National Educational Technology Solutions LLC

K-25 Oral History Interview

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Interviewee: Herman Snyder

Interviewer: Jennifer Thonhoff

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[1:00:13]

Thonhoff, J.: Yeah, just where -- the signature line.

Snyder, H.: You want the whole name? I got two middle initials.

Thonhoff, J.: Whatever you want to do. However you sign your name is fine.

Snyder, H.: Just initials and last name?

Thonhoff, J.: That's fine. Perfect. Thank you. Well start out -- I want this to be like a conversation. Like you and I are just going to talk back and forth like we're old friends.

Snyder, H.: Like we would do in (indiscernible)?

Thonhoff, J.: Exactly. You just gotta ignore all the lights and the camera and the microphone and all of that.

Snyder, H.: So I just follow your questions?

Thonhoff, J.: Yes. And if you want to add anything, you're more than welcome to. I'm jut going to start out with your name and then how do you spell it, as soon as we --

[crew talk]

Thonhoff, J.: If you could state your name and spell it for me, please.

Snyder, H.: My name is Herman Snyder, H-E-R-M-A-N S-N-Y-D-E-R.

[1:01:22]

Thonhoff, J.: Perfect. Thank you. Where were you born?

Snyder, H.: I was born in the state of Pennsylvania in the Lehigh Valley in a little town called Slatington.

Thonhoff, J.: Slatington. And where did you live prior to coming to work at the K-25 facility?

Snyder, H.: In my parents home in Slatington. Of course, I went right from college to the Army to Oak Ridge.

Thonhoff, J.: Okay. So that's how you got to Oak Ridge was through the military?

Snyder, H.: Yes. I wasn't hired. I was sent. [laughs]

Thonhoff, J.: You were sent. It was your duty.

[crew talk]

Thonhoff, J.: What are you first recollections when you arrived at K-25?

Snyder, H.: Well, arriving at K-25. I was surprised that there were not more military people around. They had me report to this Carbide and Carbon Chemicals Company at the K-25 site. So, I just got on a bus from Oak Ridge and rode the bus out there. And it was big. There was a big community of trailer homes out there that the construction workers lived in a lot of them. There was a great big bus terminal because, well, there was like 25,000 construction workers and 12,000 operating people all coming and going all hours of the day and night; there was a lot of the bus traffic.

[1:03:15]

I guess I'd have to say I was impressed with the enormity of the whole thing. And then I reported at the employment office and they assigned me to a vacuum testing school. [laughs]

Thonhoff, J.: And did they have a name for that school?

Snyder, H.: Just vacuum testing. It was in the basement of one of the buildings. And they wanted me initially to work with that group. It was at a stage where the plant was well along on construction.

Thonhoff, J.: And what year was that?

Snyder, H.: It was early 1945.

Thonhoff, J.: How long did you stay there?

Snyder, H.: At K-25?

[1:04:00]

Thonhoff, J.: Yes.

Snyder, H.: For 16 years and then I transferred to another plant here in Oak Ridge.

Thonhoff, J.: Which plant was that?

Snyder, H.: Y-12.

Thonhoff, J.: Y-12. Okay.

Snyder, H.: And the reason for that is, as you probably know by now, we just worked ourselves out of business.

Thonhoff, J.: Yes.

Snyder, H.: We did a good job. [laughter] Well, anyway, the plant was at that stage where there was some of the process equipment ready to go. And it's a tremendous plant, so that's just a small portion. But the whole plant, before operation, had to be totally vacuum tested; couldn't tolerate anything leaking in or anything leaking out.

Thonhoff, J.: Right.

Snyder, H.: And then that would be preconditioned. Cooling systems filled up with coolant and all that sort of thing. So I got involved in this preparation activity before I put them into service.

[1:05:01]

Thonhoff, J.: And what was that title?

Snyder, H.: Well, I was in the Army. It was just a technician. I was working as a Carbide employee. A lot of my peers were civilians and there were some more GIs like myself supervising Carbide employees, operating personnel. As I mentioned earlier, most of them were young ladies brought in from all around here in busses. These busses came into the plant from all the communities around here.

What were you after here?

Thonhoff, J.: Well, we were just talking about what your first impression was when you got here. And then we went into a little more detail about what you did when you first started.

Snyder, H.: Well, you said my title.

Thonhoff, J.: Yes.

Snyder, H.: Well, technician but just covering problems and helping people to work, supervising.

Thonhoff, J.: And if people inquired about the work that you did, what would you tell them?

[1:06:10]

Snyder, H.: I work at K-25.

Thonhoff, J.: And then that was it?

Snyder, H.: Yeah, that was it. Let me tell you, nobody told me where I was going when they sent me here. And when I got here, nobody would tell me what I'm going to do. And when I got to K-25, nobody told me what I was going to do, except for that act in which I was involved.

Thonhoff, J.: Right.

Snyder, H.: But within the course of time, we fellas had access to equipment manuals and plant design, the drawings, and everything to do our job. And we were smart enough to figure out what was going on. We still didn't know why.

Thonhoff, J.: Right.

Snyder, H.: And we didn't know until August 6, 1945, when the whole world knew.

Thonhoff, J.: Yeah. Is that when it became clear and solid for you that that's what was going on?

