Robert W. Johnson

TCAP plant engineering dept., 1964-1995 Interviewed by Peter Myers, May 2017

QUESTION

Please state your name, the year you started and the year you retired.

JOHNSON

My name is Robert W. Johnson. And I started at the plant in April of 1964. And I retired at the end of 1995.

QUESTION

Talk about your long history with cars and how you got interested in cars.

ROBERT JOHNSON

I grew up in Thief River Falls. A small town in northwest Minnesota. And my father was a mechanic to start out with, years and years ago and then he was a parts manager at the Ford garage in Thief River. And he worked there for about 44, 45 years. And I liked cars as a kid; I could identify all the cars going by in the street. But I really wasn't that interested in mechanical work or working on cars. I worked at the Ford garage there when I was in high school. And I worked after school as a janitor and on Saturdays cleaning up. And then after I graduated from high school I worked there full-time during the summer. Washing cars and getting new cars ready for customers, things like that. But I really wasn't that interested in doing mechanic work on cars. I didn't really like that. In high school I liked mechanical drafting, my favorite, and I just had a feeling that's what I would like to do, something in that field. So I took classes in high school I went to Dunwoody and I went to a mechanical drafting course there and that's how I just got started.

QUESTION

Tell us about your first job with a consulting/engineering firm and how that eventually connected you to the Ford plant.

JOHNSON

I got that job with Parbery Engineering right after I finished at Dunwoody. And I was there for 8 years. We did a lot of work around the Twin Cities at a lot of different companies, so I really learned a lot there. And we did have a job with Ford at the Twin Cities plant so I got to know a few people there. And years earlier, the plant manager – his name was Bob Elliot – he'd retired from Ford, and he went to Grantsburg, Wisconsin and he managed the Rolite travel trailer company. I think he had ideas in maybe producing these travel trailers on a line like Model T's or something. But they didn't have any documentation of these trailers, nothing as far as parts go and so on. So I had the job up there to detail every part in that trailer. And assign part numbers and so on. And in the process of doing that plus a little work at Ford, why, when my job at Parbery's ended, there was an ad in the paper for the Ford plant looking for a material handling engineer. And I was looking for a job at the time so it worked out. I went over there and applied for the job and I got the job at Ford. So that's how I started.

QUESTION

How long did you work at that job before you moved onto something a little different?

JOHNSON

Well I was hired in as a plat layout technician or a draftsman. And I worked on a drafting board for oh until from '64 to '69. Somewhere in there. And then I was had a few promotions in the meantime. And then I was assigned to the plant engineering department. They combined the department I was in for plant layout into the engineering department in the plant engineering department. They combined those two and then I was promoted to the supervisor of that department. That was in '69 and then I didn't work on the drafting board as much after that, I was more in a supervisor capacity and there was a few more promotions after that and promoted to plant engineering manager and ending up as the manufacturing planning manager.

QUESTION

A great run. Talk about the notion of the annual model changeovers so different from today.

JOHNSON

When I started in '64, we were working on a new model for the '65 model. And that was a big change in the body shop especially; they gutted out all of the tooling for the '64 model and brought in all new tooling for '65. It was a major change, I couldn't believe they'd ever get it all put back together again. But they did. We were designing conveyors for delivering parts and so on at the time and they were still working on the changeover. I think we were done for several weeks for that changeover. And they brought in new, better tooling. It was more fixed automation you might call it. These big machines would clamp all the parts together and then from they'd be automatically welded and open up and then go on to the next station. And then from there, they would go to the paint department of course. But all this and tooling was new and after that changeover, there were a lot of skilled trades people in that body shop that were very talented and they designed their own fixed automation to do more automatic welding. And it worked out very well, but there were toolmakers, electricians, pipe fitters, they just worked together and with their supervisors I imagine and built this equipment and that would probably be some of the first automated tooling that was put in the plant. Built by the plant employees.

QUESTION

Was it common for individual plants to figure out some of their own solutions and have their own people build new tools and mechanisms?

