NOTICE

This transcript contains a Living History Interview conducted and prepared as part of the Fernald Living History Project. The narrations, descriptions, perceptions, opinions and beliefs expressed in this interview are solely those of the interviewee(s) and are not to be attributed directly or indirectly, to the United States Government, to the U.S. Department of Energy, to Fluor Daniel, Inc., to any Fluor Daniel Fernald teaming partner company, to any of their officers or employees, to the Fernald Living History Project or to anyone associated with the Fernald Living History Project.

Name:Loyd SmithDate Interviewed: 5/28/99Date Transcribed: 7/8/99Tape: #25Project Number 20012

Tape FLHP0049

01:01:04

Q:

First of all we're going to ask you a really hard question, if you could just give us your name and spell it.

A:

Yeah, my name is Loyd G. Smith. That's L-O-Y-D G, Smith just plain ole S-M-I-T-H.

01:01:18

Q:

OK great. And uh, first of all we're going to start with a little bit of background for you, um, you **#**e from this area?

A:

Yes.

01:01:25

Q:

And uh, can you just tell us a little bit about your early life here?

A:

Yeah, our family moved here in 1933, I did, lived with my grandparents on State Line Road where there's now a golf course. That was 1933, so that was a few years ago. And then lived here ever since. Uh, just 4 years in Franklin College, Franklin Indiana but other than that you know lived right here in the Bright area.

01:02:03 Q: And what did you study in school?

A:

I studied mathematics and physical education, uh, thought I would be a teacher and coach. Because I was in sports from high school on, still am.

01:02:21

Q:

That's good. Good for ya. And uh, when did you begin your job at Fernald?

A:

That was October of 1952, October the 1st.

01:02:33

Q:

And how did you get your job there?

A:

Well, uh, it, it seemed like everybody you know you talked to, hey, they're hiring at Fernald. And they have all kinds of jobs open. And uh, so it was mostly just a matter of applying and taking over a resume and sort of seeing if it matched up with the, the resume matched up with what jobs they had available. And I sort of leaned toward the statistical quality control area and so that's why, you know that's where I got started. And the fact that it was close, only a few miles away. That was attractive.

01:03:24 Q: Tell us about your interview.

A:

The original job interview? Oh, I was interviewed by a Dr. Clyde Waldon, he was the head of statistical quality control and um, that basically his main thing looking at the resume and, do you really want to work here and this is the kind of work it will be. And uh, yeah, that sounds good and so it was like a new plant going up, kinda getting in on the ground floor that sounded attractive. And what was going to be done there, the production of uranium, that had to do with our National Defense, it sounded like this is going to be important work. And sounded like something you'd want to be part of. Really a nationwide effort if you will, getting into the Cold War.

01:04:41

Q:

And what was the site like when you first got there?

A:

Oh, there was work going on everywhere and semi finished buildings and uh, offices in houses that were part of the original landscape. And uh, where's so and so, well, he's in the bedroom. His office is in the bedroom, so and so is in the kitchen. And there were few buildings, the main building where you went it it was you know new and usable but that's all. People going every direction. The construction workers, hardhats, uh, everybody with a Q clearance you know necessary. Like a beehive is what it was like.

01:05:44

Q:

Now other people that I've talked to have mentioned the mud and the dust, what was that like?

A:

Well, once you got in there, that's the first thing you noticed. If it had rained anytime recently was you re right mud everywhere. Construction workers tracking mud everywhere. Uh, and dust and then it, at night when work let out and all those cars took off in a hurry, everybody seemed like they were glad to get to work but boy were they glad to leave and it just stirred up everything and here they go you know. So it was, it was quite the thing there getting started you know, just the.

01:06:35

A:

Several years before things settled down to you know nice paved roads and concrete streets and sidewalks and you know it was quite a while before that, a lot of temporary wooden sidewalks and you know things and work done and, in areas you know that were not conclusive really but you just had to do it you know.

01:07:08

Q:

What kind of training did you get before you started your job?

