

“Made in St. Paul: Stories from the Ford plant”

Del Peterson

TCAP retiree, 1949-1991

Interviewed by Peter Myers, May 2017

QUESTION

When did you retire, and what are some of the jobs you had?

DEL PETERSON

I retired in 1991 and returned many times after that to the plant to assist in model changes. They liked to hire retirees back for model changes because they already knew how to make things happen. They knew all the people and all the procedures and you didn't have to start from zero. So that was kind of handy. And also went to several other assembly plants for several other things. Major model changes started up, like in Norfolk assembly and the Ohio truck plant and places like that. And so I did quite a few things subsequent to retirement that still involved Ford in many different ways.

QUESTION

What was the final job title that you had?

PETERSON

The final job title I had was two: nobody at Ford tended to have just one job. So I was the Government Regulations Coordinator and the Electrical Specialist. For product. We had two people doing government regulations one of them was responsible for the safety and particularly the emissions that the plant itself put out, from the paint department fumes from the smoke stacks or whatever. A fellow was responsible for all of those things. I was responsible for the safety and for the emissions adherence to regulations on emissions for the trucks that we built.

QUESTION

Talk about your first interest in cars while you were growing up. You had said that you took a family car trip in 1940 that brought you to the Twin Cities when you first saw the plant.

PETERSON

We were based in Wisconsin but my dad was a person who did a tremendous traveling with his job. Our parents were from Minnesota. So, we were up here on a little vacation trip the summer of 1940. And I don't remember the exact circumstances but we had plenty of time to do some extracurricular activities. And it was decided we'd go and visit the Ford plant because they conducted tours which they did then and for many, many years afterwards. And I remember going through the plant and observing all the things that were going on in there and I was just absolutely fascinated by it. And one of the things I most specifically remembered was the beautiful showroom that they had. Which was discontinued after World War II. A lot of things changed after the war. But that showroom was absolutely beautiful with the kind of thing that Henry Ford himself insisted on having at each assembly plant. And I've got other photographs from other plants that showed the same kind of thing, the same kind of tile on the floor, the same big, beautiful potted plants and the lights hanging from the ceiling. It was a really beautiful place. And they would have samples of all kinds of Ford products in there including the Fords,

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the Mercurys, which had just come out the year before. And the Lincolns and of course the trucks. And the Twin Cities plant was kind of an interesting place in those days because it made just about every kind of thing that said Ford on it. We didn't make Mercurys, we didn't make tractors and some of those things, but we made the really high volume things, all the Ford cars and all the Ford trucks. Up through a ton and a half and two tons. That trip was absolutely memorable. I will never forget that one. It was a beautiful sunny day in addition to everything else, and that really solidified my interest in sticking with the automobile industry. For me, there was never any doubt what I was going to do with employment. I had to assume that I was going to work in the car business. And that's where I wound up right out of high school.

QUESTION

What age were you during this trip?

PETERSON

In 1940 I would have been 9 years old. Just old enough to find something interesting and pay attention and the memories had got pretty well-glued into the cranium there.

One thing I remember about that tour was when we were out in the assembly plant walking along the lines. Back in those days the 1940 Ford trucks and the trucks of that general vintage for several years required some pinstriping. On the sides of the cab and the hood and all that. And older people might remember those. They don't do too much of that anymore. But they had a fellow who certainly looked like he was well into his eighties who did that striping by hand. And it was just fascinating to watch him, so steady—nothing to guide him except his own technique, and he would put the stripes on those vehicles. On the hoods and on the doors and across the back of the cab. And that was one scene I'll really always remember. And I found out later that that man's name was Connie, Connie somebody. He was a guy who was really valuable and not easily replaced by somebody who walked in the door.

QUESTION

It's hard to train somebody to have that steady of a hand. Talk about your summer job there in 1949; how did that come about?

