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Northcutt, William Thomas, Jr.

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K-25 Oral History Interview

Date: 5/19/05

Interviewee: William Northcutt

Interviewer: Jennifer Thonhoff

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[crew talk]

[1:00:55]

Thonhoff, J.: Basically, what we're going to do is this is just going to be a conversation.

Northcutt, W.: I've never done any of this before, so you just sort of lead me and I'll do the best I can.

Thonhoff, J.: Absolutely, absolutely. Oh, here. (indiscernible).

Northcutt, W.: Gotta sign that?

Thonhoff, J.: Yes. This is just 'cause we're going to release this to the Department of Energy and just allows us to be able to do that.

Northcutt, W.: Okay.

Thonhoff, J.: On the line right above my signature.

Northcutt, W.: Right here.

Thonhoff, J.: Uh-huh. (affirmative)

Northcutt, W.: Okay. I'm gonna sign W.T. Northcutt.

Thonhoff, J.: That's just fine.

[1:01:31]

Northcutt, W.: In fact, I'm junior because I've got a son who's a third, so.

Thonhoff, J.: However you like to do it. And then I'm just going to ask you some questions and any stories, anything that you remember as it comes up, just as long as you're comfortable with it.

Northcutt, W.: [laughing]

You live in Albuquerque?

Thonhoff, J.: I do.

Northcutt, W.: Oh, I see.

Thonhoff, J.: Can you say your name and spell it for me, please?

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Northcutt, W.: Okay. My name is William Thomas Northcutt, Jr. It's W-I-L-L-I-A-M T-H-O-M-A-S Northcutt, N-O-R-T-H-C-U-T-T Junior.

Thonhoff, J.: And where were you born?

Northcutt, W.: I was born in Hardin County, Tennessee. That's -- Savannah, Tennessee was the county seat or whatever, was out in the country on a farm.

[1:02:28]

Thonhoff, J.: And where were you living prior to coming to K-25?

Northcutt, W.: I had gone to Memphis to work -- we had moved to Mississippi in '43 and I was a senior there. I finished the junior year in Savannah. And when I graduate from Mississippi, Corinth, Mississippi, went service for one week and they told me to go back home. I had a hernia and to get a defense job. Well, I was working in a pants factory there, making -- shipping army pants, and so I decided I'd go to Memphis to get a better job. So I went to Memphis, went to work for Fisher Aircraft building B-25s. Working straight -- well midnights 6 days a week. And we built so many, I reckon, within about 8 months, they shut down the graveyard shift. I was working graveyard shift. And sent me down to Employment Office and I talked to several different people. There wasn't anything in Memphis that I liked -- I liked Memphis awful well at that time. I was 18 years old.

[1:03:35]

But they said, "Well, we got a firm here from Knoxville. Union Carbide." And said, "Would you like to talk to them?" So I said, "Yeah, I'll talk to 'em." So when I went in, talked to them, they offered me a job. Near Knoxville, Tennessee is an operator at 85 cents an hour. So I said I'll take it and I said, "How about giving me a couple weeks, you know, to get there." Which by car it's about 100 miles from Memphis so I went from Memphis to home for about 2 weeks and caught the Tennessee -- into Knoxville, Tennessee, and sent me to Union Carbide office down there and from there, they put us all on army bus and brought us to Oak Ridge.

But we didn't know what Oak Ridge was and it didn't name Oak Ridge back then.

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Thonhoff, J.: What was your first recollection of seeing K-25 and Oak Ridge?

[1:04:32]

Northcutt, W.: It was out of this world. Oak Ridge, 'cause it's 75,000 people here then in a little town and they didn't have room for everybody, and it was muddy in a lot of places, had wooden sidewalks part of the ways. And I said to myself, "Well, I won't be here long." And here I am 60 years later, but seeing the plant just blew my mind.

Thonhoff, J.: Can you describe it for me?

Northcutt, W.: Well, it was so huge, to start with. It was about a mile and a quarter around. Of course, you had four floors. It just -- I'd never seen anything like this because I understand it was the largest building in the world at the time anyway.

Thonhoff, J.: Yeah.

Northcutt, W.: But as I say, I was star struck, I guess you'd say. I'd never been anywhere, hardly, except to Memphis. And it -- it was just unusual thing.

Thonhoff, J.: When you were talking about what you did, how would you describe that to people who were outside the secret city?

[1:05:49]

Northcutt, W.: Well, at that time, we weren't supposed to say anything. You know, well, I mean, you got work out at the plant, you know. And so that's about all you'd tell anybody. And they could ask questions (indiscernible) people say, well, they're making safety pins for diapers and all this kind of stuff. So you didn't tell 'em much about what you were doing. You didn't talk much about that.

Thonhoff, J.: You said that people would say they were making safety pins. Were there other stories or things that people would say?

Northcutt, W.: Well, they were -- they were different things. I can't remember some of 'em. There was a lot of different -- people would come up with what they thought was funny -- but I'll tell you one thing that impressed me. There's a fella, was already in his 60s. Mr. Sessums. And he worked as my basement operator. I had already made crew leader -- 17 people, one building, and all this stuff. And he got arthritis. I'd go down to see him, and he'd be saying

that wind has been hitting my neck and all this stuff. But he cut out a little clipping out of the paper and brought it one night and he called me up. They had these ring phones, you know, ring you upstairs. Wanted me to come down there. So I went down and he showed that little piece of paper and it was where Germany was trying to spread the atom using hard water. He says, "Red," they called me Red back then, I had pretty red hair then, and he said, "That's what we're doing here." But I never mentioned it to anybody. [laughing] He -- he, really he was smart enough to -- I mean -- he was on the right track, really, in one sense of the word.