A:

Uh, none before I started the job but once I was there I was in a few days, I went to Indianapolis another fellow and I for quality control seminar. So, and then seminars at Xavier University and so right away there was plenty of opportunity and the supervisors, the management encouraged everybody to take advantage of anything that was available in your line to you know pay the cost of the seminar, pay the travel expense back and forth. So it really was, everybody was encouraged to get everything they could in connection with what they were going to do.

01:08:12 Q:

And how much did you know about the process itself?

A:

Uh, to begin with, going in, hardly anything. I had chemistry and physics in high school but there was hardly anything known about uranium processing, known to the general public. A few scientists probably knew but the general public, uranium was just a word and uh, the average person couldn't have imagined digging some raw ore out of somewhere in Africa, Belgian Congo is one of the favorite spots to get it from, then later Australia. And digging it out of the ground, bringing it over here, processing it and ending up with metal uranium at the end product, just, and then this metal uranium somehow is going to lead to atomic bombs.

01:09:19

A:

What are those, I mean bombs. Just all new and then the secrecy thing comes in here you know with what we work with. I guess most everybody that worked there, their policy was just don't talk about anything that you do so you won't talk about something you shouldn't. So just don't talk about any of it, even though it might not be classified, don't talk about it. Somebody says what do you do up there. Well I work in so in so, that's about it. But what do you really do. Uh, we're not allowed to talk about that or we're not going to talk about that. So it was, a lot going on, but a lot you couldn't talk about.

01:10:10

Q:

And you mentioned about getting a Q clearance too. How did they go about getting you a Q clearance?

A:

Boy, that was exhaustive. They checked back from where you born. I was born in Grants Lick

Kentucky and moved to Indiana at the age of 3. They even went back to Grants Lick Kentucky and talked to relatives and do you know Loyd Smith, oh yeah, he's so and so's son. And uh, and basically what they were looking for was something bad. Some reason that they wouldn't want to trust you with secret information. And then they would come forward and talk to neighbors, do you remember Loyd Smith, yeah, he came here in about '33, he lived with his grandparents.

01:11:03

A:

Then they would go, did you teach him in grade school, yes, well what kind of a boy was he. And then they come on up into high school. Talk to you high school coach, high school principle and college, find somebody there. Ask them all the same thing, looking for usually the same thing. And then even the neighbors. Here in Bright they would go to Renck's store. That was the hub of everything. If you wanted to know anything that was happening in Bright, if you want to know a person, you go to Renck's store, talk to the storekeeper's that had been there forever and say, you know somebody named Loyd Smith, where does he live.

01:11:56

A:

Uh and then they would gradually lead into question like well what kind of a person is he, does he go to church you know. And a complete investigation on everyone that worked there as I could imagine you know, trace down everything that was ever arrested even for speeding. And so that's the way it went to get a Q clearance. And when you got one, you said wow, you know that Q means something because what they've done is you know pretty exhaustive before they would say well this person is Q cleared then you know.

01:12:47

Q:

That is a lot. I didn't realize they went all the way back to your elementary school and stuff.

A:

They wanted to know your brother's your sister's names, where they lived, their children. Everything they could possibly find out about a person you know they asked.

01:13:08

Q:

Wow. That's amazing. Um, let's see what was the question I was going to ask. Uh, tell us a little bit about your jobs.

A:

Well I started out in Quality Control and uh we uh monitored the production and the actually kept numbers, figures on what was being produced and the machines that we were mostly concerned with the final product quality control. The machines that actually machined this metal into shapes had to be diamond tipped because of the hardness of uranium metal and so very tight specifications on the size of this material. The plus or minuses were very small and so it was very critical it had to be monitored closely because if a machine went out of adjustment you could produce several pieces of uranium which were out of spec which then it would have to go back through the process. 01:14:43

A:

And so it was very important to monitor and use quality control sampling methods to say well this machine is producing all right you know and kept going. And everybody was in a hurry. Everything was urgent uh and most of the time in processing and machining, if you get in a hurry it leads to mistakes. And so there was always a balance between hurry up and get it right. Hurry up and get it right because an objective is to get these pieces out the back door, right size so everything will work when it gets to where it's going to go. So that was pretty interesting work.