JOHNSON

I would assume other plants did something, but I don't believe anybody did it on the level the Twin Cities did. In fact some of the managers at Twin Cities thought maybe some of the other plants would be interested in buying some of these tools if we made 'em for 'em. It never happened, but it was considered.

QUESTION

So there wasn't a corporate level department that would design and build all these tools to ship out to the various plants, the plants had autonomy to design their own?

JOHNSON

Well, I'm sure it was tool vendors that provided the basic tooling for all the plants. And of course every plant made different models and there was different tooling provided but the main major tools were shipped in to us. They were huge, I mean, they came in on railroad flat cars and we had to have heavy equipment movers bring 'em and set 'em in place.

QUESTION

And then would the manufacturer of that equipment send their own team of people to help set them up and show people how to use them?

JOHNSON

I think that was going on. I at that time, I was mostly on a drafting board, I wasn't out on the floor that much, but I'm sure they had vendors helping get it going and of course people from Detroit would come in and from Dearborn and help get things launched.

QUESTION

Some of the bigger changes in the manufacturing process you witnessed over your 30 years at the plant?

JOHNSON

The bigger changes? Well of course every model change brought new and better tooling. That would give you a chance to take out some of the older tools, get rid of those, then get new tools that were generally better and more dependable. And different things would come and go like vinyl tops for instance were popular at one time. So you'd have to install facilities for gluing and drying and installing vinyl tops and there were other things like that that whatever the customers would be sold on, you know. But there was always something going on. There were many changes throughout the year, always improvements parts changes and improvements made. But then during the model change you'd do the major changeover but there was always a lot of work going on.

QUESTION

In terms of the plant itself, one of the big changes was the expansion to the West. Talk about that and why it was necessary to enhance the operating efficiency of the plant.

JOHNSON

I was involved with that expansion. I did all the layout work for that. And can you imagine in 1924 when that plant was launched, it actually was 1925 I think when the first vehicle rolled off, but that assembly line the final assembly line was fairly close to the west wall. And there was hardly any room to get the stock on each side of the line. It had to be pretty much spoon-fed sometimes during lunch periods. And that little aisle along those windows there was where all of the tourists went by, the plant tours, so it was great for them because they were just like right next to the people that were putting the car together. But it was very hard to get stock to the line and everything got bigger and bigger and bigger. In those days, when you unloaded parts out of a boxcar, you'd probably use a two-wheel handcart. If you could imagine. Or unload things by hand. And we'd put 'em into racks, storage racks, and material handling engineers would design the dunnage to store all the sheet metal parts and things like that. But everything was small. And the model T I don't know how many engines they had but maybe just one. They were all black, a very, very simple car. And it evolved into what we build today and the parts

come in in huge racks. And they're taken out of a boxcar with a huge forklift truck, a 10,000pound truck in some cases. And they had to have big aisles to maneuver in. But we didn't have any of that with the old assembly line. We had to get it moved out and that's how we built that 60-foot-wide expansion with a new final line with aisles on both sides and room for stock racks and so that—it had to happen. You couldn't live any longer with what we had and stay efficient.

QUESTION

That was a big change.

JOHNSON

It was a big change. But we were able to build the building expansion while the plant was still running, build a new final line get everything in place and then during the changeover we tore out the old line and activated the new one.

QUESTION

Another big change during your time there was the paint building. Talk about the reasoning behind constructing a totally isolated paint shop.

ROBERT JOHNSON

Well, the paint shop was spread out throughout the assembly building. Part of it was on the east side of the plant, the phosphate system and the prime booth. And the west side of the plant we had the main enamel booth and the two-tone booth. And it was spread out all over this fender hood-painting facilities was in one corner of the building. And I forget what year it was but I was kind of farmed out to Detroit to help lay out the plant for it would be the London, Ontario plant. And I worked on the paint part of that plant for when they built that plant. So I was a little bit familiar with how the paint should look. And when I got back to the Twin Cities plant, I thought, when I had time I was playing around with layouts and I laid out a drawing of what we should build. And it had to be a separate building and when we had a chance to upgrade the whole paint facility Ford was doing then, I took out that old drawing, I showed it to 'em and it made sense. So that's how it got built as a remote building so bodies came out of the body shop and out to a separate building that was contained so it was dirt-free and that's how we started all that.