[1:07:28]

Thonhoff, J.:

Yeah. Was it hard for you to keep it a secret?

Northcutt, W.:

Well, not too much, I guess it was sort of bred in us at the time that you didn't -- we heard stories about somebody saying something at the beer joint or something and they didn't see 'em no more, stuff like this, so it was pretty well trained in secrecy.

[1:07:45]

Thonhoff, J.:

Yeah. [laughing]

What did you like most about working at K-25?

Northcutt, W.:

I guess meeting so many people and the way people worked in those days, course I never knew anything but work, you know, raised up on a farm and you start working when you're 5, 6, 7 years old. Helpin' to do the work on the farm. So these people amazed me how they worked, didn't take breaks, we didn't even know what breaks was back then in the first few years, but the swiftness of the way things got done. And the buildings, see, course they were building, turn the building over to you and then the certain group would get it ready and then we'd start it up and all this stuff and just seemed like it was just -- it was amazing how swiftly K-25 was built and started operating.

Thonhoff, J.:

What did you like the least about working at K-25?

[1:08:55]

Northcutt, W.:

I guess, start with, it might've been the shift work. Course I started out on midnight shift and -- and -- of course we had a rotating shift and I was on rotating shift for 38 years.

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Thonhoff, J.: Wow!

Northcutt, W.: That's midnight, 4-12, and day shift. So -- but I got used to it and got to where I actually liked it. With exception when we had children, you know, it's hard to when your kids are playing sports, hard to get to some of the things you'd liked to gone to, so I guess that was the biggest thing.

Thonhoff, J.: And what did you do when you worked there?

Northcutt, W.: I hired in as, they called us a process operator. In fact, that's what they told me in Memphis. They said an operator, I think, at Memphis. And I stayed in that for 10 years, process operator.

[1:09:45]

Thonhoff, J.: And what do you do as a process operator?

Northcutt, W.: You operate the equipment that we were running the process in.

Thonhoff, J.: What level was that on?

Northcutt, W.: Well, your -- your operating equipment was on the cell floor, we called it. And then you had a basement which had fans and things to help maintain temperatures and things. And then you had a pipe gallery where all your piping was enclosed. And then you had the operating floor where you had your panel boards, we called 'em, where we did the operating from. You had an operator -- to start out with we had two operators to every board, and things of this nature, which eventually turned out to be one operator to three or four buildings or something.

Thonhoff, J.: Was it the room with the --?

[1:10:33]

Northcutt, W.: Valves, you're talking 'bout?

Thonhoff, J.: Yeah.

Northcutt, W.: The old K-25 building, all the early part of it was valves and some of 'em were huge according to what section you were in.

Thonhoff, J.: Right.

Northcutt, W.: And they were pretty hard to turn. You had to operate these valves -- what we called taking a cell off stream or putting a cell on stream. And this nature, which was pretty hard work. And we had a lot of it in the early years because starting up, you'd have things that'd happen and you were scared and your supervision didn't know for sure, so you'd have to isolate the cell, you know, to make sure things were all right again. [laughing]

Thonhoff, J.: Then after a while, just started to flow.

Northcutt, W.: Yeah, yeah. It just got larger and larger -- excuse me. And the equipment, you just gradually kept adding and adding till you got to the complete K-25. And I don't remember exactly what time of the year we got there. And it was to increase your assay of your uranium material, your 235 assay, which is -- K-25 was the only plant that did that at the time. And before Portsmouth was built.

[1:11:48]

Thonhoff, J.: When did you start and leave K-25?

Northcutt, W.: I started there March 9, 1945 is when I went to K-25. And course, I stayed there over 40 ½ years, but they shut down K-25 and I was in K-25 as an operator for probably 5, 6 years until they built the axial plant K-29 and then they moved me over there. And I helped operate 29, helped start 31, 33 the larger axial equipment. And then I came back to K-25 as a supervisor in 1955, 10 years later they made me a supervisor.

Thonhoff, J.: What did you do as a supervisor? What were your duties?

Northcutt, W.: To oversee the operation of the section of the plant, of the K-25. To start with, I had a certain section and it eventually turned out, had the whole K-25. Things were running smoother so they kept eliminating operators and supervision and everything, so it ended up that I had the whole K-25 plant.

[1:12:56]

And it was a long way around so they had -- we had a bicycle in the office -- so if we had trouble at one side, you ran your bicycle over there, by that time, you had trouble on this side and you come back. So then eventually, they got us a motor scooter. So we rode a motor scooter on the top floor, of course.

Thonhoff, J.: I had not heard of the motor scooter.

Northcutt, W.: Yeah. It was a little something like a golf cart or something. It was motor operated, I mean, battery operated.

Thonhoff, J.: I've heard that there were bicycles, but they were all women's bikes.

Northcutt, W.: Most of 'em, but not all of 'em. No, I can remember -- course all operators had bicycles. We had bicycles in the axial plants also because the operators rode the bicycles, to get around.

[1:13:42]

Thonhoff, J.: So what was the axial plant?

Northcutt, W.: Well, the K-25 plant, what I call it, the centrifugal motors and the impeller type thing and the other was axle compressors. Entirely different, made different. Allis Chalmers was the main supplier of that.

Thonhoff, J.: And did that have to do with centrifuge?

Northcutt, W.: Nope.

Thonhoff, J.: No, that was still gaseous diffusion?

Northcutt, W.: Yeah, that was still gaseous diffusion. The centrifuge came later.

Thonhoff, J.: So, what's the main difference? They're both gaseous diffusion, it's just a different process?

Northcutt, W.: The -- from the centrifuge?

Thonhoff, J.: As far as the axial.