01:15:42

Q:

And what were the consequences if the, if the pieces weren't the right size or C machined correctly?

A:

Well, you just shut down the machine, make the adjustments and then start up again and monitor and see well now it's, it's doing right. And as I said, the pieces might have to go back be remelted and made into rods again and start the whole process of the machining you know. So, and uh, for the most part cost, costs were relative, you know if your talking about Russia might start a nuclear war and if we're ready with our bombs and our delivery systems, we'll be OK. Then who's going to say well that cost too much.

01:16:51

A:

What is cost too much when your talking about survival? Uh, and the, so for the most part, oh there would be talk about budgets and staying within budgets but for the most part the main concern was get the production and whatever it takes to do that. If it takes overtime, there's guys that worked around the clock up there. And one year I think I worked more overtime than anybody there and that was like 7 days a week, 14 hours a day for 7 days, 8 hours on Sunday for almost the whole year. And just the urgency of getting the job done.

01:17:46

Q:

Wow, that's a lot. (Yeah) 14 hours a day, 7 days a week, good grief. Um, you were talking a little bit about the Cold War here, what was the typical American's view on the Cold War and what needed to be done.

A:

Well, in general uh the, the public watched Kruschev and Kruschev was a scary person to watch because he was very belligerent, very inclined to brag about what the Russians could and would do. When he said we will bury you we looked at him and thought hey that guy means it. And he's going to do everything he can to make that come true because the Communist domination was in place. You saw it happening so many places in the world you just thought that guy means business.

01:18:57

A:

And uh, if what we're doing can deter that and we can say to him you can shoot first, we can't stop you from doing that but just keep in mind that when you do there's going to be retaliation and that retaliation you won't like. And that retaliation will be possible because of what we're doing here because the idea was if Kruschev would say we have 20 nuclear bombs and they're ready to go, we could say we got 40 and it's a deterrent. And that's the way most everybody looked at it. And felt like

it was a matter of survival.

01:19:50

Q:

Did things escalate a little bit for, well Fernald and just sort of the typical American's mind set during the Cuban Missile crisis? (Yes, it did) And what were those days like?

A:

Well, during, things were kind of at a peak during Eisenhower's administration of the buildup and the Cuban missile crisis seemed to be kind of a climax of a buildup toward the Russians are going to have deliverable missiles in Cuba 90 miles off the coast of Florida and we're going to allow that. They could hit any place in the United States from there and these missiles sights are in place, films showed them. Everybody was oh, this is bad. And boy everybody stood up and cheered when Kennedy said we'll turn those ships back and we'll use whatever sources necessary to do it. And uh, that was the first time that Kruschev blinked and that was good to see.

01:21:18

A:

Because up till that time, he'd beat his shoe on the rostrum and challenged and when they shot down Gary Powers=U2 plane, that was the height of his glory to be able to go the United Nations and pound his shoe and say these Americans are war mongrels, see what they're doing, they're spying on us. Yeah, Nakita, we're spying on, wonder why we're doing that. What would you be doing to cause us to want to spy on you. From that Cuban missile crisis on uh it seemed like that Kruschev backed off and never did get back to the real "I dare you, we will bury you" philosophy and things began to cool somewhat after that confrontation you know.

01:22:23

Q:

Wow. I just find that an interesting time in history. Now something, going back a little bit to the secrecy of everything that was going on at Fernald, how did they know whether you were talking or not?

A:

The only way that I can think of, would, there was some spot checks of somebody would say hey, you work at Fernald, yeah, well there was a guy just asking some questions, uh, do you know Loyd Smith. Yeah, do you ever talk to him, uh, does he ever talk about his work, what he does up there. And that's the only follow-up that I'm aware of was done. Just to double check and see if anyone was talking about what they did in a way they should not be. See at the work spots you didn't have access to everything that was up there.