QUESTION

How difficult was it to convince the executives to put the money into it and get it done? Did it take a long time go up the chain of command?

JOHNSON

As far as that paint building went, they realized it could be much cheaper to do it that way. The original thinking in Dearborn was to build a paint building on top of our body shop. Well you'd have to come in and reinforce all of the structural steel and footings and everything to support it. Then you'd have a paint building above a dirty body shop which didn't make sense at all. And they realized that this new building construction would be much cheaper and quicker. We actually broke ground in January of '85. And we ran the first unit through the phosphate system in December. And then launched the paint building in January of '86. So, in a year's time, we built that entire facility. It was 275,000 square feet, something like that, with all up-to-date equipment. the latest and greatest painting facility there was. And we also had a central exhaust

system. Which I had seen. I wanted to jam plant something similar to that it was a one spray booth. But I thought if we had that rather than individual stacks on every spray booth, it would have a central system where underground tunnels brought all of the oversprayed air into a central area and up one common stack. And it took a lot of selling and I went to Detroit and went from department to department. And worked with the people down there and I think the manager of the automotive assembly division thought it was a real good idea although the people in the paint department didn't like it. But he gave these paint people the assignment to write the letter of why we should do it. [laughs] and it got done. But it was —it was about a 5 million dollar selling job and but it worked out great. It was something that it was easily maintained. And it worked good. And the floors in the plant, we used a special concrete that was called like a trap rock finish. And so all the floors in the paint building were made that way and we scrubbed 'em and the more you scrubbed 'em, the more they shined. And the whole paint building—it was the best one in the whole Ford system. It really was.

QUESTION

Roughly how long was the conveyor from the paint building to the plant?

JOHNSON

Yeah, it was out there....I'm sure a thousand feet or more. But it gave you kind of like a rubber band between body shop and the paint building, so they had conveyors out there that would accumulate bodies. On the way back also between the paint building and the final area, conveyors that accumulated bodies. So if there was a problem in the body shop when they were shut down for a while, you had a surge of bodies to work with. And the same way if there was a problem in the paint shop, you had a surge of bodies coming back to the final area, so it worked both ways.

QUESTION

You could adjust the speed of the line to meet the rest of the plant?

02:59:06 ROBERT JOHNSON

Yes, there were like two-speed conveyors so we'd have 'em running out of the north slow speed normally and if you had to speed things up to get 'em through there you could double the speed of the conveyors.

QUESTION

Was there also a new building during your time, a warehouse storage building?

JOHNSON

There was. That was done in the south end of the plant. It was an automatic storage and retrieval system. With stacker cranes and as the stock came in, it was barcoded and sent into the storage and retrieval system. And then it was brought out as needed for the plant and put on like automatic tow trains. That went around the plant. But that was another major job. And provided more storage space that was easily accessible and kept track of.

QUESTION

Talk about the big flood of '65.

JOHNSON

Yes, I was I think that was the year after I started. QUESTION Any memories of how that affected the plant and what happened?

JOHNSON (1965 flood)

Well, Paul Boudreau was the engineering manager at that time and he worked with local contractors. He brought in I believe it was a steam engine or two and he put those on the east side of the plant on a rail spur so they were able to provide steam for the plant. This was I believe in April so it wasn't that cold out and the steam plant was generally used for heating the plant, the main plant. They would generate steam and heat hot water which was pumped through coils throughout the plant. So you really didn't need as much steam capacity at that time of the flood. So these steam engines were able to provide steam for the phosphate systems and so on. And then the hydroelectric plant had to be shut down because the water going over the dam was just very little. It was so high above and below the—that you couldn't generate anything. So, they brought in overhead lines from NSP to provide power to the plant during that time. And it didn't really last that long I don't think a week or two and it was back down again. But they had to flood the lower basements of the steam plant with clean water. To keep it from caving in. And then it was all pumped out. But it was quite an operation. Quite an operation. And it didn't affect the plant running at all. I mean, I don't think they lost any production time during that whole flood.

QUESTION

Pretty impressive what water can do.