Snyder, H.: That's when the first bomb was dropped.

Thonhoff, J.: Right.

[1:07:11]

Snyder, H.: Oh, it became clear to me what was going on at K-25. But I didn't know what they wanted this stuff for. I could imagine a source of energy for battleships or something. I never thought of a bomb, neither did anybody else that I talked to.

Thonhoff, J.: Until it happened, right?

Snyder, H.: Yeah.

Thonhoff, J.: What are your most vivid recollections of the time that you were in Oak Ridge at K-25?

Snyder, H.: Plant recollections?

Thonhoff, J.: Uh-huh (affirmative). Just any recollection.

Snyder, H.: Well, from the start, while I was in the service and following, the attitude of the people. I would say some of them were just devoted in -- we fellas in the Army, we worked long hours at any hour. If there was something had to be completed, we stuck with it. Initially, I didn't have any wife down here with me, so I'd go back to the barracks area and sleep and then I'd get up and go back to work. That's all.

But it wasn't just me. It was everybody had that attitude; the construction workers too. If I want something built in a hurry for my use, I can make a sketch on the back of an envelope and they'd put it together for me.

[1:08:48]

Thonhoff, J.: Wow!

Snyder, H.: It's cooperation. And so many of us not knowing exactly what we were doing this for; but impressed with the sensitivity and security and the fact that it had to be done a fast as we could do it.

Thonhoff, J.: What did you like most about working at K-25?

Snyder, H.: No boredom. I had a variety of jobs as a GI and as a civilian. Well, they were all exciting, interesting -- Great people to work with.

Thonhoff, J.: That's what I've heard. That most everybody was really impressed with the people.

Snyder, H.: Once I got out of the Army and stayed on with Carbide, I'd say it's a good company to work with.

Thonhoff, J.: I've heard that as well. That's wonderful. What did you dislike about working at K-25?

[1:09:56]

Snyder, H.: I want to say the cafeteria, but -- [laughter] Gee, its hard to say anything specific. I just enjoyed it because when I got out of the Army, that's why I stayed here. It was a challenge. Of course, we had visions of the United States being the world supplier of enriched uranium, so did the federal government because they kept authorizing more and more and more capacity and plants. And then by the late 1950s, we realized this demand wasn't there. And we started shutting things down.

Thonhoff, J.: Right. How did people, as well as yourself communicate to family and friends about the secret facility?

Snyder, H.: Well, we didn't. I had relatives calling my parents, wondering what kind of trouble Herman was in because the FBI was visiting and things like that. But I couldn't tell my parents or even my wife what I was doing. So, it was just an assignment down here. That's all I'd call it. While I was in the service, and then later, it's just a place where I was working.

Thonhoff, J.: What were the physical working conditions like?

[1:11:50]

Snyder, H.: Crowded, busy, humming all the time. It was part of the big program to keep things clean because of the nature of the work. But, there was plenty of food service out there when you got hungry; had a good dispensary in case of any injury. And for an industrial operation, I would say we were well taken care of, better than the conventional type plant. And of course, I'm familiar with things like steel plants from where I grew up, which are hazardous and there was everything run here in interest of avoiding calamities of any kind.

Thonhoff, J.: And what were your coworkers like? How was that like, working with the people at the facility?

Snyder, H.: Well, all these folks came from all over the country. It was a cosmopolitan community, cultural community, energetic, young folks. Never a dull moment is all I can say.

Thonhoff, J.: It sounds like you really liked it there.

Snyder, H.: Well in the town too; when my wife joined me down here, I was still in the Army and we were invited to their homes and their parties and my bridge improved tremendously. Everybody was friendly. Everybody was here for the same objectives. Well all the facilities that anybody would need, they built the city so fast but they did such a wonderful job; the high school, the junior high, eight elementary schools.

[1:13:03]

Talk about being busy. One of the figures I ran across when I was doing a little checking in the files, they had over 700 busses running in regard to trans -- well about half of them just covered the city. And the other half covered out of the city, working up workers to bring them in. They weren't many automobiles running around.

People living in the city, they just get on the bus and go. They didn't even have to pay. It was free transportation.

Thonhoff, J.: Just got on the bus to go. Then they would take you out to go shopping too, wouldn't they?

Snyder, H.: Anywhere you wanted to go in the town.

Thonhoff, J.: Oh wow.

Snyder, H.: There were three principal shopping areas, east/west and one in the middle and then a lot of little neighborhood shopping areas. The drug stores, the grocery stores, barber shops, a lot of thought went into building this town and they ended up -- they did a beautiful job. I still live here.

[1:15:22]

Thonhoff, J.: Well they had to have done a beautiful job then for you to still want to be here.

Snyder, H.: Yeah. Good schools now.

Thonhoff, J.: And how much emphasis did the company and your supervisor place on safety and your health?

Snyder, H.: Very much.

Thonhoff, J.: A lot.

Snyder, H.: We had at least an annual physical examination. We wore badges as IDs, identification, but also had film in them to pick up any exposure to radiation. And the only time that they found any significant radiation on my badge was when I wore it to the dentist. But that's the kind of continuing analysis that went on.

Depending upon the work you were on, you'd be called to the dispensary more than just once per year to check on things. At least once a year, I got a rather thorough physical exam. And in the meantime, if I got a cold or headache or just feeling bad, I could run in there any time and have doctor's services.