01:23:39

A:

The information was sort of in partials. Some of the information over here, some over here, some over here and if anybody was going to do anything with it, they had to have access to all of it and this information over here, even though you were Q cleared was only available on a need to know basis. You had to give pretty good reasons why you needed to know that before that person would say OK here's the report. So there was an internal control of who knows what and how much as well as we call it external control of just monitoring now and then to see if there's any indication of information.

01:24:29

A:

The main part as well as some of the processes that maybe lead to uranium production but they were pretty well known throughout the world because you know there were several countries producing metal uranium and working toward bombs. But the, the main secrecy was about how much. You know the enemy would say, Kruschev would said Russians, say we know that they got a project there at Fernald, we know they're producing uranium. What they didn't know was how much. And if they knew how much, they could they calculate and say ah-ha, they've produced enough uranium for so many nuclear bombs ah-ha. Then they would know what they had to do to match. So that was the main control was don't give out any information that has to do with how much is being processed.

01:25:38

Q:

And being in quality control, you knew exactly.

A:

Yeah, and then I spent 8 years in final inspection which was inspecting the final pieces, putting them in boxes, shipping them out in trucks or railroad cars. So that was the final step, that was direct knowledge of how many tons was going out of there. And you wouldn't believe, unless you already know, how many tons of finished uranium went out of that place. And how many tons of ore came in to start with. Oh, it would boggle your mind.

02:26:14 Q: Can you give us a ballpark figure on that?

A:

Not really. It's been too many years you know to remember tons you know. I didn't retain that.

02:26:30

Q:

So on site what locations did you do most of your work in?

A:

I started out a couple years in the main building where the quality control headquarters is located and then moved to the laboratory building still in quality control. Then Plant 6, final inspection, the far end of the plant where the railroad cars pulled in, the trucks pulled in and our men in our department would inspect everything, box it up, label it, and ship it out. And I mainly was, well I was a foreman in that area over production and kept track of what went out. And that was interesting you know.

01:27:27

Q:

And did you have a system for keeping track of every piece that went out, tell us a little bit about that?

A:

Yes. Every box that went out had a we'll call it a packing list of what's in there. The whole history, where did that come from, what ingot. Ingot being a large piece of uranium than that being rolled into rods which could put through the machines and made into the sizes you wanted. So when you had a box of material that could be traced back to an original ingot and so that was all information that was vital because everybody wanted to know the exact specific weight of that material and its dimensions. If something went wrong later on, they want to be able to trace it back to a certain production batch and know what went on.

01:28:43

Q:

And during the process were you ever, I mean, the waste, what was happening to the waste?

A:

Oh uh, Joe Carvetti was handling the waste. He was one of the main cogs in disposing of, and that's really not a complete word because it wasn't disposed of entirely but uh processing uranium waste so that what could be burned up let's say, you'd have wood and other materials and it could be burned up into a uranium dust, a black fine dust which could then be processed again. But you had to reduce it down to where about all that's left in there is some uranium and the other wood and stuff got consumed. Then there was the silos. The famous silos that get talked about.

01:29:55

Q:

Before we get into that we're going to change tapes real quick. We only have a 30 minute load.

A:

OK.

FLHP0050

02:01:11

A:

(Mr. Smith was talking but no sound)...it was early after I started uh, what are those big things being built. Well, those are silos. Well, what will they be for. Well, they're going to hold the waste material. Ah, you see we're buying uranium ore from the Belgian government, from the Belgian Congo in Africa.

02:01:34

A:

And the only thing we're buying is their uranium that's in there. Say what. Yeah, that's all we're buying. Well, what do you mean, what else is in there. Oh, there's gold, there's iron, ah, ah radium, there's all sorts of chemicals in there and ah it still belongs to the Belgian government. We just buy the uranium. Yeah, that's right. And we're going to store it there. Yeah.

02:02:05

A:

Well, for how long. As long as they want us to. That was the price that we were willing to pay to get the uranium was yeah, we'll store it for you, anytime in the future you want it, we'll ship it to you.

Ah, whatever gold in there, it's yours. And that was, that was mind boggling I, you know, and so these big silos were built.