JOHNSON

Yes. And after the flood, they filled in down there, the little road between the steam plant and the hydro plant was raised the area around the steam plant was filled in. So when you walk into the steam plant today you're walking in on the second floor.

QUESTION

They learned because they knew one might happen again someday.....Talk about this plant's reputation for quality in the system. In 1990 you won the first Q1 Award from Ford. How did it maintain quality, how big of a deal was it to win these awards?

JOHNSON

It was a big deal. I know the plant management served steaks to everybody in the plant in the cafeteria for that. A year or two before that, we won the maintenance excellence award and we did a lot of work to win that award also. But between the maintenance, keeping the plant running smoothly, and the work that they did on quality, paint quality, quality-wise throughout the plant, you look at your quality reports they use a warranty [inaudible] so that kinda tells you what your quality levels are. But they had a team of people they'd go out to dealers and they would check on warranty claims, find out really what the problems were. So you'd come back to the plant and correct some of these problems. That was a big way of knowing where your problems are and correcting 'em. we had a stop button program that we installed. So that stations along the line would have a stop button. If you have a problem finishing your job, you could stop the line. It went through a lot of learning curves doing that but I think that helped.

Because you want to finish a job in the stations where it's designated to be done. That's where you have the proper tooling and everything to do it right. If it doesn't get done there, it has to go to the end of the line with inspectors and repairmen. And eventually, with improvements in quality and keeping the plant running smoothly while they eliminate a lot of inspectors—and repair people and the whole thing ran a lot smoother. Not to say there weren't problems here and there but there's always changes in stock or problems with a tool or whatever that but I think everybody worked very hard to get the job done right the first time.

QUESTION

Sounds like it. You had a fun nickname for one of the first robots. What did you call it?

JOHNSON

That was probably some of the earlier ones that were programmable robots. They were made by Cincinnati Millicon if I recall. There were seven of 'em in the body shop. I forget if they were welding floor pans or what. But they dubbed 'em the Seven Dwarves. And they had each had a name for one of the dwarves so that if one broke down or quit why you can go find out what Sleepy's doing you know but most everything in the plant had some kind of a nickname. And for some reason somebody'd come up with some cute name for everything and if it was a problem what everybody in maintenance knew where to go.

QUESTION

Introduction of robotics and its impact on labor.....people getting reassigned.....

03:06:54 ROBERT JOHNSON

You're always working on improving your productivity through automation or whatever and people are displaced when you do that. I think because it wasn't like a lot happening at one time, so through attrition or whatever, I don't think you know people weren't sent out the door if you know what I mean. They were absorbed somehow. But through normal attrition maybe and some maybe wouldn't hire as many maybe or whatever, I don't know. But automation results in less jobs. So, there's different jobs of course. Somebody has to design this new equipment. Somebody has to maintain it, keep it running. Those are different types of jobs. So it's not a loss because you have to buy a robot that's been built by somebody, or build one yourself or whatever automation you're doing results in you know more engineering, more—more work.

QUESTION

Typical work week for you re: how many hours you had to put in>

JOHNSON

Of course it depended on what was happening at the plant, but your production levels go up and down as the economy changes all the time. So sometimes your plant's running 10 hours a day. Sometimes 8 hours a day, it could be 10 hours a day and 8 hours on Saturday for production. And of course that doesn't leave a lot of time in maintenance or doing the other work. So then in our area, we'd be working sometimes 12 hours a day. And maybe 10 hours on Saturday and maybe 8 hours in Sunday. And it was—there was one stretch where I worked like that for six weeks without a day off. And you'd work Christmas Day and New Year's Day and every long weekend, they'd give you a chance to do some sort of a project. Or during the vacation shutdowns or during Christmas through New Year's, the plant would be down, that'd give you an opportunity to go in there and do things. And to get it done why it'd be a lot of hours. So, it's hard to say what the average was but in the 31 years I was there, I worked 10,000 hours of overtime. That was overtime when it was paid for plus a lot of casual time on top of that. So, that would've been like 5 extra years. So I don't know what the average was but we worked a lot. You were in the plant a lot and away from your family a lot.