[1:14:24]

Northcutt, W.: Oh, it would just handle more -- just increased your production tremendously.

Thonhoff, J.: Oh, okay.

Northcutt, W.: It was larger volumes. It was in at the lower assay of your cascade, say, under 1%, or the feed material, and as it came up through there, you increased the assay. So this handled tremendous for more inventory than K-25.

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Thonhoff, J.: You said that you were amazed by the quickness of how things got done. How do you feel like people communicated?

Northcutt, W.: Very well then, I thought. There wasn't -- the only problem we had in the early years, to me, it was new and there wasn't anyone that really knew was going to happen, and so you were very cautious to start with. That is the reason -- it gradually speeded up as you learn and we all pretty well learned together because it was just start and start themselves when I got there. And it wasn't even known as the process then, it was, you know, just what you call a safety run or something, or testing equipment and teaching us operators and things of this nature.

[1:15:43]

Thonhoff, J.: Do you think that because it was so secret, you formed stronger bonds with people?

Northcutt, W.: I think so. I think we all felt -- excuse me -- we were doing something about the war effort. We didn't know what. And I think that drove most of us to, you know, really try to make everything work right and do a good job. That's the way I felt about it.

Thonhoff, J.: That's kind of the feeling that I'm getting from hearing people talk is that you guys all came together for the good, the common good.

Northcutt, W.: That's exactly right. Course back then, everything was a war effort, just like I said, building the planes in Memphis, Fisher Aircraft, and it was about the same way there. I mean, people worked and they were dedicated to getting something done, you know, which this change in later years which bothered me.
[laughing]

[1:16:40]

Thonhoff, J.: Yeah, I don't know if we could get back to those kinds of work ethics --

Northcutt, W.: No.

Thonhoff, J.: -- it seems that it might be that kind of far out of reach.

Northcutt, W.: Uh-huh. (affirmative)

Thonhoff, J.: It's a little sad.

Northcutt, W.: Yeah, later years and younger people hiring in, it felt like you owed 'em a living or something, it seemed to me. I mean, they wanted all their breaks, which when I started out, you didn't have breaks. If you were busy, you ate your sandwich [while you were turning] the valve or whatever. You didn't -- we didn't have no allowances for breaks. Course you didn't have a union to start with, then we got one of those later and that started changing things, too.

[1:17:15]

Thonhoff, J.: What was the difference -- what was the major difference between not having a union and having a union?

Northcutt, W.: Well, I think we were more together before the union because you had representatives from the union and they had to represent your supervision like me. You'd get grievances and got to work that out then with your union representatives. And it just made sort of a complete difference in operation, you know. Of course, the unions, I think, have done some good some times and all, but. Of course we had a strike or two, too, you know. I was out on strike myself one time for two days while I was an operator, then as a supervisor, they were out two -- I don't know how long it was, but I stayed out there 24 hours a day then. I was on supervision then. So we had to work 24 hours a day.

Thonhoff, J.: What were you guys striking about?

[1:18:17]

Northcutt, W.: Wages. I think it's 2 cents we got the first time, 2 cents an hour; maybe 6 cents an hour the next time.

Thonhoff, J.: And that was a significant increase?

[1:18:29]

Northcutt, W.: Yeah, back then.

Thonhoff, J.: And as far as health facilities, did you feel that was adequate?

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Northcutt, W.: Yeah, I do -- because I can remember -- we had a dispensary, we called it, and a main dispensary and we had a nurse on all shifts. And they pretty well took care of us. You know. If you got sick or if somebody mashed a finger, something like this, you didn't have a doctor except on days, and then they also had -- knowing K-25, we had one little infirmary downstairs, you know, where you could get to quick, too, also.

Thonhoff, J.: Were there any major accidents that you can recall?

Northcutt, W.: Well, they were some that I didn't really -- well, I know one real bad one that had happened in 1420 where we'd lost two fellas down in a tank.

[1:19:28]

Thonhoff, J.: What happened?

Northcutt, W.: Well there's -- it had fumes in it and one of 'em went down and apparently didn't have the protection and he passed out and another guy went down to get 'im and he passed out and they both died.

Thonhoff, J.: Wow.

Northcutt, W.: Yeah. I was told there was one electrocution, but I didn't really know about it. Something had been in our power operations, you know, electricity. And we also had one fella hang himself down there.

Thonhoff, J.: We heard about him, Andy, ended up haunting the --.

Northcutt, W.: [laughing] Yeah. It sorta felt funny going through where he was found. I know what you know, course we all knew where he was hanging and -- and a lot of talk went on about that for years.

[1:20:17]

Thonhoff, J.: Did you ever have any experiences like that where doors were shutting and noises were being made or anything like that?

Northcutt, W.: No, not really.

Thonhoff, J.: No.

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Northcutt, W.: Course this was a huge -- you know, this was a huge plant and 'cause there weren't any doors on operating floors you could hear anywhere anyway unless it was a toilet restroom. [laughing]

Thonhoff, J.: Do you feel like safety was a big emphasis?

Northcutt, W.: Yes, I think it was. The only exception is, as I say, we didn't really know all the -- all the dangers of it.

Thonhoff, J.: Right.

Northcutt, W.: It's just like respiratory equipment. To start with, all we had was an old Army assault mask. And then hot weather and it was, we kept -- buildings were hot anyway and if you was in the gallery or cell floor, it was real hot a lot of times. And a lot of us had bad habit if we got so hot, we'd pull that mask back, but course, you wore protection in case you had something that released or something that might be dangerous to you.

[1:21:24]

Thonhoff, J.: Right.

Northcutt, W.: And even though we didn't know what all we was messing with, they told us that, you know, we should wear it. So then I think they tried to be very safety conscious with us. It was something we had to learn to take control of it ourself and be sure we protected ourself.