02:02:30

A:

And ah, ah as I said before, things were urgent you know, get them built. Looking back, it'd be easy now to say 20/20 hindsight ah, they should have been constructed, oh, later on, the Miami Valley Ready Mix, we'd been glad to send them tons and tons of ah, concrete to ah you know build ah more stable silos ah, with a concrete base where nothing could leak through.

02:03:08

A:

And ah to the best of my knowledge there was plastic in there and ah, after so many years you ≠e going to get some leakage. And ah, but they held a lot of material. Tons, and tons, and tons of material that ah, well frankly you wouldn't want it in your drinking water. (Chuckles)

02:03:30

A:

And ah, so it's easy to look back and say this should have been done, that should have been done. In 1950's everything wasn't known that's known now and ah, as I said, the overriding factor was ah find a place to store it, we got to store it now, today, we're producing, we're putting out a lot of waste material. It's got to go somewhere.

02:04:05

A:

We can't ship it away from here. There's not, no place to go with it. We can't ah put it directly into the streams like some chemical companies have you know, just put stuff directly in the streams. We've got to contain it. So that's the story of the silos you know. Big huge things to store luke you'd call it. Kind of a messy, you know, material.

02:04:36

Q:

Um, I've heard from other folks that there's Manhattan Project waste, were you aware of that at the time?

A:

No. Ah, that would probably have been one of things you know, you gonna need to know about it, no, OK then, you don't know. That, that, you know, it was just not that everybody worked there wouldn't know about that, you know.

02:04:59

Q:

Did you hear about that later or did you, have you heard that before?

A:

Ah, that waste was stored there that came from the Manhattan Project, uh, I never truthfully never paid much attention to it too know one way or the other or really care one way or the other you know. It just wouldn't have been important you know.

02:05:24

Q:

Tell us about some of your favorite people on site.

A:

Well, uh, Jim Noise was, he followed George Wonder as plant manager and uh, he uh, I thought did a good job, in his job. Don Nelson, his assistant, associate, assistant plant manager, ah very knowledgeable. Easy to talk to. Uh, and one fellow that I worked with was my supervisor for 8 years was Fred Brandell and uh similar background.

02:06:07

A:

I guess you, people have a similar background in sports, played football, basketball, Dayton ah University and ah was ah maybe 15 or so years older than I was. But very similar. Ah had been in track and field in college so had I ah, and uh, very knowledge in mathematics uh, final inspection, new gauges and uh, ah he, we always said we were twins.

02:06:43

A:

We wore the same size smock; the same height, the same weight within a few pounds. Uh, I had bigger feet than (laugh). But, he was, uh, good man, knowledgeable in his job and uh, just some fellows like that, that ah kind of stand out and uh. Well, then, there's all the uh, athletes up there that I played against

02:07:10

A:

The Dick Bonner, the ah ultimate softball player and ah, Harry Phillips. Harry Phillips was a black man and, but, he stands out. He worked in the laundry but he was a basketball player he was a softball playerBone of the best uh, just an a-one person.

02:07:36

Q:

So you were pretty instrumental in getting a lot of the sports started?

02:07:40

A:

Yes.

02:07:41 Q: Can you tell us a little bit about that?

02:07:44

A:

Well when I first went there, they had played one season of softball and uh, hadn't played any basketball yet, so I was in on the ah startup of the basketball league. And uh, we had to use ah gymnasiums in Hamilton uh, the wasn't any gymnasium built uh, there weren't any plans to build one on site; however, there were uh, ball diamonds.

02:08:16

A:

And uh, so we started the basketball leagues in ah, that first year, in '52, in ah the fall and ah, we had uh, oh, I think seven teams ah play, and ah that increased as the work force increased. And, uh, having played four years in college, why it was sort of natural to ah, be interested in playing and organizing. And softball was the same way.

02:08:48

A:

The next year we ah had maybe six or seven softball teams and then, it got as high as sixteen teams, that we had there. And ah, it would have shift leagues. There was a second shift league that would play in the daytime and, uh, of course, the day shift workers all played right after work.