QUESTION

Strikes in the plant.....how would that affect others who weren't part of the UAW?

JOHNSON

Well, salaried people were still in the plant. Unless they took vacation time or something like that. But, you know there was always something to do: filing or cleaning or things to get organized, planning, whatever they'd keep the salaried people pretty much busy during that time. And you had to be there and ready when the place opened up again. So you couldn't just let everybody go and they weren't laid off as far as I know. I know I never was, I was probably busier during that time than regular working hours.

QUESTION

Did you have to cross picket lines to get to and from work?

JOHNSON

I don't recall that. No. I think there were pickets out there but it was all civil and there was no problems that I was aware of. I don't recall if we came in through a different door or anything, but I don't remember but I never saw a problem anyway getting back and forth to work.

QUESTION

Bringing in the Ranger in the mid-80s, how big of a job was it to retool the plant to make two very different products?

JOHNSON

Well, it was all new tooling, of course, it's a totally different truck. There's hardly any parts that were the same. But we were kind of familiar with doing you know in the early years it was cars and trucks at the same time. I think we were building 46 cars and 5 trucks an hour when I started there and we had a little separate body shop for the trucks and the cars, but then they go through the same paint systems and the same final area and they all went down the same final line. So between the Ranger and the F series, it was mainly just body shop tooling. And then the rest of the system you just went you know one behind the other. And the biggest problem is all the different parts. Because you got two different models and they're getting more and more complex. I don't know how many different models of a truck you can make before you make the same one over again. And you can say there that you can have the same with Ranger and F Series. And they dropped out the F Series, we built all Rangers at the end. That simplified things a lot and it was easier to automate too because you got a standard vehicle. Otherwise, in the body shop you could have a certain amount of automation but it's very hard to automate on the final line when you have a big truck and a little truck. Or even when you had a car and a truck and nothing in common. So the automated tooling it would've been very complex to do that.

QUESTION

Talk about the feeder conveyor systems that would meet up with the main line.....how did all those parts get put onto their respective conveyors, was that through manpower or was it automated?

JOHNSON

Well, it was in the final area, they used a teletype. So there were teletype machines in all the key areas throughout the plant. And each unit—each vehicle has a sheet with all of the requirements on there. So, as it would come into the final area of the trim or chassis, it would tear off teletype sheet and maybe stick it on here someplace so that everybody on the line they could read what part that goes on that truck. And that's how they kept track of it. And there was a job number for each one and it started out in the morning it would say Job 1 or whatever and then throughout the day, so, that's how they kept track of it in the final area. In the body shop they would call it a buck sheet of some sort. There was a metal tag that was stamped out that had certain information on there. So people knew as it went down the line. What that vehicle took. And then it could paint the same way it was identified for the paint color and it was a complex system but it seemed like it worked very well and I don't recall everything ever malfunctioning where you had the wrong—well I suppose you'd get the wrong part somewhere, but I was never aware of where you'd have a two-car...two doors on one side and one on the other and something like that I've heard about.

QUESTION

Somebody mentioned there was one car somebody made like that on purpose to prove some kind of point.

JOHNSON

I know one time my father asked me when he was in the garage back home he asked me how did they ever get the air in the tires because they had a car come in and there was no valve stem on it. On the wheel. There was no way for the guy to check the air, put air in. and 'course in the plant the tire and the rim are put together in the machine and it's one—they actually fill the air tires through the rim. It's just boom, it's one shot out of air and it's full. And I talked to the fellow that would put those valve stems in. he worked in in the paint spray booth where they painted the wheels and I asked him if he ever found a wheel come through with no stem—no hole in it. Oh once in a while he says, and I said, he says sometimes they'll come through and they'll have more than one hole. And then what do you do? Oh I just put a stem in each one. [laughs]

QUESTION

That would look a little strange. I've talked to people in various job capacities and it's become clear to me people at this plant felt a good amount of pride in the work that they did. A high level of dedication. What do you think accounts for that? [longevity, dedication, quality]

JOHNSON

Well, I don't know. I think it's probably work ethic of people in the Midwest. I think in Minnesota, North Dakota, Wisconsin, wherever we drew people from, lot of 'em were guys off farms or whatever that were used to work and were very handy. They worked on machinery or driven tractors and so a lot of these people were in the plant um. A lot of 'em were family, you know, there were fathers, there were sons, other members of the family worked together in the plant. They were—they were good jobs and I don't know I think it was just the work ethic in this area that people are brought up that way. And they had a lot of good people in that plant and that's what I think anyway. I know even my daughter worked in the plant during one summer during her college year. And we got her a job in the plant 'cause a lot of people did that.