PETERSON

I'd just graduated in 1949 from Murray High School in St. Paul. And so I just went down to the Ford plant one day to see if they were hiring for cranking up this new '49 Ford. And I got to go in and have an interview with the industrial relations manager, Ingevall Jensen. He was a really slender, tall guy with a big, broad smile. And the first thing he did was shake hands with you. And I thought that was kind of nice but later on I found out that the reason he did that was to find out if your hands had calluses. If they didn't he knew darn well you wouldn't be there more than a few hours because your hands were going to be split open. So I had plenty of calluses having worked for a garage in Little Falls back in 1944 and subsequently I worked in gas stations and all those places changing tires. So I had no problem having some calluses. So, one thing led to another and they hired me right on the spot. And I went out on the line. I was paired up with an old timer and we were given the job of evaluating certain subassemblies on the front suspension as they arrived from the boxcars. And we had to calibrate them. Ford at that time, since this was a brand-new car with a completely different suspension than the old ones, we had to keep track of castor and camber measurements on the front suspensions that make sure these things that the vendors were sending us were going to be okay because we had no further

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way of checking that in the plant. Later on when the car was finally built, they would do the toe-in, of course. But, we had that job and anyway the old-timer, the first thing he said to me—he says hey kid you’re crazy to come to work here, they’re going to close this place. Well, for many, many years afterwards a lot of people came and went but the Ford plant was still there. And finally it’s now reached its end. It’s kind of a sad thing but that’s what happens.

PETERSON

But that summer and subsequent summers I would quit and go back to school at the University of Minnesota in engineering. And I don’t know if they actually planned it that way but I wound up being a vacation replacement because they didn’t shut the plant down for vacations in those days. People would go individually on vacation. And when they did that, somebody would have to replace them. And almost every day I would come into work. I was often given a job to replace somebody who’d just gone on vacation. And that worked out pretty well because I was used to working on mechanical things and putting things together. I did have one job, assembling fuel pumps, where replaced a guy who was ambidextrous. And I was not. And they had to give me some help every half hour they would throw in a fellow to catch me up on the fuel pump because I couldn’t do everything with both hands the way this other fellow could. But they didn’t mind doing that, so, we had to keep up because if you run out of fuel pumps, the line stops and 2,000 people sit down and wait for the line to start. And that’s a super “no, no” in the Ford plant or any other high-volume plant, with 45 or 50 units an hour coming off that line.

QUESTION

Were they doing one or two shifts back then?

PETERSON

It was then a one-shift plant. Ever since it started in 1925. That changed when they dropped the passenger car out in 1970....’78, ’79, when the new Ford for ’79 the Ford car was the first of the downsized cars. And that’s when they dropped the passenger car line out completely and became exclusively a truck plant. And people were concerned at that point because they thought well, now it’s going to be an awful big layoff. Well, instead of laying people off, they hired 300 people because they went to two shifts on a truck. So that worked out very, very nicely. And from then it was all trucks. And later on, the Ranger. In 1992, they finally decided because there were so many F-Series plants and the Ranger was doing quite well that we completely dropped the F series. And it was interesting to see what happens as a result of dropping something like that. The body shop – back in the days where they built both passenger cars and trucks – would have separate conveyors for these different product lines because they were so completely different. When they stopped the F-Series, the body shop, all its welding guns, all the tools that were lined up on the conveyor that did those vehicles, it completely stopped. Nothing would happen. It was just absolutely amazing. Within about two weeks everything started disappearing off there because welding guns you can use those anywhere. A lot of them are not really specialized, they’re universally applicable. So the body shop would need some spare guns or something and they’d go over and swipe ‘em off that line. After a while that line was just completely decimated and they finally took the whole thing out.

QUESTION

When did you get hired as a full-time employee?

