nuclear-powered satellite that reentered and crashed in Canada. And so I was up in Canada, up in the Northwest Territory, and *my* boss at the time, the deputy manager, was Don Kerr, who later was director of Los Alamos—and who, by the way, is going to be our annual speaker at the [Nevada Test Site] Historical Foundation's banquet. Don Kerr was the deputy manager and Ink [General Mahlon] **[00:40:00]** Gates was the manager. And Don went off to Washington to be a deputy to General [Alfred Dodd] Starbird, who headed up the Washington—we were ERDA at the time of Dodd Starbird. And what had been a temporary assignment of Don Kerr to Washington became a permanent assignment. And so I was sitting up in the command post in Edmonton, Alberta [Canada].

Ink Gates called me and he said, `Hey, congratulations.`

And I said, `What for?`

And he said, `You're the new deputy manager of the Nevada Operations Office.`

And I knew the position was empty and I knew that Ink was interviewing. He never interviewed me, but now I'm the deputy manager. So, let's see, that happened in the late seventies—

Now, at some point along here, you move out of the GS [government service] system and into this other higher system of government?

No, I was still in the GS system. As deputy manager, I'm a GS-17, which, when I first became aware of the civil service ratings, the GS-17 was very close to God—awfully close to God. If you went down to Sandia base and you went to the officers' club at Sandia base and you were waiting for your table in the dining room, they called you by rank, and the loudspeaker would click on and they would say, Major General Smith, your table is ready. GS-17 Wade, your table is ready.

For real?

Yes. Again, back to this quasi-military organization called the Atomic Energy Commission. That changed. That was, some would say, eroded—I wouldn't say that it was changed—as we made the transition from AEC to ERDA and to—we became much more the civilian agency and got away from a lot of the military stuff.

But anyway, I became deputy manager in, I think, '77, and as the *alter ego* to Ink Gates. I learned a lot from Ink Gates. I used to get very unhappy at General Gates. He was the manager, and we'd be a couple of days from a test or have some big crisis going on, and Ink would stick his head into my office and he'd say, Hey, I'm on the way out to the Boy Scouts. We have a Boy Scout council meeting this afternoon. Or, I'm off to the Chamber of Commerce. Or, I'll be gone two days to the Chamber of Commerce retreat up in Mesquite, or something like that. And in those days, Mary, I'd say to myself, What the hell's he doing? We got this crisis going on right now, or, We got this big, important test in two days. Well, it was a great lesson for me, and he was a great mentor and a great teacher because he taught me that you had more responsibilities than just those associated with the test site. You had a responsibility to the community and to the state officials and to the elected officials that, when you're *way* down in the organization, you don't realize those responsibilities. And Ink was very good at that and he taught me the importance of making

sure that if Senator so-an-so called, that you responded in the appropriate way. That was another one of my great learning experiences.

One of the things that I *did* at the time was—let's see, we'd gone from AEC to ERDA, and there were eight operations offices in the field, at the classical places: Hanford [Washington] and **[00:45:00]** Nevada and Idaho and Albuquerque [New Mexico] and Oak Ridge [Tennessee] and Savannah River [South Carolina]. And these guys called themselves the Eight Chinese Warlords. And they were, because in those days everything—again dating back to the military-industrial ideas and dating back to some of the things that had to do with classification—these were very *independent* organizations. For example, the AEC office here in Nevada didn't rely on anything from the Albuquerque Operations Office [ALOO]. We had our own personnel people and finance people and human resources people, and so in eight locations around the country, you had these huge, big federal structures—

And part of the notion of this is compartmentalization, so one doesn't *know what the other is doing? Am I understanding that?*

Well, there was a little of that. There was a little of that, but the most important thing was that—again a decision that had been made many, many years earlier—that all of these parts of this nuclear weapons complex should be *run* from the field location and not from Washington. A battle that is also fifty years old and continues today, about who's in charge. Well, back in those days—in the days I'm talking about, in the seventies—the guys in the field were very clearly in charge. And very, very *senior* people who had either come up through the organization or come in from the labs or from the military, like the manager here, Ink Gates, was a retired Army general.