QUESTION

Having visited other Ford assembly plants, was there quite a bit of idea exchange between plants?

JOHNSON

Yeah, I think so. We started what we call a total production maintenance which is what they were doing in Japan. And I went to Japan with a regional manager and the regional manager from the stamping plant along with one of their people and we looked at what they were doing in the Japanese plant. They called it total productive maintenance. Where the workers there would do their own maintenance work. Where if they wanted a platform built to make their job easier, they'd come in on a weekend and build it. You know. And they had a way of documenting breakdowns and so on. There was a lot of working with employees and employee involvement and that sort of thing. So we came back from Japan we started what we called FTPM: Ford Total Productive Maintenance. And all of plants got involved and got groups of people together. And we would go from plant to plant to plant these groups of people to see what other plants are doing and what their work groups are doing. And I probably had oh I don't know maybe ten groups in the Twin Cities in various areas the seat cushion area, tire and the wheel area, in the paint area and so on. And you'd get these small groups working together to come up with ideas to make their jobs easier, safer, whatever. And if they were having problems with whatever it is you try and work these out together. And have the maintenance people in there and the production people in there and some supervisors in there working together. And it evolved into a real good deal even after I retired I think it got bigger and bigger and bigger. Initially I think there was a lot of reluctance from UAW maybe that we were looking at reducing jobs. That was always what they were concerned about. And so that was what gets called employee involvement at that time you know some union would say well we're not gonna get involved with this, you know? All you're gonna do is we're gonna give you some good ideas and then you'll take our job away. Those kinds of thoughts. And but I think at—it did get better and better even after I retired there were more people involved and you had to get by what they called the lines of demarcation, you know, where you can't be doing my job, you know even ask 'em well what how about keeping your area clean, you know? Why do you need a janitor to come over and clean up after you? Well, that's his job. You know. These kinds of things.

But, people did get involved with it. They started realizing it doesn't take that much to keep my area clean and safe and it got better and better and better.

QUESTION

What's the most memorable part of your career at Ford or any experience that sticks in your mind?

JOHNSON

I think probably when I felt the biggest accomplishment was that new paint building. To be able to get it built the way I had envisioned it and the way it turned out. And it just got better and better. People in the paint building took great pride in keeping it clean. They provided a lot of stainless steel coverings for areas to make it easier to clean. When you clean it up everything shined. It was just really nice. The spray booths had glass walls on and the people, the booth cleaners that cleaned the booth took pride in keeping those windows clean. So, I think that was probably one of my biggest accomplishments that I felt good about.

There were a lot of other things that I did. I got involved with a lot of projects in the plant. I know when I first started after the first model change, there was the time I was assigned to update what they called a plant layout to sixteenth scale. It hadn't been updated in years and years and of course the plant was getting bigger and it wouldn't even fit on this drawing anymore. So, I started all over again. I think I spent about 400 hours making new drawings. I went to the plant and re-measured everything so I knew that plant from one end to the other. I got to everything from top to bottom and end to end, it was a lot of measuring, go back out in the plant measuring, come back draw it, and come back, back and forth. I really learned a lot about the plant doing that. And it helped. It helped over the years knowing exactly where everything was.

QUESTION

For the paint shop project, did Ford hire a local general contractor to come in and do the physical building of it?