PETERSON

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That happened in 1955. I had just gotten out of the Navy, off active duty, I mean I was still in the reserves. But so I went down to the Ford plant one day and—I don’t know why I did it but I left my uniform on. And this is not like a military town. You show up at the Ford plant in some kind of a military uniform and you’re going to attract a lot of attention. So anyway I felt kind of sheepish about that. I talked to them about a few things and I wasn’t really interested in getting a job there anymore because before I left the Navy, having been in naval aviation, I already had a job lined up with Lockheed Aircraft. In Santa Monica, California. And my brand-new wife and I were going to go out to California. So, it was nice, we shook hands with a lot of people and I left. Well, about two days before we were going to move to California and start our new job out there, I dropped back into my mother’s house and my mother told me somebody from the Ford plant called up they’d like to talk to you. And so I called them up and they wanted to know if I’d be willing to come down for an interview. Make a long story short, I got hired back as the very bottom in the manufacturing engineering department of the design draftsmen. And I thought this is kind of neat, if I can do this and not have to move all the way to California and start a whole new complicated life there, this is something I know something about. So that actually happened. And the way it happened was really kind of strange and a little bit unpleasant but what happened was, just prior to them calling me, there had been a railroad crossing accident I believe in South St. Paul where the railroad tracks are in one of those suburbs down there. And Harry Kenny was the superintendent down there, the main man in charge of the entire body shop. He was trying to cross that and he didn’t make it across, he got hit by a train and he was killed. He died in that accident. Well, it turns out there was a progression of events then. A whole bunch of people all down the line got promoted to the next job up and that did leave an opening in the lower levels. So that’s how I got on salary. And stayed there for the next 40-some years.

QUESTION

What were some typical projects you worked on as a design engineer?

PETERSON

Design draftsmen – that was just a title, really. You would try to cook up hand tools for putting the car together. You would cook up fixtures, you would work with purchasing on buying things like tables, worktables and things like that. And you could actually design certain kinds of things. Ford had standards for everything. Ford had standards for conveyors and all those things. So you could very often tap into standard drawings. And you would go ahead and decide that you could make a drawing that shows these standardized devices going through various parts of the plant and use these things. And so that’s really a design draftsman job. It’s a lot more than draftsman.

QUESTION

What other jobs did you have between then and your final job as the Government Relations Coordinator?

PETERSON

There were many. The next job I had was a tool engineer. That was with power tools. And I found power tools absolutely fascinating and I was responsible for switching this assembly plant over to a very inexpensive line of air tools that were commonly in use: drills, screwdrivers, impact hammers, things like that. And we saved a great deal of money by using these relatively standard, not too expensive tools.

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QUESTION

I’ve heard that some people got around the plant on bicycles or tricycles. Did you have one?

PETERSON

Originally when the plant opened, I guess they had a few bicycles around the place. But I was the first person in the plant for decades who was allowed to have a bicycle. I bought a Schwinn bicycle. It was a girls’ bicycle because I wasn’t interested in having to get off and on the thing all the time. A girl’s bicycle was handy so I could just step right through the thing, I had big baskets on there. And I used that to haul all my power tools around to try out for this, that and the other thing. And they on the various assembly lines so that was handy, having a bicycle. That caught on and pretty soon a lot of people – the plant at that stage was one great big building it’s a million square feet and 22 acres and that’s a lot of walking. So all of a sudden, a few more bicycles started showing up. And then they started having problems with bicycles. People would do silly things with them. They would try to cross a bridge that was opening. And they would not quite make it and there were a few accidents. And eventually the utilization of bicycles became a tricycle. They would have maintenance people using tricycles that would carry all their tools and parts. And the maintenance people it was really handy for them. But the individual people if you ranked highly enough in the plant you would have an electric cart instead of a bicycle. And not everybody who was of a certain age is able to really successful ride a bicycle, we found out. But I got pretty good at it.

QUESTION

You mentioned pneumatic power tools—were they using electric power tools before then?

PETERSON

That’s another little story. The standard kind of power tools that were used originally were something called high cycle. And what they mean by high cycle is that they were 180 cycles per second instead of household current. And the reason that they would do those things is two-fold. The tools were really heavy-duty. They were really needed for these heavy-duty jobs. And the other reason for using them is there was no theft involved. If you were going to use our standard household and after-market type tools, they would disappear pretty darn fast. Electric tools. So there was no theft of them and they did just fine. But at that stage, you couldn’t control the tightness of things with an electric tool. But with an air tool, you can control it very well by various clutches that you can use and also just by varying the air pressure that you feed to the tool. So you can really designate very carefully how tight your nuts and bolts are going to be. So that was handy.