Thonhoff, J.: Did they do any monitoring of people's health?

Northcutt, W.: No, not that I know of.

Thonhoff, J.: Any preventive measures besides the masks?

[1:21:51]

Northcutt, W.: Uh-hunh. (negative)

Thonhoff, J.: I know at one point, you had your badges. There was film in there.

Northcutt, W.: Yeah, they had the films in our badges, but also in the early years, we had to wear our own clothes. We didn't have -- later years, they'd give -- I think it was after I wasn't operator or after I'd -- I don't believe I was ever furnished coveralls and things. But to

start, you wore your street clothes and wore 'em home and everything. But they wasn't anything back then actually said about it.

Thonhoff, J.: Do you think that caused any problems later on?

Northcutt, W.: I never heard of any actually -- no -- course there's lots of people that had diseases and things that they feel was caused from out there. A lot of them probably were. But so far, I've been lucky. Some of them said, "The radiation must've helped you."
[laughing]

[1:22:50]

Thonhoff, J.: Super strong. [laughter]

Northcutt, W.: Oh, man, I said yeah and 38-year shift work's what done it.
[laughter]

Thonhoff, J.: I've heard stories about things that radiation can do. Were there many stories that were going around during that time about the after effects?

Northcutt, W.: Not really in the early years, later year -- later years, we started hearing this, you know. If you were breathing that stuff, you was likely to get lung cancer. And which, like I say, I know several people what's died with lung cancer, you know, but I know several that wasn't even working there and died of lung cancer, too, so it's, you know, it's a hard thing, but they -- they know that it did cause cancer of different types and all.

Thonhoff, J.: Were you ever hurt on the job?

Northcutt, W.: Don't believe I ever was. I don't remember ever having -- a really a recordable injury. I was one of the few. If I ever hurt myself a little bit, I didn't worry if I hurt a rib or something over checking something or something like that -- just minor things like that; I never had anything major.

[1:24:08]

Thonhoff, J.: During the war, you said that you were up on the operations floor. Did you know what you guys were doing? Did you know what the process was and what it was going to be used for?

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Northcutt, W.: No, ma'am. Actually didn't know -- we sort of suspicion, maybe, but I didn't really know until they reported the day here in Oak Ridge that they had dropped the bomb.

Thonhoff, J.: And what was your reaction to that?

Northcutt, W.: I was tickled to death. [laughing] You know, to know that we've helped what looked like was gonna stop the war, which it did stop it, pretty quickly then.

[1:24:49]

Thonhoff, J.: I heard there was dancing in the streets.

Northcutt, W.: Oh, it was and they -- there's a picture at the museum and there's one fella with his hands throwed up and I tell my wife that's me [laughing], but [laughing] -- but I can't even remember exactly where I was, you know, when it happened. It's been, as I say, 60 years ago now.

Thonhoff, J.: Yeah. I've gotten mixed reactions to that question.

You were speaking of your wife. Did you meet your wife during the time you were working at K-25?

Northcutt, W.: No, I know Dot down in Memphis. I'd met her in Memphis. I had two sisters was down in Memphis and Dot, her sister, was in Memphis. And I'd met her, but we didn't get together. She came up here in February, few days before I got here in March. And we started datin' probably in '46 and fell in love and ended up getting married in '47, in October '47. She worked 2 years at K-25.

[1:25:52]

Thonhoff, J.: And what did she do?

Northcutt, W.: To start with, you had -- back in testing -- people that tested equipment for leaks and all, which most of this was done on the cell floor and they'd get through with it and turn it over to operations people like us. And then, later on, they put her in line recorder operations. We had line recorders to check your streams, to see if there were impurities in your stream. You could tell what was going up to the cascade. And she worked in that until they decided to get rid of women and she got laid off in 1947.

Thonhoff, J.: How were women treated?

Northcutt, W.: Well, at that time, I think women were treated pretty equally -- acted just like we did. [laughing]

Thonhoff, J.: Do you think that there was any kind of discrimination?

[1:26:48]

Northcutt, W.: I didn't see any back at that time 'cause -- like the operator, they were paid the same as I was, you know, and course I made crew leader pretty quick and you got raises as you went up like that and a crew leader was the next thing and then a supervisor after that.

Thonhoff, J.: What about minorities?

Northcutt, W.: Minorities just weren't there to start with and when they were, they were mostly in janitorial departments. And of course, me, I was from the south and I've never really been around colored people, black people, we called 'em colored back then. And was - - most feelings of people like me were that you didn't want to work with them. That's just honest about, you know, and course this changed later on. I remember I had a big black fella that became a janitor foreman, first foreman of the black men -- was made -- and we -- I just loved the fella -- and, course, he gradually worked hisself in -- and I had quite a few black operators in the later years, especially in the axial plants.

[1:28:09]

Thonhoff, J.: But there was definitely separation?

Northcutt, W.: Yeah, it was to start with, but I think it gradually worked itself in, you know, and it's turned out pretty good.

[1:28:09]

Thonhoff, J.: Let's change tapes.

[End Tape 1, begin Tape 2]

[crew talk]

[2:00:38]

Thonhoff, J.: We're back. Okay.