But as his deputy, I got to know pretty well the other seven Chinese warlords, and one of them was a fellow from Albuquerque named Herman Roser. Herman Roser was kind of a legend in the weapons program. And Herman had started out at Zia [Company**]** as a matter of fact, up on the hill and had a very illustrious career and was the manager of the Albuquerque Operations Office, which was the *biggest* of all of the eight. And we were facing the 1980 election, the fall of 1980, and there was a candidate for President of the United States named Ronald Reagan. And the system had said—I'm greatly oversimplifying something that you know as much or more about than I do—the system had put into place, If Ronald Reagan gets elected President of the United States, this guy is going to be the secretary of energy and the assistant secretary for defense programs, the guy that runs the whole weapons complex, will be Herman Roser. Duane Sewell was sitting in that chair in the Carter administration, and so Herman was the designated successor to Duane if it went to a Republican administration, which it did. And in early 1981, I got a call from Herman Roser. And he always—even though he was about ten years older than me—he always called me "young man." *Always* did. And I got this phone call from the manager of the Albuquerque Operations Office. He said, Young man, I want you to come to Washington with me and be my deputy. Assuming I get nominated and confirmed, then will you move to Washington to be my deputy? Which was a *huge* step for me, and a big honor. And I said, Herm, I got to talk with my wife. There's other people have a vote in this. **[00:50:00]** And so I talked with my wife, and moving to Washington was something we—I knew I *had* to do if I was going to stay in the business, you know. It's a little less important now, but in those days, you had to get your ticket punched. And if you ever going to be one of these Eight Chinese Warlords, you had to have put in some time in Washington. So the *deal* was that I would go in and be Herman's deputy for a couple of years, and then the manager here would retire—Ink Gates

would retire—and I'd come back to Nevada and be the manager of the Nevada office and live happily ever after. Didn't work out that way, but anyway, Herman had said, Will you come back? And I had talked with Mary, and we have a disabled son, and so just picking up and moving was a little more complicated than it would be for others.

Now, you have three children, you said?

Yes. Yes.

So are your other children pretty much grown by this time, or—?

Yes. In fact, the youngest one—the boy that was injured is the middle one—and the youngest one was a senior in high school when all of this happened. And so anyway, we said, OK, we'll go. And of course, some months went by because, you know, then the president had to select a secretary of energy, which he did. It was Jim Edwards from South Carolina, the dentist. And there's some interesting stories about that, too, that we ought to talk about one of these days. And then Herman was nominated by the president, and as soon as Herman was confirmed, then the Wade family headed east.

And I was principal deputy assistant secretary for defense programs. And it was fun in a lot of ways. *Enormous* education for me because *watching* how Washington works from a vantage point *inside* Washington is remarkable.

I was going to say, you're already high enough in the organization that you're an insider and you're an important character in the drama, let's say. But then it's sort of late. You've been a government person, but outside of government, in Nevada of all places, which has got to be so— [Laughter] Which is really outside of government.

Well, and it's really unlike Washington, D.C. So, just some details—you move there, you have to find housing, you have to get high school for your daughter, all these kinds of things, and stuff for your son, or did your wife do that, or—?

Well, no, our daughter was off in college, and so the middle boy, the one that *is* disabled, we took him with us. The youngster, the youngest one, was a senior in high school, and he stayed here, and he just lived in our house because, you know, the deal was in two years I was coming back here.

And what is his name?

Scott.

And then your middle son is?

Terry.

Terry. I've met Terry. And your daughter is?

Is Sherry.

Sherry. I've met her also.

And at *my* level, which was *very* senior in the federal government, GS-17—I'm sorry, by then, we had made the transition from GSs to SESs [senior executive service].