02:09:10

A:

And ah, sports were encouraged by the ah management. and there was a budget for each one of the ah sports so, uh, it was nice that way, that they were supported, because uh, you know, after working a lot of hours you need some sort of relaxation and sports filled that.

02:09:40

Q:

That's great. And, of course, our teams are still going now; that's ah, every Wednesday night. Um, anything funny ever happen?

02:09:50

A:

Yeah, there were several things that were funny that happened, but, uh, uh, one of them was, uh, the story of the lost piece of uranium. Ah, I was in final inspection at the time and, uh, we had sent a, a, truckload of uranium in uh, in boxes. Uh, headed ah west and uh, it left over there oh, about four in the morning and, uh, got out on Indiana 46 by Lawrenceville and, uh, the truck, the bed of it, the wooden bed of it, broke down and it just fell through and scattered uranium pieces all over the road so, immediately the road was blocked off both ways and uh, my supervisor called meBFred BrandellBand said ah "hey, you gotta get in here".

02:10:50

A:

"Ah, we've had an accident and uh, there was uranium spilled and we have to account for it all." And so I hurried in there and got in there about 4:30 and ah started talking back and forth with the men on the site where it happened. Yeah, we've got this box, yeah it's full, all these pieces okay. And ah finally we got down to the last box and there's two pieces missing.

02:11:20

A:

And they said well, we can't find anything; we've swept both sides of the highway. Well, you gotta do it again uh, cause there are two missing; we know they were shipped out. And ah, there ought to be two empty spaces in that last box. Okay. So they swept the sides and they found one. Come back. Yeah, we found one, we found one.

02:11:41

A:

Okay, that's great B now where's the other one. We don't think there is another one. Well, we think there is because records show it was shipped in that box and it's got a number. Alright; we'll get another couple of more Geiger counters, or centilators, they call them, out here and uh, we'll sweep both sides again. And they did, and they found it.

02:12:08

A:

The piece was down a crawdad hole. Slipped down there, too far down to see visibly but they found it with a ah, Scintillators and, uh called back in and I said whew! I'm glad you found that. Well, that was a kind of funny thing.

02:12:30

Q:

What kind of impact did that have on the neighbor, I mean did anybody know about that? Did anybody know about the spill at all or?

A:

No not really. They, somebody might have happened by that ah, site out there where it happened ah, first one on the scene, first car going by ah, they, you know, might have seen boxes, metal pieces, but they really wouldn't have known ah, ah, what it that, you know.

02:13:00

A:

Ah, there's always a fear that a piece of that would fall in somebody's hands and they would use it for a door stop or on their desk, you know. Ah, hey look what I found - Ah, well, what it that - Well I really don't know, but ah, it's, it's conversation piece, you know.

02:13:21

A:

And we, we wouldn't want that to happen, you know because that would be bad publicity for security reasons, and all the way around that somebody's waltzing around with, they got a piece of uranium, you know.

02:13:37

Q:

What do you think the consequences of something like happening today would be?

A:

Oh, a piece of uranium today, would not have near the impact that it would have back then. Ah, nobody would get real excited because somebody had a piece of uranium. Ah, there's not much that they could really do with it.

02:14:01

A:

It's not going to hurt them because they got a piece of uranium, they hold it next to them, and it will do their insides - no. It won't hurt them and ah. So, it, it wouldn't be the same as it was then. Ah, security, secrecy and so forth, ah it's just quite different than it was then.

02:14:28

Q:

And ah, generally how do you feel about having worked at Fernald?

A:

Well, I've, I've always felt like when it started up and those of us that were sort of in on the ground floor. Felt the same way then, and I still feel the same way now. That there was a definite job to done for a certain time period in history.

02:14:53

A:

And ah, those of us that live close to the project, and then others came from far away to work there because they had certain skills, ah we had a job to do, ah it ah, certainly appeared to be urgent, and ah, we all felt like, this is, we want to get this job done.

02:15:18

A:

Ah, if it takes working overtime ah, to ah get it done. Ah, we'll do it and ah everyone thought it was important on a national scale. Ah, not just another company making widgets, (chuckles) or even automobiles as necessary as they are.