Northcutt, W.: OK the incident I wanted to tell you when they brought us in to Oak Ridge, they brought us to Wheat School. That's what they called it. I think I trained for about 2 weeks before they called me out to go to midnight shift. But at first day after they checked us in and everything, they assigned us a dormitory room which was Greeley Hall for me. And so when we got to Greeley Hall, I had my suitcase, just had one bag with my clothes. I went in, they had a nice maple half bed or $\frac{3}{4}$ bed and then they had an Army cot -- you know, a terrible thing to sleep on. So there wasn't anybody in there when I got there, so I just put my suitcase on top of the good bed. And I went up to the cafeteria -- they had cafeterias everywhere, there was 2 within, I guess, 100 yards from where I was. And when I got back that night, there was the longest fella on that old Army cot with his feet hanging off. [laughing] His name was Frank Cathens, but he didn't wake up that night and I went to bed. So the next morning, I got up, I said, "Now, you take this bed and I'll take that cot." I weighed 130 pound then. He said, "No, you got here first." He said, "You can keep the bed." And -- and we did but we became good friends. Frank left, after about 2 years, he got laid off and went to Michigan, but I just thought that was pretty cute. Ended up as good friends and everything, you know. [laughing]

[2:02:04]

Thonhoff, J.: How nice!

Northcutt, W.: Yeah.

Thonhoff, J.: You know what? That shows the integrity of the people that were working there to, you know, be conscientious of other people.

Northcutt, W.: Right.

Thonhoff, J.: It's something that I'd like to see --

Northcutt, W.: Yeah, I would, too. I really would.

Thonhoff, J.: You said that your wife got laid off in '47.

Northcutt, W.: Uh-huh. (affirmative)

Thonhoff, J.: Did you guys end up having a family and what was that like?

Northcutt, W.: Yes. We married in October '47 and we had 4 children. Tresa was born 10 months, where you got down on the line. But -- but

anyway, we had 4 children over the years. The last was born in 1963, but we lost Todd, the baby boy, at 4 years old from a kidney ailment. And Tresa, the oldest, got killed at age 39. And she's the one that's got Jennifer. She had Jennifer and Michael, they were 10 and 8 years old. And I'd just retired about that time, so Dot and I was able to stay with them pretty well till they got 'em up of age and they turned out to be real good kids.

[2:03:20]

But we -- when we got married, you couldn't get houses or anything. We stayed in a Jefferson Hotel for the first week, then we got in an apartment, which was a nice little apartment, just 12 apartments in those days. And we lived in that. Teresa was born and I guess we stayed in that until '54, somewhere along there. And they gave us a little "A" house, you know, 2 bedroom house, 1 bath. And we moved in that. We was tickled to death, you know, have a house.

So we ended up having 3 kids in that little "A" house with the 2 bedroom. Also my little brother had gotten out of the Army and he couldn't get a job so he come up and he was staying with us. So we lived in that little "A" house till Paula was born and Joe -- I was on midnight shift again. And Joe was on 4-12 at Y-12 and he came in -- and Dot, I told her I shouldn't go to work. She's having pains, you know. Said, no, you go on to work; couldn't afford to miss a day's work.

[2:04:28]

So about 12:30 that night, Joe called me said, "I'm taking Dot to the hospital." So she had third baby and Joe moved out.
[laughing]

Anyway, we lived in that house until we finally got a 3 bedroom, had to buy -- they sold houses to us back then. That little "A" house we gave, I think it was \$2,685 for it. And ended up buying a "C" house and I think we paid so much equity, paid the house off for the fella that got it, see. If you were in a good house, the better off you were, but we happened to be in the smallest of the houses. So we bought the "C" house and lived in it until '64 and then bought a new home down on the west end down here, had 4 bedrooms -- where we had enough room, had a den, and all this stuff.

[2:05:20]

Thonhoff, J.: That's nice.

Northcutt, W.: Took us that long to get where -- sort of comfortable for the kids. Last few years, it was home, anyway.

Thonhoff, J.: Were there activities for the kids to do in town?

Northcutt, W.: Yeah. Course the school kids had the Wildcat Den, they called it. But that was for the older kids. And of course, the younger kids, I guess, just whatever we provided for 'em. Course they didn't have much balls for kids back then and such, but all of us was playing sports from the plants and we had our teams, so Momma and the kids was down watching me play when we was playing ball. And we had friends that was playing. But later on, they'd start getting things for kids. But early years, they didn't have much.

[2:06:07]

Thonhoff, J.: Could you explain to me the Wildcat Den and what that was?

Northcutt, W.: It's still here.

Thonhoff, J.: Oh!

Northcutt, W.: It's -- of course you don't know -- at Grove Center. And it was more or less a hangout for the high school kids. They had dances and all this there. And so there's a group -- they were going to demolish it. They claimed that it was faulty or breaking down or something. And this group wanted to take it over, keep it for the heritage or whatever, you know?

Thonhoff, J.: Right.

Northcutt, W.: And see, this was a nice building, they fixed it up some and they're meeting again in it now and you'll see a whole bunch of cars there 20, 30, 40 cars there at a time now.

Thonhoff, J.: Nice!

Northcutt, W.: But it was the biggest thing for the kids back in the early days. Wildcat Den.

[2:06:57]

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Thonhoff, J.: You had mentioned that you played sports and things like that. What were the recreational things the plant had --

Northcutt, W.: Okay.

Thonhoff, J.: -- to do?

Northcutt, W.: We had a good recreation program out there. Mr. Al Burris, I remember, was one of the first and was a supervisor out here. But you had bowling teams and you had softball teams, basketball teams for women and men. Even Dot played some basketball, even for the little time she was there. But they had quite a few activities for the employees. And they had schedules -- we had different ballparks and they'd schedule when you could play. We even played on midnight shift, you know, we'd bowl in the evening or in the morning when we got off work and they had to scatter it out to so many different teams and all.

[2:07:42]

Thonhoff, J.: Right! Everybody was on such different shifts.

Northcutt, W.: Yeah, right.

Thonhoff, J.: And do you think that system worked well, to schedule everybody to do their?