[1:16:24]

Thonhoff, J.: That's great.

Snyder, H.: Yeah. I say it's not conventional industrial practice.

Thonhoff, J.: Absolutely not. I don't think that's really conventional of any practice at this point.

Snyder, H.: But that's the way it was done here because there were a lot of uncertainties from the standpoint of radiation. We had to just adopt -- the best information we had was from the radium industry. And convert it to our type of potential exposures and then add a big safety factor. We had radiation meters around the plant. We had gas masks around the plant in case we need them. Of course, I learned in the Army how to use one of those.

We had all the equipment we needed and the training we needed. We had emergency squads on each shift, just like emergency squads, you know, how to report the fires and ambulance calls in the town. I think it was well organized.

Thonhoff, J.: And during the war did you have any idea that the enriched uranium you were separating would be used for? Did you start piecing it together?

[1:17:43]

Snyder, H.: No, as I told you before, I realized we were enriching uranium.

Thonhoff, J.: Right.

Snyder, H.: And the energy potential of it. But I'm a mechanical engineer. I thought in terms of power. Run the ships, maybe even big airplanes or dirigibles or power plants; never thought of the bomb until they shot one off.

Thonhoff, J.: Wow.

Snyder, H.: And at that time, there wasn't inter plant communication to give us a clue. I know now where the bomb parts were made and the bombs were assembled. But I didn't know then.

Thonhoff, J.: And what was your reaction when you found out?

Snyder, H.: Oh, it's a shame to say gleeful for something that destructive. But we really feel like we had done a job. We ended a war. Even today some people want to condemn us for doing it, but we ended the war. There would have been hundreds of thousands more people killed. So, we were proud of it.

[1:18:56]

Oh, we had big celebrations all over town when that was announced.

Thonhoff, J.: Wow. And how do you think history will view the Manhattan Project and its outcome?

Snyder, H.: Well, they should view it as unbelievable an accomplishment industrially. This General Groves, who was in charge of the Manhattan District Corps of Engineers and his whole staff, all the contractors, they got the people, workers, materials, all the resources together to do what this project -- the Manhattan District -- did in a matter of a few years is unbelievable. In the meantime, we were engaged in a war and all the industrial capacity being directed to that effort. For K-25, for example, somehow or other they got all that special piping and valves and instrumentation and motors and pumps and converters, all fabricated, delivered, and this plant put together in a couple of years; even built a power house. We had our own power house because we had to have dependable power and variable frequency capabilities.

It hurt me when -- I think in about 1962, they shut that thing down. They had to. The cascade, the plant was being shut down. So the power house went with it.

[1:20:42]

After K-25, as I'm sure you know now, there were a lot of additions to the plant. K-27 almost immediately and then in '59 or '61, K-29, K-31 building, much more modern design for a gaseous diffusion cascade; and then another year after that, K-33 building. By that time, of course, we were running on all TVA power. The power house was originally for K-25. And as long as K-25 was running, it still took care of K-25. But all these other additions were on TVA.

Our power house, for example, generated twice as much power as Norris Dam and just for that plant. When we got the whole K-25 area built, let's see, we were consuming more power, a lot more power than the rest of the State of Tennessee, excluding K-25. We were consuming more power than the city of Detroit, which is supposed to be the most industrialized community in the country; a lot of electricity running this place.

Thonhoff, J.: And what was the other source of electricity for the other plants? What was that that you said it was?

[1:22:22]

Snyder, H.: Tennessee Valley Authority.

Thonhoff, J.: Okay.

Snyder, H.: TVA.

Thonhoff, J.: TVA.

Snyder, H.: And a lot of this was my job. When -- my later years at K-25. The production division, the cascade the power, the utilities.

Thonhoff, J.: What exactly did you do while you were at the facility?

Snyder, H.: Started out as an engineer. Then as a civilian, resuming the work in that service group, Cascade Services we called it. And we did a lot of the necessary things like re-vacuum testing, reconditioning; taking care of the problems for the cascade. And I guess it was

about 1949 where they transferred me to the cascade as an area supervisor. And then, oh, I did a turn in a central control room, which is where -- from where we controlled the entire cascade. And I was one of the shift coordinators in there. So I called the shots on shift. And in an emergency it was a busy place but I enjoyed that; I liked having something to do.

[1:23:56]

And after a year or so of that, I got reassigned to a cascade area. Then I became the cascade department head, running the whole cascade and the utilities. And then I was -- I had an assistant production division superintend title there. Five or six years later, the production super -- division superintendent got promoted and I was given his job. So aside from the cascade utilities, I then took over the power operation, the power house, and all electrical distribution system, TVAs collections and what have you. Felt like I had a big job.

Thonhoff, J.: You had a huge job.

Snyder, H.: I had a lot of huge help from -- it was fun. But anyhow that's kind of my life history at the K-25. In 1961, we just about had all of K-25 shut down and we were dropping power and all the others and could see the writing on the wall that my job there was done. So I accepted a transfer to the Y-12 plant.

Thonhoff, J.: And then how long did you stay at the Y-12 plant?