That was the question, yes, this other—

Yes, we'd made the transition from GSs to SESs. But even though I was a very senior SES employee in the world of government employees, the government doesn't help you do a *damn* thing when you are transferred like this. You know, they *arrange* to have your stuff moved, but it's moved by the low bidder, who showed up at my house here and then looked at the stuff he **[00:55:00]** had to pack, and then they went down and bought boxes because he didn't have—I mean, it was a low-bid thing all the way. Low-bid thing all the way. And it costs you money

because the government has boundaries on how much weight, how much of your furniture, and so if you're over—it turns out that I had a cousin that lived in Washington, a *Navy* officer from my mother's side of the family, named John Redfield. And John Redfield lived in McLean [Virginia]. When Mary and I went back *looking* for a place to live, we stayed with my cousin in McLean. And on the two or three days that we were there, a townhouse down the street and around the corner from my cousin suddenly became vacant. Let me tell you, Mary and Troy Wade, back in 1981, were clearly not the most sophisticated people in the world, but we'd been around a little bit. To pick up from Las Vegas, Nevada and go to Washington, D.C. and look for a place to live in the midst of what is *absolute* chaos, no matter which direction you look, is a traumatic thing to do. A lot of people can't do that. They end up *not* doing it, for lots of reasons. We were lucky. We found a townhouse in McLean. That's another interesting story. We bought that townhouse in McLean, lived in it a couple of years, then I got sent to Idaho. So then we had another one of these unusual discussions about, `Should we keep the townhouse in Washington, because military officers do that all the time because they cycle back and forth`. And we said, `Hell, no, we're *never* coming back here again to live,` so we sold it when we moved to Idaho. And then when I got transferred from Idaho back to Washington, *we could not qualify* for the townhouse that we'd sold *three*-and-a-half years earlier. So each of these is a great learning experience, a very *costly*, painful learning experience.

But anyway, in '81, here we go, we end up in Washington as—

And my calculation is you're now in your late forties, is that right?

Let's see, that was 1981.

What year were you born again? I don't remember.

Eight-one, ninety-one.

Oh, you're just going to be seventy. You were born in 1934, so yes, you're in your late forties.

Yes, I'm in my late forties. Which is young.

That's my point.

Which is young. Herman Roser was an interesting guy. He was sort of my second father. He considered himself my father. But it was interesting because here I am—and Herman didn't want *anything* at *all* to do with the federal bureaucracy. He had grown up in the weapons program, he'd spent his entire life, he'd been in Washington on two assignments. Very highly respected. Very highly respected by Congress, but he didn't want *anything* to do with the bureaucracy of the Forrestal Building. Guess who he asked to take care of all of that? And guess who knew absolutely nothing about it? *Nothing* about it. At one point, the secretary of energy called Herman and myself up to his office. This was Jim Edwards. And you may remember that one of the planks in Ronald Reagan's election campaign in 1980 is that he was going to disband the Department of Energy. And that all dated back to the Carter gas crisis and all of this. And a lot of **[01:00:00]** people *missed* the fact, including President Reagan's advisors, that *in* the Department of Energy was the nation's nuclear *weapons* program. And Secretary Edwards—delightful man, and when I think of the term "*southern* gentleman," when I hear the term "southern gentleman," I always think of Secretary of Energy Jim Edwards, because he was a true southern gentleman. He didn't know, Mary, until he was confirmed as secretary of energy and showed up at the Forrestal Building that he owned the nation's nuclear weapons program.

This is un*believable.*

He did not know that. But he called Herman and me up to his office and he said, `Now, look, my goal is to disband this department. That's what the president wants. Now, I know that you guys are going to survive, and so go find yourself a new home. Tell me what you need, but I don't want to know what you're doing.` And we said, `Well, Mr. Secretary, there are a couple of things, you know. Like there's a`

document that annually the secretary of energy and the secretary of defense sign that define what the nuclear weapons complex is going to do for the coming year, and that goes to the president and he signs it. So, Mr. Secretary, you can't just not be involved.