Northcutt, W.: I think it worked real well for many years and then in later years, it got to be a controversy. A fellow at Y-12 was ahead of the -- took over all the plants and came out there one time. I had my 4-12 group -- they said they couldn't play because 4-12, just had to forfeit the game, so we got in a little controversy about that, you know, it was discriminating against my shift workers, so. So we got that ironed out, but they did try to take advantage of us there that one time.

Thonhoff, J.: That doesn't work.

Northcutt, W.: [laughing]

Thonhoff, J.: I'm going to go back to K-25 and how it impacted history. How do you think history is going to view the Manhattan Project and its outcome?

[2:08:40]

Northcutt, W.: Well, I think majority will view it in the right manner, you know, you got people feel it's wrong to have the atomic bomb.

Thonhoff, J.: Right.

Northcutt, W.: But look at all the other things they've done to people. I mean, I -- I feel that it saved lives and I think -- I think it'll be viewed as one of the greatest things that ever happened in the United States, that we perfected the system to develop a bomb. 'Cause we hadn't, you know, and it was coming from somewhere else.

Thonhoff, J.: Right.

Northcutt, W.: And then we were just very fortunate that we got it first. So I think it'll be viewed tremendously in the right perspective.

Thonhoff, J.: And what do you think was the biggest accomplishment for you personally and also for the plant itself?

[2:09:30]

Northcutt, W.: Well, for me personally, is just having an opportunity to help start the plant and run it for years and years and what we accomplished there. And also the opportunity for me to do better in jobs, starting out as the lowest and I ended up as a plant shift superintendent for the last 11 years, which I didn't have a college education or anything and I was very fortunate and very appreciable of that. 'Cause later years, they didn't make superintendents out of -- if you didn't have college educations. But in the early years as the people that started the plant, had the experience, and you had the old -- older people that helped start the plant, Carbide people that took care of the people that did the work and knew the plant.

[2:10:24]

Thonhoff, J.: Right.

Northcutt, W.: And then as it got on in later years, they started doing the technical and the college people, which I have no regrets or anything. My kids went to college, too, later on.

[2:10:37]

Thonhoff, J.: Well, I think both ways really worked --

Northcutt, W.: Yeah.

Thonhoff, J.: -- when you have the experience and that can be better than a college education because that's all theory.

Northcutt, W.: That's exactly right.

[2:10:51]

Thonhoff, J.: And after the bomb was dropped, what work was being done at the facility during the Cold War era?

Northcutt, W.: Well, we were still increasing production and course, let's see, it was '64-5 we shut down K-25. It's when decided we'd -- we had premature -- plus they built Portsmouth and then it went to the idea of producing power material -- power plant material to build nuclear power plants. And everything was focused on increasing production and making low-assay material, like under 4%, say. 'Cause most of your reactor -- power reactors was under 4% material -- and so we were pouring it out.

[2:11:43]

Thonhoff, J.: What was the percentage for the weapons-grade uranium?

Northcutt, W.: Well, 97 is the highest, but really, this is not secretive or anything, I don't think anymore -- that was the submarine material. For submarine reactor, it was 97%. 'Course your bomb material, I don't know -- we -- we had withdrawals of 35% up to 90 or something like this.

Thonhoff, J.: So you were doing 4% for the nuclear reactors and things of that nature --

Northcutt, W.: Yeah.

Thonhoff, J.: -- so it was extremely less toxic.

Northcutt, W.: Oh, yeah, yeah, yeah, it's just -- just minor stuff when you get down to it. [laughter]

[2:12:22]

Thonhoff, J.: Quite a bit more minor.

Northcutt, W.: Yes, ma'am.

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Thonhoff, J.: So the work changed by having there be more work with less of a concentration.

Northcutt, W.: Right. Right.

Thonhoff, J.: And during the Cold War period, are there any interesting stories or recollections that you have about things that happened? Or just during your experience at all at K-25?

Northcutt, W.: Well, I can't think of anything real unusual -- Like I say, we -- we were still going full force really until '85 and that's when I retired. We shut down -- shut down all the plant. But I -- I got out before all the clean up started, you know, and all this. But the contamination that we had caused, which—you know -- I didn't really know or nobody really knew what this was going to come to in the end, which we know now, it's very expensive, the clean up of everything.

Thonhoff, J.: Yes.

[2:13:28]

Northcutt, W.: So. But I don't know of anything really unusual.

Thonhoff, J.: Were there any particular people that you remember?

Northcutt, W.: Oh, yeah. I remember the early days, some of my favorites. Hal Manley was one, he passed away, was one of my first supervisors. And as I say, I was 18 because I became 19 about three months after I got here, but he sort of took me under his wing and he'd have me up to his house to eat. He had a 12-year-old daughter. I was 18, you know. But I remember and loved him and Arnie Johnson and Gus Foresman, and.

Thonhoff, J.: What made these people stick out in your mind?

Northcutt, W.: Well, a big part of 'em came from South Charleston, with Carbide, and they were -- quite a bit older of course. I guess they were in their 50s or maybe even some of them 60s then. And it's just the way they treated me and other people, too. They were just great people. And they was a lot of 'em, I mean, you know, that I know and most of 'em are gone now. Thurston Morton was another good one and MacIntyre. Oh, they just some beautiful people. And that's the biggest thing I miss just those people just gone and the ones I worked with, I didn't miss going to work on midnight shift --

[2:14:54]

Thonhoff, J.: [laughing]

Northcutt, W.: -- but I do miss all the friends that I had 'cause a lot of them, may never see 'em again, you know. There's a lot of 'em -- I'll see somebody now once in a while and they'll say, "Red, I haven't seen you in 20 years." That's when I retired, you know. 20 years ago.