02:15:41

A:

There was a sense of urgency about it that ah, ah, most of us could just sort of visualize, some Russian people, our counterparts, doing the same thing over there and being told - this is urgent, we've got to do this, those imperialistic, capitalistic ah, people in the United States, they \neq working around the clock, we have to do this, we envisioned that.

02:16:13

A:

It was like a race. Ah, who's gonna get to the finish line first? And ah, so that's the way most everybody worked there, ah not everybody. A few there were, let's face it they were working for a paycheck, and that's about all they thought or knew.

02:16:31

A:

Ah, many of them took pride in their work. If they were machinists, they wanted to be the best. Uh, ah, seems like you always have that. And it's a good thing that there at that project, that there were a lot of people that felt that way. Whatever job they were doing, they wanted to be the best.

02:16:50

A:

Because of what we were involved in. If, if we did our job the best, then we'll be the one at the finish line, ah first, and ah, we won't be taken over by communism. Everybody pretty well believed that it could happen.

02:17:08

A:

And ah, ah, it appeared throughout the world that it was possible, because they were making inroads in most of China, most of any country you could think of. They were making moves in Cuba, South America ah, so that's the way we felt about it.

Q:

What was your sense, when the years later, when the Soviet Union finally did collapse?

02:17:41

A:

That was ah, a real surprise to most people and to me that ah, the way it happened, and the suddenness with which it happened. I'm a Christian, have been ever since high school, and our particular church, Christian Church, we believe a lot in prayer and ah, we still believe that ah, the Berlin Wall going down was a result of prayer.

02:18:17

A:

Ah, not everybody believes that, ah and that's all right they don't have to. But it was a real shock, that ah, an empire seemingly that strong and that capable and with that ultimate purpose, we're gonna take over the world, could ah some day, just, almost seemed overnight, that ah, they could almost say - hey, it was a good experiment but it didn't work out.

02:18:53

A:

Ah, maybe capitalism is a better system, democracy, freedom is a better system. Ah, what does it take to bring that about? I think Reagan helped, bring it about with his stance. Ah, I think ah the United States in general, the leaders helped convince Russia that in the long run, their system was gonna fail. And that people were gonna starve because of their system.

02:19:31

A:

And ah, ultimately they would just fall apart and they did. But it, it the way that it happened and the suddenness of it, I, I still shake my head at that. That, that it really happened. Seemingly that quick. If you'd been in Russia and traveled, you'd have gotten a sense of it's going to happen but unless you were there, unless you saw things that were happening that would lead to that, you just imagine then business as usual, the communist line, we hate the capitalists, we're going to bury them.

02:20:10

A:

Uh, you'd think that was still in place and real strong, but in one way I think the Russians really, the leadership finally figured out well, if we want to get some money, some aid, some help from the United

States we don't want to be enemies with them. We want to sort of be friends so we can go over and visit them with our hands out. I think they finally figured that out. They saw other countries getting aid from the United States and they said - hey, we can use some of that aid, how do we do that. Well, we can't be their sworn enemies.

02:20:53

A:

Expect them to, I don't know how many people would agree with that that they it sure looked like to me that it was a move on their part. And their economy was just in shambles at the time the collapse happened and let's face it, nations run on economy. That's why we're doing well now is the economy is good and when the economy is good everybody's in a pretty good mood.

02:21:30

Q:

One of the terms we've been using a little bit on site, as we approach the 50th anniversary is Cold War Warrior. That's what, well they would apply that to you, having been on the site the time that you were there at the height of production. How do you feel about that term?

02:21:48

A:

Oh well, uh I would feel more like just having a job to do and doing it and not thinking of us, meaning the ones that were there and worked and as being somehow more important than the fireman in Cincinnati doing his job, the policeman doing his job, uh they're warriors. In fact the police they might get shot at. At least where we were we had security guards all over the place and we weren't likely to get shot at. Some things could have happened up there that would be dangerous you know.