But anyway, here we were in an enormous ramp-up because the Carter administration had reduced the nuclear weapons program dramatically. Towards the end of the Carter administration, President Carter recognized what he'd done and turned it around and it was starting back up. But, you know, when Herman and I walked in there, the program had been like two billion dollars and it was up at four and it went to eight, so the program was growing rapidly. The facilities were *old*. We had the world's largest supply of duct tape and wire holding reactors together and buildings together that were fifty years old. So we had enormous challenges, trying to keep things together in the midst of a political attempt to do away with the department. But man, what a lesson, an education process, that was for *both* Herman and me, but particularly for me because it was Herman's last job. And Lord knows where—I was going to go back to Nevada, the plan said. But what an enormous education, because suddenly amongst the other things we have to do is we have to *deal* with this question about, OK, you guys, this eight billion dollar piece is going to be cut off and go somewhere. Now, where is that? Is it the DoD? And so now, we're all the way back to 1946 and the establishment of the Atomic Energy Commission, and we're looking at the logic that caused that decision to be made, and did that logic still apply in 1981? And it did. It did. There was *absolutely* no—we're kind of digressing here, but there was absolutely no stomach on the part of the Reagan administration to have an independent agency. A lot of us said, Hey, we got this neat idea. Why don't we just pick up all of this stuff and move it out and we'll put it

in an agency over here and we'll call it the Atomic Energy Commission? And that was *not* acceptable to the president and his people. The did *not* want an independent agency.

What was their reasoning on that?

Cutting down government. Republicans always reduce government and the Democrats always increase it, or at least that's the lore. I think, in fact, it increases whether you're a Republican or a Democrat. They all grow. Anyway, Ronald Reagan was going to reduce big government. He was going to do away with this cabinet agency, and he didn't want to have to establish another *independent* agency.

[01:05:00] *So he wanted you to go under someone else's umbrella, basically.*

And I'm convinced, Mary, that in the Reagan political advisory people that were talking with him before he was elected, a lot of them didn't know the weapons program was in the Department of Energy. And then when they learned it, said, Well, that's no big deal. We'll just move that to Defense. And it turned out, of course, to be a huge problem. And so there was a fellow in OMB [Office of Management and Budget] named Joe Wright, who decided that the place for the weapons program to go was to the Department of the Interior. And so we were directed to begin discussions with Malcolm Baldrige—who was a *famous* secretary of the interior, Malcolm Baldrige—to begin discussions with the Interior people about moving the weapons program over. And Joe Wright's logic was that in the Department of the Interior was the Bureau of Standards and NOAA [National Oceanographic and Atmospheric Administration], so there was a lot of *technical* stuff buried in Interior that nobody really recognized. It *was* a major cabinet agency, and so we would *fit* in there. Now, we made lots of comments about the Department of National Parks, Weather, and Nuclear Weapons, but OMB was very serious, This was the way to go. So we cleared a bunch of people in Interior and

so comes this big day when Herman Roser and Troy Wade and Air Force General Bill Hoover, who was the senior military officer in our—we go over to Interior, and we have models of warheads with us. We go into this conference room—this huge, Malcolm Baldrige's conference room, which we had also electronically cleared—and Herman makes a couple of introductions, and then General Hoover starts briefing. This was a flag command briefing, two hours long, and so Hoover, who is just a *marvelous* guy, good personal friend, started on this briefing, and Secretary Edwards was sitting there, Secretary Baldrige was sitting there. I don't remember now, but we didn't get very far into the briefing and Baldrige said, `Wait a minute. This makes *absolutely* no sense. This is *nuts*!` And he turned to the secretary of energy and he said, `Jim, we got to go across the street and see the man. We got to do something, but this ain't the right place for all of this, I can tell you that.`

So he's starting in with weapons and what they are and where they are and the whole thing.

Yes. Yes. Yes. And that was my only real ever contact with Malcolm Baldrige, but I became an enormous fan of his just because of that single day. And apparently, you know, the two secretaries went and talked with the White House and talked with the president, and suddenly the intent to dismantle the Department of Energy went away because they couldn't find a way to solve the nuclear weapons problem. It was too hard to tackle.

[01:09:26] End Track 2, Disk 1.

[End of interview]