Thonhoff, J.: It's funny how people can be so close in our lives and then you just kind of move on.

Northcutt, W.: Yeah. For a while, you'll try to stay in contact, you know, and of course, you got family and you got grandkids coming, great-grandkids and -- and you just don't have the time. I don't know what I'd done when I was working, so -- busier now than ever.
[laughter]

[2:15:30]

Thonhoff, J.: Well, it's that momentum. You've got it going strong. You just keep it going.

Northcutt, W.: Yeah, that's right.

Thonhoff, J.: I like that.

What did you do when the facility was put on standby?

Northcutt, W.: When we shut down, we had most of it shut down and they transferred me to what they called coated chemicals. That's where I worked days for nearly three years. What we did was shipped the material, packaged some of it and, of course, it was withdrawn. We had about 17 people. Had 2 supervisors and had 17 operators. And we packaged the material or sampled the material and got it ready for shipment and had to put it in always safe containers. And we had a truck from California, hauled it to Torrance back and forth, 24 cylinders at a time. But we had to have it spaced and in wire cages and strapped down and everything.

[2:16:31]

And the other foreman had two fellas that done the sampling to make sure the assays were right, whatever material we were

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shipping. A lot of this was power material, you know, for power plants and so forth. We did handle some high assay even there. And of course, we handled it a lot more carefully than you did the other.

Thonhoff, J.: Right.

Northcutt, W.: 'Cause I know one time we had some 97% material. It was in a nickel-lined cylinder, small cylinders. And for some reason or other, France, we was letting 'em have some experiment with, so they brought the French people over here and Hank Covert was my supervisor and was having a little meeting and he told me, said, "Now, Red, don't tell 'em anything about that material. Nothing about anything." I said okay. So one of them asked me a question. I said, "I don't know nothing." [laughing]

[2:17:27]

But why they were doing this, I don't know. It was through government channels or something.

Thonhoff, J.: Right.

Northcutt, W.: I never really did understand why we were doing it. But I worked there for approximately three years and then they wanted me back in the cascade and that's when I went back to -- went to the axial equipment. K-29 had got -- I believe it was all operating at that time. It started it. So I was over there as a foreman for -- no, I was an operator before I made foreman. And we got it -- was going good and got 33 ready to go and sent a group of us over there to help start up 31. And after that, 33 came along and I ended up at 33, helped start K-33. That's 6 months or so before we ever started everything. And that was the biggest plant, K-33. And that's where I made supervisor, after we got 33 started and they sent me back to K-25 as a supervisor and put me with a group of guys I've been operators with and that's one of the hardest things I've ever done was working with a group of guys -- I don't know how many I had at that time, you, they had 4 or 5 foremans at K-25. And like I told you, it ended up one foreman had all K-25 before it was over.

[2:18:50]

But ended up making all right and we got along pretty good, after we got all lined out. I was still pretty young and nervous about the situation knowing them, but Dot and I talked it over and we said,

well, it's more money, so I'd better give it a swim, so after I got all lined up, I was fine.

Thonhoff, J.: After you talked it all out, was it actually easier because you knew them?

Northcutt, W.: No, I think it was harder to start with.

Thonhoff, J.: Yeah, but then --.

Northcutt, W.: 'Cause they tried to give me a hard time, you know. That was the thing about it. And then you had your union then and I had it -- one of my good friends was a union steward and he -- he gave me a little trouble once in a while.

[2:19:31]

Thonhoff, J.: 'Cause he could. [laughing]

Northcutt, W.: Yeah. Yeah, 'cause he could. But it ended up all right. Never had much problem after the first 2 or 3 months.

Thonhoff, J.: What do you think that future generations should remember about K-25 and the work that was done here at Oak Ridge?

Northcutt, W.: Well, if they think like I do, I think they should appreciate it and remember it. I think it should be passed on down. I know they're preserving some things that shows what we did, you know, and I don't know what's going to happen with K-25. They've been trying to get a portion of it where you see what reaction they had, you know.

Thonhoff, J.: Right.

Northcutt, W.: At one time, they had a -- one cell set up at the atomic museum and the atomic museum was down before they built the new one down at Jefferson. They actually had a cell there showing one of your little converters and everything in it of the K-25 gaseous diffusion. So I don't know whether they're going to maintain one of those or not. But I -- I think they should just to show, really, what we -- what we did and I think we should be remembered as a group that helped save the ol' U.S. of A., myself. And I think everybody oughta look at it thataway because I know some people aren't.

[2:21:17]

Thonhoff, J.: Well, absolutely! There has to be room for both (indiscernible).

Northcutt, W.: Yeah, yeah, yeah, I understand, you know. It's -- when you talk about taking lives, it bothers people. It bothers me. But way I have to look at it, they was taking our lives and I lost a lot of good friends over there that I would've been with if they hadn't turned me down, you know, and I ended up different direction.

Thonhoff, J.: Right.

Northcutt, W.: And course, a son of mine went to work down there in the later years, not too long before I retired, but he hired in as a barrier operator and now he's in management at Y-12, so he hired in on my 50th birthday, so he'll have 29 years next Tuesday.

[2:22:00]

Thonhoff, J.: Wow!

I've noticed a lot of people stay at the facilities for 20, 30, 40 years. It is because they're treated so well, or what do you think?

Northcutt, W.: That's one of the things. And the other was your benefits. You built up a good pension benefit. Of course, we had what we called it? You could put money in yourself, and Carbide, put a percent in for you and all, which built up a pretty good pot there.

Thonhoff, J.: The 401-K?

Northcutt, W.: It wasn't a 401-K then. I was trying to think of what it was. I can't think of the name of it right now. And we had a savings plan -- we called it -- paid off every 2 years. And that's when we'd take a vacation, go to Florida with the kids or something, you know. You couldn't -- you couldn't afford it till then, so we'd take that money and make us a trip.