The change to air tools was quite gradual. It took a couple of years. And finally one day we decided that almost every tool in this plant – as far as I know – is an air tool. How about we find out if there are any electric tools left anywhere? Because some people would use them in a non-portable manner. They would set ‘em up on a bench or something to do some sub-assembly work. And some of those things were kind of hidden back in corners behind main lines. And you didn’t even know that they were there, so, we decided the way to find ‘em all is shut down the power supply. We shut down the high-cycle power supply and all of a sudden, guys kept popping up from back in the weeds here and there. ‘Hey, my tool doesn’t work anymore!’ That’s how we found out where the last of the high-cycles were. So we had to make some adjustments based on that so these people could continue to do their job without the high-cycle tool. And air

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tools are still in there. They are much more precise than it used to be with magnetic clutches and all kinds of things.

QUESTION

Did some of the line workers or others come to you with an idea for new tools?

PETERSON

Oh yeah. One of the fellows who was pretty good at that was the plant manager. He had a lot of ideas. I should try to make this long story short. Do you remember how the cars back in the late sixties and the seventies would have a fairly large C-pillar behind the rear door? And there was a weld joint in there. They don't make these cars that way anymore. They've changed all of that now. But that weld joint was right across that C pillar. Behind the window that is in the door that's ahead of it. And that thing was full of solder. It had to be filled with solder so you could make it smooth. And then you would send the vehicle into the solder grind booth and they would grind that thing down. So it would be nice and smooth so it would not show any defects through the paint. Well, that never did really work very well. We found out that when the vehicle would subsequently go through the paint department, and it would go through an oven, these dissimilar materials would swell up or shrink and you'd wind up with lumps, so it was a terrible problem. And Ford was not unique in this. GM and Chrysler, they had the same problems. The plant manager he decided we gotta do something about this but we turned out we were actually working on the wrong thing. But we had to invent a two-motored belt sander that these guys could hold against that thing and go like this and to really smooth it out. And the belt would tend to eliminate their wiggling around of an operator trying to hold a normal power tool. That helped, but not enough. So you still had the problem of dissimilar metals going through a hot booth. And the cure for all this was the vinyl roof. If you can't fix the damn thing, cover it up. And that really was one of the main impetus I think for the vinyl roof getting so popular. It was not only popular with customers, it was popular with the plant. One problem just went away right there.

QUESTION

Some people started their career there working on the line and eventually enter the apprenticeship program and learn a skilled trade. What were the various pathways for a line worker to move up into different jobs?

PETERSON

They would probably demonstrate some skills and they would probably express a desire to move on. Working on an assembly line is much harder than many people realize. It's the repetitiveness, and you just can't stop. You have to keep going. And for a lot of those jobs, almost anyone is going to want to do something different. And for a long time, maybe all the time, one of the ideal things was to get to be a to work in maintenance as a sweeper. Now, the outside world might think a guy who's working on the assembly line that's a pretty good job but a sweeper, that's janitor work. That's nothing. Well, the janitor can lean on his broom once in a while. So those were actually jobs that were regarded by most hourly workers as an improvement. If you get to be a sweeper. So there were lots of different paths.

QUESTION

Talk about the makeup of the workforce in terms of male, female workers.

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PETERSON

As I recall, when I started in '49 and for many years afterwards, we only had three women working in the assembly line. There were women who worked in the office in the accounting department and labor relations and places like that. But, on the line there were only three women. And all three of them were on the instrument panel line. They were all three people who remained after the war. And they kept them on because they had very good dexterity with their – you might say feminine – hands. And back in those days, we didn't have all these plug-in wires that we have now. A lot of the wiring you'd slap a wiring harness into the back of an instrument panel and all of a sudden you've got all kinds of eyelets all over the place that'd have to be put over a terminal. And you gotta grab a power tool, put a little nut on there. Back in those days, those ladies were very good at doing that very fine work on the instrument panel. So that's where they all were.