[1:25:25]

Snyder, H.: Twenty years. I had a total of 36 years service with Carbide, and if you add my Army time here in Oak Ridge, it's something over 38 years.

Thonhoff, J.: That's a lifetime.

Snyder, H.: Yeah, and that was my career. I retired early too. Gee, I was a youngster when I got here.

Thonhoff, J.: Well you worked your way up really quickly then.

Snyder, H.: We didn't say anything about how I got here. That's an interesting story.

Thonhoff, J.: Well let's talk about that.

Snyder, H.: I was in college --

Thonhoff, J.: Let's change the tape first.

[End of Tape 1, Begin Tape 2]

[2:00:06]

Snyder, H.: Well I don't want to ramble too much here. I have a habit of doing that. I'm not sure where to start. Anyway, let's start with entering college in 1941, which put me in the class of '45, to graduate. And I was there to study engineering because it was my ambition to ultimately be an aeronautical engineer. As a kid, I enjoyed school. I enjoyed athletics and building model airplanes. I wanted to be an aeronautical engineer. It didn't' work out that way, but it's a good story because it shows how interferences, and unanticipated, can still lead to a good life if you put your mind to it.

[2:01:40]

So I started in college and by December of '41, the Japanese had attacked Pearl Harbor. And in the meantime, prior to that, we knew full well we had big wars going on on either side of us in Asia and Europe. And we were already -- we hadn't declared war, but we were a major contributor of material and some manpower.

So guys my age knew that we were going to go into this in due time and wanted to get into ti. When Pearl Harbor occurred, you know, the patriotic blood flowed and we wanted to do something. A lot of guys left school and enlisted. I entertained the idea doing that because I had some Army training; one whole summer, when I was in high school -- American -- local American Legion sent a group of us guys to a citizens military training camp at Fort Mead. Good basic Army -- introduction to the Army infantry life.

So, it was something about the military. And at college, of course, I was in the ROTC. But anyway my parents --

[crew talk]

Snyder, H.: My parents and high school principal and above all the draft board convinced me to stay in school. The draft board said that if you

keep going to school and qualify rapidly for your degree, we'll keep you deferred and then you can enter the service.

Well that sounded like a pretty good deal. So I stayed in school, all of the colleges, I think, in the country set up accelerated schedules. And ours went to three semesters a year instead of two. And I had entered with the class of '45 and I gradated with the class of '44. It was three pretty tough years, academically and financially. In the meantime, the campus changed quite a bit, mainly occupied by the fellas in uniform. The military were sending people there for specialized training. But anyway I made it through there in '44.

And about that time, I was trying to get myself lined up for a commission in the Navy and was having trouble with my physical. I finally wound up accepting an opportunity to be -- go to officers' training school for the maritime service. And then the draft board said, "No, no, you belong to us." And I says, "Okay, where am I going?" "You're going in the Army." And I went down in Camp Wheeler, Georgia. Got the degree in one hand the Army pulling me with the other one. Going through 16 weeks of basic infantry training. A lot of this I had experienced before, but I had to do it again. And it did me good. Got me in goo physical shape.

[2:05:16]

And in the meantime, during the course of this, I was called for special interviews by a lot of officers, special testing, and this was all to decide where I was going to go in the Army, they told me. I let them know real quick that I wanted to go to OCS. That's officer's candidate school. If not, I sure think I'd like to get to the Corps of Engineers. Maybe I can practice what I learned during those three years I was deferred. Nothing happened, nothing happening, nothing happened. Training was about completed and we were advised our outfit was going to be deployed in the European theater and I suddenly got orders that I should get on a train in Macon, Georgia, and go to Columbus, Ohio, to Ohio State University in the ASTPs, Army Specialized Training Program. I thought, "Oh my God! Why would they want to send me back to college?" Well, when I got up there, they had us houses aside from the general university public and aside from the ASTP program. This was just a farce that we were there for the ASTP. And I didn't know it until much later on. It was an assembly operation, evaluation operation, scientific and engineering and technical people from Army all over the United States being sent

there to be evaluated for this Manhattan Project assignment. And where in the Manhattan Project there were many locations throughout the United States where they were working.

[2:07:10]

Again, a lot of interviews, a lot of papers; some of the interviews were real provoking. They wanted to know all about my private life, kind of clubs I belonged to, what I did in my spare time. Then my parents, where they came from, our ancestors, what kind of politics were we involved in, what parties. That's why I say it was annoying, provocative. You know, where we lived, how long we lived there, who our neighbors were, who are friends were, relatives, aunts, uncles and cousins. This information went to the FBI for them to check me out for security purposes. Of course, I didn't know that, asking all these questions.

The other questions were guys wanting to know what kind of work I'd like to do and what I specialized in. And I talked about how I liked hydraulics and thermodynamics and working with pumps and motors and combustion engines, and I was a mechanical engineer. I thought I could be a good one.

I remember telling them things like that because I wound up at K-25. But anyway there were a lot of other discussions. After about three weeks up there, about 40 of us were told to get on board the next morning -- Army pullman car -- I just happened to be sitting out there on the siding next to the stadium where we were living. So we got on. Where are we going? Oh, you'll find out, soldier. So we get hooked onto a train and we were piling along in this car.

[2:09:02]

It wasn't nice feature. They gave us a credit card in the dining car anytime you wanted to go down there.