[2:22:59]

Thonhoff, J.: So they gave you paid vacations?

Northcutt, W.: Oh, yes. We got paid vacations. We started out with, I think it was 1 week, then it went 2 weeks, and after 10 years, you got 3 weeks, after 25 years, I went to 6 weeks, I guess -- so basically had all kinds of vacation and you could build up vacation and hold it over and when I retired, I had 12 weeks coming, so. So they had

good benefits. And I think that was one thing, and the longer you stayed, the more benefits you got. I mean, it built up, you know, according to your salary and so forth. And I think that was the reason a lot of the peoples stayed. 'Cause I ended up quitting at 59 years old because I'd hired in 18 and we were shutting the plant down, I felt people needed the jobs worse than I did. All of our kids were gone. So I told Dot, "Let's just hang it up." And we did and I've enjoyed every minute of it.

[2:23:59]

But some of the people, now, I know some of the people that stayed till they was about dead -- after they changed the retirement age from 65 -- you could stay till 100, I guess. And I had one friend and he'd had a stroke, had an arm like this and he was still out there 10 years after I left. I'd see him and he's -- he said, "Biggie," said "I'll have a quarter million dollars when I leave there." I said, "But Ted, you won't be able to spend it." He said, "My wife will spend it for me." She died shortly after that and then he died shortly after that, so. But there was some, I call it greed, that just kept staying until they weren't able, really, to work.

Thonhoff, J.:

Yeah, how are you going to have a good time with what you've earned your whole life if you're not healthy enough to?

Northcutt, W.:

It's like some people felt that it was more important to them than anything, their job -- or still working. But me, my family was more important after I'd made a good living -- got a good living going, so.

[2:24:59]

Thonhoff, J.:

Good man!

Northcutt, W.:

That's the way I felt.

Thonhoff, J.:

Very good. Are there any stories or anything that has been brought back to you by talking about people that you worked with or about certain instances like people smuggling in things or things that you recall about the time?

Northcutt, W.:

I know of a few instances where people were trying to bring in booze in, you know, of course. And I remember we rode on cattle wagons in the early years. They called 'em cattle wagons, had tokens, you know, we'd buy tokens and they'd deliver us to and from the plant from the bus station or something, but [laughing]

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you'd have guys with a bottle drinking on the way to work. Course, that was in the early years -- I was an operator, myself, I couldn't say anything, you know. And they'd either get rid of it or something before they got through the gates. The guard would check you going in the gate.

[2:26:01]

But I'm sure there's -- in -- in fact, I had one friend ended up -- wasn't a real good friend. I guess I met him when I first came here. He and another fella, they caught them with some on the job. And they fired both of those.

Thonhoff, J.:

What would happen if you got caught just having alcohol but not at the plant?

Northcutt, W.:

Well, that, I think, was handled on an individual basis. I know we had some instances like that. Mr. Milcook was a -- was a shift superintendent back then and he was pretty good at handling things. Maybe get them out of the plant and send 'em back home. They'd get somebody to take 'em, of course. And course, you usually got reprimanded and then if it continued something like this, you'd -- you'd probably get terminated. But they were pretty tolerant of people, you know, giving 'em a second chance I call it.

Thonhoff, J.:

Yeah. Room to learn.

Northcutt, W.:

Yeah, to learn and to do better. I had another friend that had a problem, was just about not going to work. I mean, he'd drink so much and, you know, had a lovely wife. We were good friends. They didn't have any children so his wife just loved our first two, I guess it was. But he just got so bad, he was supposed to drive sometimes, his wife called me, said, "Red, you're going to have to drive." Said, "LR has been drinking and can't go." And he just missed a lot of work. And he ended up getting a medical because of it. Being, I call it an alcoholic. He was just sick, you know, all the time.

[2:27:34]

Thonhoff, J.:

Yeah.

Northcutt, W.:

But they's very -- very few instances I know of stuff like that.

Thonhoff, J.:

And then are there any memories you have of interactions with people that stand out in your mind?

Northcutt, W.:

Well, there's a few things that pop up. I had an operator that had epileptic fits. They called them epileptic fits. They're seizures anyway. And we had these high-backed steel chairs that operators sat at a desk at and I -- I had to look that-away one time 'cause I had several buildings back then. You couldn't see everybody all the time and your building was a large territory. I happened to see he was on the floor beating his head. And so in this instance I called for help. Of course, we had an ambulance service and everything. And me and some of our operators got down there and held him, keep him from hurting himself anymore, you know.

[2:28:42]

But you know, they didn't terminate people like that. I mean, he stayed there for several years and that was the only time I remember him having one on the job.

Thonhoff, J.:

Wow!

Northcutt, W.:

But you had a few people had seizures like that on the job. I knew one other fella, but I wasn't at his location when he'd have a --.

Things, as far as the job, I remember one of our supervisors was killed fishing one time. A fella shot him from the -- he was out in a boat by himself fishing and this ol' boy was going to steal his stuff. Shot and killed him out in the water. Now, I remember the night I heard that, we were at the bowling alley and somebody come in and told us that they killed him. So that was a thing -- one of the sad things in my lifetime out there.

[2:29:39]

Thonhoff, J.:

Yeah.

Northcutt, W.:

But right off, nothing else comes to mind at all. [laughing]

Thonhoff, J.:

Okay. That's good. We're actually at the end of this tape.

Northcutt, W.:

Okay.

Thonhoff, J.:

You have perfect timing. What do you know? [laughter]

Northcutt, W.:

Oh, yeah, I'm good at that --

[End of interview]