02:22:28

A:

And uh, and we're not sure, many of us aren't sure of the lasting effects of being around uranium in different forms. Gaseous form, metal forms, dust forms and we're not sure about that. But I've never been one to worry much about it. If, for instance, if you had it to do all over again would you work at Fernald around that, certainly. I certainly would, wouldn't give it a second thought as to possible consequences working in that atmosphere. Uh, so I just kind of go back to there was a job to be done you know and people willing to do it for many different reasons. Career, it was exciting and people like to work in something there's excitement to rather than dreary day after day after day.

02:23:34

A:

Now it got a little wearing when you work seven days a week, it does. But still the end result is, what you \neq working for is still out there and whether you \neq working seven days a week or five or six, the goal you \neq shooting for is still there. And so I wouldn't glorify the term you know or try to make it hero's or anything like that because you know you didn't have to work there. It was a choice and if you wanted to be part of it why I think it was a good national effort. And uh, glad that it was done.

02:24:24 Q: And why did you leave Fernald?

A:

Things tapered off and about '65 and then following. And uh, I worked on one last, I transferred to the Engineering Department and worked on a really interesting exciting project in the use of graphite crucibles. Graphite crucible is something that stands about that high and it's about this big around and it's used to melt uranium at 2300, 2400 degrees, uh uranium metal. And uh, those crucibles cost a lot of money and they can only be used so many times and then they just fall apart. And I made a study, a statistical study to determine - well, we buy 3 or 4 kinds of these from 3 or 4 vendors, uh which ones of these are actually lasting longer.

02:25:43

A:

And giving us more use before we have to discard them. And I found this one particular source, these graphite crucibles would last like 30% longer than the others. And when you re talking about big figures and a lot of uranium crucibles, you re talking about hundreds of thousands of dollars and so by using that one brand we saved several hundred thousand dollars a year. Just, and I suspected but I never knew for sure why that particular brand of graphite resisted the corroding effects of melting uranium.

02:26:40

A:

I suspected that they were treated with something. Course that manufacturer would never let that information out as to what they were treated with. But we suspected that and I visited the graphite production place in Albany, or Buffalo New York, and uh, that was an interesting project. Well, at the end of that production tapered off and it really got sort of dull if you can contrast the excitement with well, we got to get this out with what do you want to do today, well I'm not sure or where are you going to hide today, you know and nobody liked to talk about that, but it happened.

02:27:30

A:

So I decided well you know I've got change and 16 • years here, yeah that's enough here. And the urgency of production sort of tapered off by '68 and so I got into some accounting studies at University of Cincinnati and decided to go the accounting route and be an accountant. And uh, maybe work for a small company some place. That's why I left. I never did have much trouble deciding when it was time to leave a place where I was working. And it was time to go. And besides that, sports had cooled off a little bit and we still played basketball and we still played softball but our days of winning like the Cincinnati Metro Championship, kind of tapered off a little bit.

02:28:37

Q:

How do you feel about the work that's going on at Fernald right now?

A:

Well, it's very important for a different reason than when we worked there. It's important for several reasons: One is it's important to, for our government to show to the ordinary citizen that there is a national conscious to protect citizens, even one citizen, from something that the government had something do with. And so the idea of cleaning up the site is really important because after all who messed up the site and made it necessary for a cleanup project to be started. We did, United States, the people, the government, we did it. So we ought to clean it up. And uh, whatever it takes.

02:29:49

A:

The people that live around that project, on the outside edges, when it started and some of them are still there, uh they have a right to live in a safe environment and drink clean water as much as is possible. And so I think the effort that's put there in some ways should be almost as strong as the effort that we put into producing for a reason. Cleanup is just right up there with it in importance I think. And I know it's expensive, I see the figures and it just boggles my mind, the cost of cleaning it up. But I don't think there's really much choice. I see it as something that has to be done.

02:30:44

A:

If it was your own house, I think you would want to clean it up. If it was your own farm and something similar, you would want to clean it up for the same reason. And it's not their problem, it's our problem, it's the United States government problem and we're all part of the, we were all part of the first effort and we're all....