Thonhoff, J.: Nice.

Snyder, H.: Nobody told us where were going. We could figure out we were going south just by watching the signs along the railroad. The next morning we woke up in the L&N Railroad yard in Knoxville; where that yard was, turned out to be the '82 World's Fairgrounds. It's a bunch of nice park and stuff now. But anyway, it's this railroad yard -- Amy bus there waiting for us -- and we got loaded on there and where are we going? Oh, you'll find out, soldier.

[2:09:55]

So he heads up this two-lane road up through the woods. You know, it's wintertime, so there's not much to look at in the woods. There was not much in the way of housing or people around. We began to wonder my gosh, we're really going into the boondocks here. What's this all about? We finally come upon this place that looks like an Army camp, but there's a big sign out front Clinton Engineer Works.

Guards come on the bus and check us all out. All right, you can go in. Well it looked like an Army camp. It had Army architecture (indiscernible). A lot of mud, board sidewalks. People running all over the place. Big trucks running all over the place. But the only soldiers I had seen up to that point were the ones up at the gate. And as the bus progressed into town, there was no sign of Army equipment, you know, no tanks neatly lined up and trucks and cannons. Not even a drill field that we could see.

[2:11:11]

So we came to this headquarters building, which is where the federal building is located today. And went in there and the first thing we got was a lot of security lectures. What you do here, stays here; what you hear here, stays here. You don't talk to anybody. You stay here. They did remind us that if we left the area for any reason, we better have our badge or we couldn't' get out. And if we got out without the badge, we could not get in, that's for sure.

So it was a good impression, about something going on here that's highly secretive and don't talk about it, no matter what you know.

Then we got advised that we are now in the Corps of Engineers. We are assigned with the Manhattan District and we are -- what do they call -- yeah, they were calling it Oak Ridge at that time. The town of Oak Ridge; in east Tennessee, in that we were going to do engineering work, that there were a lot of contractors doing work here in the area and we'd be assigned with them.

Okay that was about the nutshell like they told us. We got back on the bus and they took us down to the barracks area. And this looked like Army. The barracks housed about a single story

housing about 60 soldiers. We each had a bunk, a locker, and a place to hang our clothes. Pot belly coal stoves down the middle of the room, latrine in the back, big cafeteria served the whole area.

I said it looked like Army but it had an awful lot of mix with college. [laughs] And it wasn't typical Army. There was no KP duty, no latrine duty, not guard duty, no rifles, no bugles; we were responsible to the Army and we were advised that we would exercise discipline if it became necessary in view of our conduct or something.

[2:13:50]

In the meantime, they'd supply us with our checks monthly. We eat wherever we want to eat, and we get a food allowance. They could replace our clothing and shoes and things like that. There was no drill field. In essence, we were in the Army and we were living there with the Army. We would be assigned to (indiscernible) some contractor. And as far as the Army was concerned from that point on, we would be accountable to that contractor for our working hours, our activities, our shifts, and whatever. And that's the way it worked. They finally told me – I guess my clearance was slow getting in because of all the relatives they were talking to. So they weren't ready to send me to work. I spent some time driving a truck. They eventually said you go report to Carbide and Carbon Chemicals Company at K-25. And I didn't have the slightest idea what that was all about. I just remember that chemistry was my hardest and most boring subject. And now I'm going to a chemical company.

[2:15:04]

There was a lot of chemistry there but not the research type chemistry. And the place was full of pumps and motors and pipes and valves. [laughs] I figured that's why I was down there. So that brings me -- brings us up to where we started, going to work at K-25. But if you had to be in the Army; that was good deal.

Thonhoff, J.: It was just a natural progression, to go straight into K-25.

Snyder, H.: Well, in 1946, the plant manager talked to me and said that if I was interested in staying there, I could probably get an early discharge to stay on a job I wanted. I had entertained thoughts of maybe going back to school. I still thought maybe I'd like to be an

aeronautical engineer or a dentist or something. Use the GI bill to go back to school. My wife was agreeable to that.

By the way, I got married while I was down here. Ran home and she made all the arrangements. Got us a license, lined up the preacher, reserved the university chapel, and all that stuff. All I had to do was arrive and get married and put her on the train with me and come back to Oak Ridge.

Thonhoff, J.: Lucky.

Snyder, H.: Housing was a problem and one of the ways to solve housing was for her to get a job, which she promptly did at K-25 too. And she didn't have to wait for her clearance because they had a place where she could do her work. It was outside the security area. So we were both here.

Anyway, she was agreeable to stay. She liked east Tennessee just as I do. And I took the offer and was discharged from the service and just stayed on the job wearing civilian clothes. And then there was this progression. I was fortunate. I was with the right people, the right time. And apparently, I had done an adequate job.

So went I left here, I was reporting to the plant superintendent as his production division superintendent.

[2:17:40]

Thonhoff, J.: And your wife, where is she now?

Snyder, H.: She continued working until we decided to have a family. I tell her she hadn't worked a job since but I know that's not true.

Thonhoff, J.: Not true at all.

Snyder, H.: She worked hard raising a couple of daughters, who still live in this area. They provided us with some grandchildren and two years ago we had our first great-grandchild. We would frequently run back to Pennsylvania and they all wondered why we didn't come home. Grace and I just figured this was home. We loved this town.