QUESTION

What can you remember about what people said about working in the plant during the war?

PETERSON

They hired a lot of women to work, particularly on the side of the plant that did the aircraft engine parts. The aircraft engine parts that we were working on were for a radial engine called the Pratt Whitney R-2800. Which was a very famous and highly utilized 18-cylinder air-cooled radial engine. A big, round engine like they used to see on airliners. And we would receive certain parts from a vendor that was making castings or stampings or whatever. But they wouldn't be finished and we had the job of finishing these things. And cam rings for those big engines was one thing. They also finished oil pumps and a few other small parts for those things. And that's where the women were mostly. I did hear that one woman was working on the other side of the plant where they made the M8 Greyhound armored car. And she got famous because they goaded her into going too fast on the test track one day and she rolled one of those things and luckily I don't know how she managed it but she didn't get hurt. But she was probably quite embarrassed, being the only person who ever rolled an M8 armored car outside of the military's action.

That armored car business was really kind of strange because the government couldn't make up their mind what they were going to do with it at the beginning. The beginning of the war was really something—everybody was hurrying and scurrying and trying to do the right thing. They had designed a huge armored car, a 6-by-6. And when we eventually made the M8, but that was substantially smaller. But they were all 6-by-6's. They initially came out with a great big monstrous one that was twice as big as the original M8. And it turned out it was a complete fiasco. It would not work for the military, it couldn't pass their test or anything, but we made several of those at the Twin Cities plant. It had two engines. And then they started on the M8, which got to be pretty famous. There were two Ford plants making the M8: this one and Chicago. And they were mostly given to the British. And they're the ones who gave it the name Greyhound 'cause that thing would really go. It was a rubber-tired tank. And it would go three times as fast as a tank. And I guess they made a lot of good use of it.

QUESTION

In the mid-eighties the plant went through a major conversion so you could make both the Ranger and the F-Series...what was involved in that big retooling?

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PETERSON

The Ranger was a completely different thing. One thing you’ve got to keep in mind is that there are basically two different ways of making motor vehicles. And the trucks are still being made a body on a frame. And cars are not made that way anymore. And the Twin Cities plant never ever made a unitized-type vehicle. So that’s whole different kind of an assembly plant. So when we did various things when we switched from passenger cars to trucks, and all those things, there wasn’t that big a transition because the arrangements of the plant, the body shop, the paint department, the trim department, and the chassis department, the repair area, and all that inspection stuff, all those things stayed the same because the procedures were not nearly so different. A unitized vehicle plant is completely different.

QUESTION

I assume after that point you would make both types of trucks on the same assembly line?

PETERSON

Part of it would be the same. But not all of it. The body shop would have exclusive conveyors and fixtures and things for the one type of truck because they were so completely different. The cab, the box, were completely different on the little Ranger. So those would be different. But then they would join up and they would go on the same line in the trim department where your trim things were kind of consistent. You didn’t have these major parts that had to be so different. And the same thing on the chassis line. You would have both the Ranger and a full-sized pickup coming down the same line. But in the body shop, they had to have different facilities for each.

QUESTION

Thinking broadly from starting in ’49 to your retirement in ’91, what were some of the biggest changes to the process of assembling a vehicle? Some of the major advances in technology and machinery you witnessed during your time there?