JOHNSON

Yes. There was; in fact it was a joint venture between two big contractors. And then all of the subcontractors. It was a lot of people that were in there working on that thing. Just parking their cars was a problem when they'd come to work. But they worked night and day through all kinds of weather to get that thing built on time. It was a major undertaking. I know one summer, the paint building was under construction and Philip Caldwell, the CEO Ford came in, flew in, we had to pick him up at the airport. And he came in to see the plant. Well the plant was down. There was really nothing to see. But we went and got him. And we brought him through in a car and walked him through this big, open building filled with dirt piles. I don't know what he thought but yeah, it turned out great.

QUESTION

Was there a lot of preparation for a big executive visit?

JOHNSON

They did that and of course I had the opportunity to take a few of 'em on a tour. I took young Bill Ford on a tour down at the hydro plant around when he was just starting out, he was going through all the plants to learn about Ford. So I would bring him in the conference room and all these CEOs or whoever would come in. Governor of Minnesota was there and we had a lot of dignitaries coming through. And you'd treat 'em right. Take 'em to the conference room and have a presentation and take 'em to lunch in the executive dining room.

QUESTION

Do you know if this was the last Ford plant to have its own hydro power?

JOHNSON

I don't know if any other plants that have their own hydroelectric power. I know Henry Ford had a small hydro plant right in his home. But as far as I know we were the only one that had one and it was a showpiece for everybody that came to the Twin Cities wanted to go down there and look at that. And then I think the guys in that hydro plant kept it sparkling clean. All the time. Where you could eat off the floors in there. They took pride in it and kept it up so.

QUESTION

Were they a separate operation in terms of the personnel that worked down there? [hydro plant]

JOHNSON

Well, they were pretty much assigned to that hydro plant. And of course if a job opening came available, other electricians would bid on that job. And they would get it and I think they would rotate it every week from shift one to two to three, I don't know how they did it. They were good jobs down there. A lot of times there wasn't that much to do, you just keep things running. We had two people down there at all times and on a day shift we had a utility man. Who would do whatever repair work and whatever needs to be done. And they kept that place running real well.

QUESTION

Did the steam plant require a little more day-to-day supervision or maintenance?

JOHNSON

It was a different classification; it was what we call pump men they actually had a boiler's license. And they were in the steam plant and they were assigned there. I don't think they rotated shifts down there, I think you'd work on one shift only. But there again we had at least I think two people at all times. And then there was a supervisor assigned between the hydro and the steam plant. And they had the boilers to maintain; we had air compressors down there. Eventually they built the waste water treatment plant down there. So that was another group of operators.

QUESTION

Back to the 2000s when rumors started circulating about the plant closing.....when you learned that the plant was actually going to close in December 2011 what went through your mind?

JOHNSON

Oh boy. I was in there just shortly before the plant did close. And it was in kind of turmoil at that time. The day I was there, a lot of 'em didn't know what they were gonna do. They hadn't been really told if they had a job at another plant or where they were gonna go. I know a lot of 'em had already been transferred out of the plant, taken other jobs. So they were constantly hiring new people to come in to keep the place running. But was pretty sad. I know a few years ago, before the plant was completely demolished, a corner of the building where my office was still intact. Not really intact but it was standing. And I went over to the plant, I had been there several times watching the demolition and so on. Mike Hogan, who was the final guy left that was watching all the demolition. He took me through that area where my office was and it was

really sad. To see everything gutted, all the light fixtures had been taken out and asbestos was taken out and it was just ready to be taken down, you know. All of the glass busts all over the floor; there's where my desk was. And then it was shortly after that where they went in and they tore everything down. Yeah. It was sad. And it was a shame because you know it was one of the best plants they had for quality and cost. Most productive. Best workers. And why they couldn't have come up with something to keep it going I don't know. But they never had a new product to bring in there.

QUESTION

Their official reasoning was this plant was just too far outside the supply chain for the Ford system and it would be difficult to upgrade it to a whole new vehicle line.

JOHNSON

Yeah I think there were probably a lot of different reasons. Could be the taxes in Minnesota, could be access to the plant, it could be we didn't have room to have our own stamping plant there. There's all kinds of reasons and but I guess a decision was made that we were gonna be one of I don't know how many plants shut down. But at that time I think St. Louis went down, Norfolk went down. During my time, I don't know how many plants went down. The first ones were in California with Los Angeles and San Jose and Dallas and out east Edison plant went down, New Jersey and it's just big plants. Like Lorraine, Ohio went down.