The lakes, the mountains, the people; like I say, I kind of fell in love with the community when I arrived; it was so different, so

progressive. And most of the people were our age. Oh, and the schools were excellent. Good future for the kids.

Thonhoff, J.: Absolutely.

Snyder, H.: Our grandkids too. That's where they went to school. Gee, I'm getting old.

[2:19:00]

Thonhoff, J.: You just adopted it as your home.

Snyder, H.: Yeah.

Thonhoff, J.: That's wonderful.

Snyder, H.: Oh, we became UT fans and season tickets for football, basketball, and all that stuff. But then I did get too old for that. I couldn't stand the crowds any more. I told you I could ramble. Excuse me.

Thonhoff, J.: No, it's wonderful. That is so much wonderful information. That's really great.

Snyder, H.: I should tell you about the housing. The Army had the barracks for me. If you had a desire to live otherwise, outside of the barracks area, because of a spouse, they would permit that, but we were on our own. And of course, we weren't making that much money. But a lot of the fellas that were married had their wives come down and they were living in Clinton, Cove Lake, Kingston, -- Oliver Springs. And these buses came around for them to get on and ride to work. The only problem was the expense. But a lot of them stayed in town by arranging to live with somebody. So, I just advertised for a room, and I got some responses and checked them out. We wound up staying in a little K apartment. I don't know if that means anything to you; but at the top of the ridge on Waddell Circle. And an old couple was living in there. She seemed real sweet. So I figured we got along all right. If I paid the rent, we get the bedroom. They'd sleep in the living room. We shared the bath and the kitchen. That worked fine for a few weeks. And then good thing my wife decided she was going to work because then she was eligible for housing. The best she could do in a hurry was a couple's dormitory; now that was an adventure. [laughs]

[2:21:21]

This town is full of dormitories for single people who -- single people gals and single people men and then they had a few couples dormitories. And well, there were funny people there, I'll tell you. [laughter] As quick as we could, we got out of their and moved into another dormitory that they had renovated to apartments and got one of those apartments. That gave us a lot of room. But they were what I call railroad flats. They just took these dormitory rooms and chopped off a bunch of them and made an apartment out of that segment. We had four or five doors to entering our apartment; one to the kitchen, one to the bedroom, at least three to the living room; all off that hallway. [laughs] But anyhow it was occupied by a lot of people like Bob Dyer, you mentioned was here before. He lived there and by that time I had an automobile.

Bob rode to worked with Grace and I. Bob worked with me for a long time. Well, anyway, then we finally -- let's see -- decided we would rather have a little house. So I applied for that. Gracie didn't have to go find a house for us. We were moved into a little E-1 apartment, which is a cute little apartment. Then when the first child arrived, we were eligible or something bigger. This is socialized living if there ever was some. So we went to what we called a B house, two bedrooms. And we lived there for a few years until the second child came, and then we were eligible for better things, I guess.

[2:23:37]

That was about 1952, I guess. We wound up in a nice ranch style house; the last homes that the government built in the old town area. And we stayed there all the time and our kids would go to elementary school, which was right down the street -- shopping center right down the street -- wonderful place to raise a family and enjoy life. Then again, the neighbors were all people just like us. Everybody had dogs and cats and kids. [laughs]

So my wife is still with me. Since then we bought a home on the lake for a while, came back to Oak Ridge and lived in a condo. Now we're in still another house. We've moved around a lot.

Thonhoff, J.: Do you think she'd like to come in and do an interview with us about her time that she spent at K-25?

Snyder, H.: Frankly, no. I don't think she would want to. [laughs]

Thonhoff, J.: Okay. Let's look at the cold war era and the work that was done at the facility after the Manhattan Project. How did the work change during that time?

Snyder, H.: Well, I think I already mentioned this increased demand for the product. We were doing all kinds of things to get more output, working the equipment well above its original made, planned, capabilities, adding these plants, K-29, K-31, K-33. And then the government also decided they would put another location and build a plant in Paducah.

Carbide agreed to be operating contractor for that and did a lot of the engineering for it because that plant was going to duplicate the facilities that finally evolved from improvements in K-33 and K-31.

[2:26:06]

So the Paducah facility was staffed with people from our K-25 plant. We had to replace them, of course it was that time when we had spread out pretty thin with all these new additions, but anyhow, the plants up there were staffed from K-25. And we had to come up with replacements. It was one of those years where there was a lot going on. I never was assigned in Paducah but I spent a lot of time up there. It used to be you had to drive up there. It was a terrible drive from here to Paducah before intestates.

Thonhoff, J.: How far is it away?

Snyder, H.: Well, it was usually a two-day drive or all day drive with two drivers to get there. I was leading up to eventually the DOE -- the federal government provided us with helicopter here in Oak Ridge that would take us to the Knoxville airport and we had a U.S. Air Force airplane at our disposal, one of those old C-54s I think they were. And we'd go to Paducah for the day. We'd get on that airplane, fly up there in the morning, spend the day there, whatever we were doing, and come home at night.

[2:27:47]

So anyway, I spent time in Paducah. It was cooperative. It was a Carbide operation both places; a lot of exchange of people. And then we goodness right on the heels of Paducah, the government was going to build a third site, and they went to Portsmouth, Ohio.