PETERSON

Over the years there were a lot of changes and many of them were really huge improvements. Back in about the middle fifties the industry came out with a tubeless tire. You can’t imagine what a change that was for an assembly plant. An automobile requires five tires. And until the advent of the tubeless tire, you had a wheel, a tube, a valve stem, and the tire itself. And you had to put all these things together. And you had to fill the tube up by putting air through the valve stem. Monstrous job. Monstrous department. To do all of this. All of a sudden here you’re coming along with a tubeless tire. There’s no tube. The first thing you do with a wheel after you paint it is you insert that valve stem into the wheel and it just sits there. You don’t even take the cap off. Because the next thing the wheel does is go down a little conveyor laying on its side. A tire drops onto it cattywampus bent to one side. And an automatic machine comes down and ramps the tire onto the rim. And the next thing that happens, the tire automatically gets pumped up by a great big rubber sleeve that comes down over the thing and fills it around the rim. It goes poof. And you got thirty pounds of air in the tire. Now all you have to do is balance it. So you set it on a balancer, a guy looks, the balancer tells him where to put a weight to make sure it’s all right. He slams on a little weight and off goes the tire. This is a marvelous change. The customers might have thought, boy, tubeless – that’s good for us, you know, it’s probably a modern thing. But the big advantage was for the assembly plant. And that was just one of the things.

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PETERSON

And the other great advancement was the robots. They robotized everything and it became a thing that's one of the reasons they had to build that training center. Which got a lot of use. Because people in the assembly plant, nobody was raised with robots, but you had to have people who knew how to work on these things. How to schedule them, how to set them up, how to fix them when they went crazy. And sometimes they would do that and all of a sudden there were a lot of new trades for people who knew how to deal with robots. And actually the Twin Cities plant was pretty early in inventing some of their own robots in the first place. There was one fellow in the body shop, I think it was. He was the maintenance guy. And he decided that the first robot that I can remember, we had a cross line in the body shop and you'd have the front of the car hanging over the end of the conveyor. And the car would go sideways. Well, there was a joint between the floor pan and the firewall of the car. And it called for a multiplicity of spot welds all the way across there. Well, they had to have a guy standing there, cachonk, cachonk, cachonk, cachonk—this guy figured out how we could make that thing automatic. And he did. And the plant manager was behind him on it. And those two guys cooked that thing up. So all of a sudden there was one of our first robots. The person who used to have to do that highly boring job was no longer there. The car would get there, there would be indexing. And as the thing moved along the conveyor, the thing would do all the spot welding right there. And that was just the beginning. And it went on from there. And finally in the later years, we would have things like one of the most interesting robots toward the end of when I was there was the windshield sealer robot. It used to be that you would put a windshield in and there were many different ways of doing it—a rubber gasket around the windshield and you'd have a pull cord you'd pull it. The gasket flanges out and all of a sudden, the windshield would well you can't do that anymore. So the windshield has to be glued in. So we had robots that would pick the windshield up out of a rack, put it on the cab coming by, and in the interim, it would hold it on a fixture. It would automatically put the sealer all the way around the windshield. Pick the thing up, lay it right on the truck, and hold it there for the specified amount of time so that the adhesive would set. And all of this was automatic. But you know there were almost always one or two guys with green coveralls there hanging' around there. If you had green coveralls you were a maintenance person. And that thing would screw up often enough so that they liked to have somebody around there who would fix it quickly because that's a line-stopper. If that thing quits, the line stops.

So robots were a big deal and it's highly common now. And the other big thing that happened was—one of the things everybody hated but we had to do it was the quality control methods. as espoused by W. Edwards Deming. The guy who set up Honda and Toyota with quality control methods. And we don't need to go into all that but his methods were proven to be very good. Ford decided to pick up on that and in a way we used to think that we're almost overdoing this. Because you still have to build this thing, you can't do everything with a bunch of charts. And it got to be kind of interesting. Every once in a while, they'd bring a whole airplane load of big executives in from Ford in Detroit. And they would come into the plant and they would go around and they would look at everything we were doing. They would make suggestions, we'd have a big meeting and they'd say you know you're doing that kind of thing there but I saw over in Norfolk they were doing it different. Well, why don't you try that. And those were interesting meetings. As it turned out later on, they hardly ever even looked at the product anymore. They would go along the assembly line and the truck would be going along behind all these guys. But they'd be looking at the wall full of charts. Showing how the quality is going. And it got to be

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almost too much to a lot of us ordinary guys working around the plant. But, it was. If you're trying to hit a bullseye on a target, crawling up on the bullseye is not the way to do it. You bracket it. And I think that's what they do with some of these things; they overdid it just to hammer it home that these things have to be done and then things would moderate and you'd get something that you could work with.