QUESTION

So they must be producing more cars out of fewer plants, concentrating on fewer but perhaps larger operations? And in Mexico?

JOHNSON And Mexico. Yeah they bring in a lot of cars from Mexico.

QUESTION

Is there still an operation in Ontario?

JOHNSON

No, that plant went down, too. That's where they built the big Ford and Grand Marquis Mercury. I think there are still some plants yet in Canada. But no, a lot of the big plants were shut down. And Twin Cities was considered a little plant. We were what they called a B Plant. The bigger plants were A Plants. And the A Plants all the salary grades were one grade higher. When I retired, I was a salary grade 11. I started out as a salary grade 4. We were having a meeting with our regional manager and in one of the meetings I piped up and said well why can't Twin Cities be an A Plant, we're a two-shift plant, we're high quality, we do everything an A Plant does and better. Why can't we be an A Plant? After I retired, they did make it an A Plant. It did happen. There were other things like 10-hour day, I'd worked on that before I retired. Showed that the plant would save money, it'd be one less startup a week and you wouldn't have to give 'em coveralls and gloves for one less day a week. And the employees would benefit, they'd have three-day weekends. Their work schedule was more uniform as far as you come to work, you work for 10 hours a day, and you're done. And before that you'd work 8 hours a day. And when you're on two shifts, after you'd change and go on overtime, then you'd work ten that means the night shift has to back up two hours. So people had babysitters they had other things going on they'd have to constantly change their work schedule or their home schedule. And if you're on four 10's, it remained constant. And then if you needed overtime just work Friday and you still have a two-day weekend. So there was a lot of benefits for the plant and the people. They realized that I think it happened after I retired, but, they went to four 10's.

QUESTION

You had the right idea.

JOHNSON

I did. I had worked out how much money the plant could save and all the benefits and I talked to people but you know it never really got going. It finally did.

QUESTION

This has been interesting and delightful, thank you very much. I'll keep you informed about our progress here.

JOHNSON

I like to think that I was kind of born and raised in the best of times, you know what I mean? When I was born in 1937, you know, in a small town, you didn't lock your doors at night, we were raised up as a kid you'd be out playing all day winter and summer and no TV. And when I was born, you know the hospital bill was 23 dollars and 50 cents. No kidding it was 3 dollars and 50 cents for the delivery room. It was 2.50 a day as my mother was in the hospital for 6 days. So that was 15 dollars. And the doctor got 5 dollars to deliver me. And it was written on a little piece of paper like you'd get for a receipt at an old grocery store or something, handwritten. And my mother saved that receipt and I still have it. But now you look today, what's happened, all the paperwork every time you go to a doctor's office it's just—everything has got so complicated.

And then I graduated from high school I was in the National Guard for 8 years between the Korean War and Vietnam. And my units never got activated so I was lucky there. Went to Dunwoody and got a job quickly and I learned a lot in 8 years with a consultant engineer. I was lucky there. Married a girl from Thief River Falls and we'll be married 57 years in July. You know everything has worked out just beautiful for me, I can't believe how fortunate I am. And yeah, and working at Ford was great. I loved the job, I loved to go to work in the morning. It was hard work but you could accomplish something. You can't believe what you could do in that plant on your own. You wouldn't necessarily have to go by the original Ford standards and everything that you'd come up with ideas and why don't we do this? Good idea, why don't you draw it up, take it down to the shop and have him make it, you know. You work with these guys in the shop. We had a good rapport with everybody. I think the maintenance people – they had better jobs as far as not being monotonous or hard on them as people on the line. So there was less problems. When it was time to settle grievances at the contract time we were done in no time and we didn't have a lot of problems compared to guys on the line that really had to work hard. Some of those jobs were really hard. Hard on their bodies and monotonous and but in the maintenance area, it was pretty good.

And if they had an idea they were listened to more so than guys on the line. You gotta do it this way, you know, and don't argue. But even then, that got better and better. And people started listening to each other. Yeah it was a good place. END