Carbide had a lot to do with the development and design work there. Had nothing to do with the construction and didn't want anything to do with the operations. So it was a full identity in itself; whereas the Paducah plant worked in conjunction with K-25. Their product came down to us to go into our plant and help give us a boost.

The other plant was going to be totally independent. So they got Goodyear Rubber and Tire Company as the operator up there. We had to train a lot of people for them. They sent them down to us and we put them to work at K-25. There were a few occasions that I made a trip up there. But it was usually the kind of gathering of the clan type of trip, discuss problems and try to prepare them for some of the eventualities that occur in running a cascade operation.

That kind of occupied my cold war. It was in 1961 then that I transferred to Y-12.

[crew talk]

[3:00:14]

Snyder, H.: Okay. I didn't say much about the origination of the K-25 facility, I don't think I did. In 19 -- well its part of the amazing story about what General Groves did. In 1942, they broke ground here to build the city. In 1943, they were building K-25 and Y-12; that's amazing. MW Kellogg Corporation did the design work for K-25. It's an engineering firm in New York. We knew them as Kellex down here. Columbia University prior to that had done what research they could get done in a brief period of time. At one time they build a pilot plant. But Columbia was the leader in that kind of research and development. And a lot of the fellas that worked at K-25 came down from Columbia and came here with Kellex and stayed here after the plant was built and running.

Construction actually started in 1943. Carbide signed an operating contract in early '43. And as I said, when I got here I nearly '45, the plant building structure was up and the plant was reaching the point where they were ready to start things.

[3:02:17]

So I just wanted to cover that. I did mentioned power consumption. Paducah, Portsmouth. Get back to the town itself,

we had a peak population here of 75,000 people. The original area that the government owned and fenced in, about 90 square miles -- the city, the original city, about nine square miles. During the cold war and subsequent years, the city has expanded a great deal. It used to be all on the south side of the Black Oak Ridge, the turnpike along the bottom. Then they expanded across the turnpike, further south and a great deal to the west. So the city has grown quite a bit. The population though during the war was 75,000 people, the fourth largest city in the State of Tennessee. [laughs]

After the war effort and all the construction, the population settled down at around 30,000 people. Right now, it's a little under that, 26,000 or 27,000. We're still building houses. So a lot of the old houses are occupied by one or two people. The original owners, original occupants, instead of the five, six, or seven that lived in a typical home during the war.

The schools are coming along fine. Imagine the scope of building this, just layed it out along the ridge to get out how the roads could wind with moving the least amount of dirt. So there wasn't a straight street in the original Oak Ridge at all. There were streets that went up the hill and there was West Outer Drive and Outer Drive across the top and the turnpike crossed the bottom. And all the streets off of these laterals up the hill were starting -- names starting with the same letter. Off of New York Avenue, there was Norton Road and Nolan Road, and so forth.

And everything is winding around, up and down. So visitors would come here and say, "Honey, I know where you're going around here." Well, if you've been here long enough to be familiar with the layout, it was easy to follow and find places.

Thonhoff, J.: Right.

[3:05:12]

Snyder, H.: Really not a straight street anywhere in the town. So when I got here there were gravel roads and all that mud. It was fun going around in these buses. [laughs] It was.

Utilities, they built a water plant, they built a sewage plant. They built a steam plant downtown to heat most of the office buildings and dormitories and everything. It was torn down a long time ago. All the electric service had to go in the town. They put the street

in there and the next thing you know they were laying pipe and marking where the houses are going to go, bringing electricity in. Then they come to the houses, a lot of them prefabricated, set them down, hook them, put somebody in them. Some took a little bit more time to build, but they were all comfortable homes.

[3:06:11]

Now the water and the sewer, electricity, soft coal was about the only thing we had to heat and that's terrible thing to handle if you don't know what you're doing. A couple of times I puffed our furnace and got soot all over the house. But eventually they got natural gas and more electrical heat. That's worth it.

I've already talked about the buses. And we -- you know, we had theaters, we had bowling alleys, drug stores, recreational halls, churches, shopping areas, little neighborhood shopping areas, big shopping areas. There weren't enough churches. There were a lot of people holding their services in these rec halls on Sunday or in the theaters. They closed the theaters so they could hold church in there.

When the government finally got through assigning and selling property, I would say we had more churches per capita in Oak Ridge than anywhere in the United States.

Thonhoff, J.: Oh really?

Snyder, H.: All of these groups that had been organized on the run, so to speak, now had the opportunity to build a church. And they were all out building churches. I was kind of proud of that too. That's the kind of people we had. Fun people, good time people, but they also went to church.

Thonhoff, J.: Wonderful.

Snyder, H.: And I consider myself one of them too. Then in 1949, the city was open to the public and that was a big celebration. We had a big parade in town with movie stars participating.

And in 1953, they opened up the main roads through there. Then let's see about 1957, I guess, is when the government decided to get out. out of the real estate business and sell the properties. And I bought my little ranch house for 8,000 dollars, I think.

[3:08:24]

Thonhoff, J.: My gosh!

Snyder, H.: Of course that was cheap in those days too. But that was 1950 dollars, not 2000 year dollars. However, that was a good deal and then we remodeled it and stayed there until the kids finished high school.