QUESTION

Any occasions where the Twin Cities plant came up with manufacturing innovations that were adapted by other Ford plants because it was such a big idea?

PETERSON

Yes. That brings to mind the suggestion program. Ford had a really good suggestion program and a lot of people won cash prizes and all that. I even turned in a suggestion once just for the heck of it because it seemed like a little bit of a waste to be putting this little baggie on this end of a wire here. About three months later they came around all excited and said, 'Hey, you just won a new car!' I was awarded a new car. So, the suggestions that were made would come from everywhere. But I'm not sure that that's what you're talking about. You're probably thinking about more bigger deals than that. But that really worked with some of the biggest ones because the guy working on the line, he's the guy who knows – he's right there! And if he feels like it he can think about his job and he can probably figure out some better way of doing it. And they would do it.

QUESTION

Thinking about the guy who came up with the idea for automating all those spot-welds between the firewall and the floor pan. Would that idea have gone on to other plants?

PETERSON

Oh yeah. That and many others.

QUESTION

How common or frequent was it for the line to have to shut down for one reason or another?

PETERSON

There would be shut-downs. Quite often something would go wrong with a tool there would be a con—conveyor break-down, something in the facilities. and another frequent cause of a shutdown would be somebody misreading a schedule. And getting the wrong parts. And of course we all heard the old jokes about the three-door sedan. Sometime I think people would on purpose do things just because they were so bored or who knows why. They'd put a two-door body side on one side of the car and a four-door in the other side and see how far it's going to get before somebody notices. So, those kinds of things happened too. I had one interesting thing that I happened to see personally, and that was during the Ranger production, after we got into a lot of electronics. At the time they came out with electronic fuel injection and a lot of the electronics in the engine, there was one little gadget that would either be in the trunk or your car or it would be someplace in the cab. And it would be an emergency shutoff switch for the fuel system. It was just a little tiny switch like that. And it would have a sensor in it that if there was an impact, like in a collision or something, that thing would open the circuit and it would prevent fuel from flowing from the fuel pump. It would shut the fuel system down entirely. Well, to make a long story short, what had happened was these little switches would

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come about a hundred and fifty or two hundred in a carton. All segregated like an egg crate. And somebody apparently one day was carrying one of those boxes. And they dropped it. Well when they dropped it, all those things went to open. They were shipped to us in a closed position. So that the electricity would flow and you didn't have any problems starting the car at the end of the assembly line. So we kept putting these little switches in on the trim line and it goes through the whole trim system with this switch in there and now, nobody knows it but those switches are all open. It comes to the end of the line; the car won't start. It took a little while to figure out what was wrong. None of these cars would start because all those switches were open. So once we figured it out then we had to go through the whole line and push the little button on top to reset it.

But see, that's a quick stopper. But you know your people in the repair area, for example, they have seen everything that can happen to the thing. They would quickly isolate a thing like that. And it's just because their long experience. They know what to do next.

QUESTION

Any experiences you might recall of severe bodily injury to a worker because of some mishap in the line?

PETERSON

No, not on the line. We did have accidents. We had some pretty strange ones. A lot of people decided not to wear wedding rings anymore because of what happened to one of the supervisors in Trim. A lot of parts will come to a car on a conveyor. And there'll be some part that you want to put on it and it comes on another conveyor hanging from a hook. And you take something off of this hook and you put it on the car and assemble it. Well, I don't know exactly how it happened but one of the supervisors got his ring caught in one of those and he wound up losing his finger. Because the conveyor went up in the ceiling and off went his finger. So, that happened many, many years ago. So there were accidents and a lot of them were kind of crazy ones. But you get so used to everything that's going on that you can see an accident coming before it can happen.