The city adopted a charter in '59, developed home rule in '62, and we were on our own. And I was interested in the city. I was active in the Chamber of Commerce as a Carbide representative. I was president the year that we built the Chamber of Commerce building downtown. I served on the planning commission; that was interesting work. A new town, having been serviced by the government; you know, they even turned around and changed the light bulbs when the government was running it. If you had a leaking faucet, they'd come change the washer. I'd say this was socialism at its worst, but -- and dirt cheap rent. But we finally reached normalcy here.

And the planning commission was very much occupied with commercialization; people wanting to build things and change neighborhoods and it was a very active pursuit at that time.

I also got appointed to the city's human resource board. I served on it for about seven years, chairman a couple of years. We didn't have much trouble in this town with integration, but we had the typical changes to accomplish.

When I got down here and went into that K-25 plant and saw black and white bathrooms, I didn't understand it. I was a Yankee. And black people to the rear of the bus, oh my God; this sort of thing. Even the government bought a special section of Oak Ridge for the black race. They didn't live with us. It was the Scarborough community and it's still the Scarborough Community, and I don't know if there's anybody living over there other than blacks. But at least the blacks now are living in the town. And some of them have real good jobs and so forth.

Thonhoff, J.: So the minorities were kind of segregated?

Snyder, H.: Yeah. But we didn't have any battles or anything here in this town. The school integration went real smoothly. So on this

human resource board, we just handled the problems that did arise, to try to quietly resolve them.

Thonhoff, J.: Right.

Snyder, H.: I don't think the board is even active any more. We got over the hump. So I never did get to be an aeronautical engineer. I never even go my pilot's license. I didn't have time.

Thonhoff, J.: You were to busy having your life.

Snyder, H.: I got to enjoy -- the water. I always had a boat. Well, after well settled down and the kids were growing up. First speed boats, the kids learned how to water ski. I never liked to fish. And then I bought a house boat. And that was our summer home. Well, we still lived in our house, but weekends we were always up there.

And my dear wife, she's hauled the linens back and forth and the food back and forth.

Thonhoff, J.: That's a task.

Snyder, H.: When I finally suggested we ought to move to the lake instead of having that boat, "Oh let's do that!" So we lived on the lake for about ten years and enjoyed that. Right cross this lake here. We were still in Oak Ridge, as far as we were concerned. But it was Knox County on the other side of the water.

[3:13:07]

And that's when the pressure was on to drop the planning commission business and the chamber of commerce business because I wasn't even an Oak Ridger any more, but I spent all my time over here. We did our shopping here and all that sort of thing. And after I got tired of all the work that goes with living on the lake, we moved back to Oak Ridge.

Thonhoff, J.: Coming home.

Snyder, H.: Yeah. Now, oh, I never did talk about going to Y-12. I went over there as a superintendent of certification activities; the laboratory dimensional inspection, physical inspection, all that kind of stuff for weapons parts being fabricated. I got pretty well acquainted with the plant; got acquainted with the people; acquainted with the union. I had done a lot of union activity too in my job at K-25.

So, the time came they needed a new industrial relations superintendent, which was all those people things, you know, labor relations, employment, benefit plans, cafeteria, dispensary, the safety department, so forth.

Oh, at that time the guard-force, fire department. Anyway, they had a vacancy there and suggested I could handle that. So I took it. And then I finished my career with Carbide in that activity. There were always changes, additions, deletions, reassignments. But I wound up with the title of employee relations manager.

[3:15:13]

So instead of running machines and stuff for airplanes, I was running people.

Thonhoff, J.: You ran the people that ran the machines.

Snyder, H.: But it was an interesting job too. It was strictly a manufacturing jobs; a lot of chemistry that goes with materials handling and material salvage and that sort of thing -- Interesting work.

Thonhoff, J.: What do you think is important for future generations to remember about the K-25 facility at Oak Ridge?

Snyder, H.: Well, I'll say this for the eighth or ninth time, I guess. The enormity of the accomplishment to build it, to turn it on, and have it work; you know it wasn't that easy, but it did work. The Y-12 plant was built to enrich uranium through the electromagnetic process. And they made the first enriched uranium for the first bomb. But our plant was so much more productive and inexpensive relatively that Y-12 went out of business.

Tennessee Eastman Company was the contractor -- operating contractor over there from initial operation '43 until about '47. And then they were shutting down and Carbide took over the Y-12 facility too for what work remained and that was mainly chemical work, taking our product and processing it to get it ready for weapon application or reactors or whatever.

[3:17:04]

What was I leading up to? Anyhow what to remember about K-25 was the size of the plant, the number of people involved and to get that thing running the way we did without any serious mishap. We

had our rough moments. I can remember one power failure, the whole thing went down. Of course, it was well engineered. From our control room, all I had to do was push some buttons and I closed every valve in the place practically. It took a long time to get it going again. We handled it. Life was interesting.

Thonhoff, J.: Is there anything else you want to add?

Snyder, H.: I think I've talked enough. I'm getting hoarse.

Thonhoff, J.: We'll get you some water. I think that's it.

Snyder, H.: Okay.

Thonhoff, J.: Wonderful.

[End of Interview]