QUESTION

When did the plant go to two shifts?

PETERSON

That would be in 1979. When they dropped the passenger car. The dropping of the passenger car and going to all truck was concurrent with two shifts. They hired 300 people more instead of laying anybody off.

QUESTION

What do you remember about the couple national strikes that went on while you were there? How did they affect the salaried people like you when the line workers were on strike?

PETERSON

I remember a couple of meetings. All the line workers who were interested enough to do it were forming a picket line out in front of the plant, and it wound around and they were joking with each other and holding signs and all that. Meanwhile, the salaried people were inside the plant. And they would have meetings figuring out what are we going to do next. I remember one guy

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who had stayed up all night in the plant trying to make sure that nobody was going to come in there and try and do some damage. And he had the place locked up except for that. So, there was not real animosity, I never really saw that. But those times had a certain amount of tension. And then it would all go away and they would settle the thing and everything went back to normal. It took a long time for the Twin Cities plant to become really strong in the union and also a lot of things that were happening at the same time like the development of OSHA. That worked right in with a lot of the things that the union was very interested in. OSHA and its interest in safety standards for workers. I mean, when I was working there, long before OSHA, I had a lot of jobs that OSHA would have shut the plant down. But I was just a green kid, and you tell me to do something, I'm going to do it.

QUESTION

How would you describe the state of union management and relations during that time?

PETERSON

Overall it was quite a spirit of cooperation. Everybody knew that the Twin cities plant was the highest quality truck plant in the country. Back in those days there were many many plants building the same product. Nowadays there's maybe only a couple or even only one that makes a certain product like a Fusion or all the Fusions come out of a certain plant in Mexico. Back in those days, a lot of plants were making these the same product, and the F Series pickup was one of them. And Twin Cities was always either number one or number two. In all the quality standards that were measurable. You would measure quality primarily by things like warranty costs. These things come back to bite you in the long term. And it was kind of funny because I don't know who started it but between us and Norfolk, Twin Cities and Norfolk, were always— one of us was number one. And finally one of the plant managers bought a porcelain pig. Whoever was number two in the latest quality gradings would have to get that pig and they would have to keep that pig and until they would get to be number one again, and they would send it back to the Twin Cities plant. That thing went back and forth for years. But it's those kinds of things that everybody's interested in and I think in general, the kind of people you have in Minnesota want to do a good job. Whether they're already salaried or whatever. They want to do the best that they can. And I always had that feeling about our hourly people.

QUESTION

I've heard a lot about the pride in the work they did, both hourly and salaried workers. What was it about this plant that lead to this high degree of pride?

PETERSON

I'm sure a lot of people tried to figure that out but the type of people who are here – it's farm country. It's an agricultural kind of mood that people have. Maybe the fact that there's a lot of Scandinavian people and Polish people, people who are pretty famous for being hard workers. Which may not always be the case, and I can't imagine how'd you ever try and differentiate that. And one of the things about this plant that people really loved was its location. Believe me, this is the only assembly plant anywhere that I know of situated in a park. It's just beautiful. Visitors who used to visit me when I was in Government Regulations – I was always being audited. By some expert from Detroit. And these people who traveled to all the different assembly plants, they loved to come here because it was such a pleasant place. A lot of places not so pleasant. The atmosphere that surrounds the plant is pretty terrible in some areas. And I don't know, you just put all these little things together.

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PETERSON [continued]

Well, one of the things that's kind of interesting is that I was told that when they did have tours, which they don't anymore, out of all the North American assembly plants, this one had was second in a number of tours. Tourists who came through. And the only one that exceeded it was Dearborn itself.

QUESTION

Was there a lot of pressure from Ford people coming in to check up on things, pressure from the top?

PETERSON

There's always pressure between quality and getting production. And you know, it's almost as if those things are contradictory, that they'll never be able to work together. And so it's a constant battle to make those things work. But quality nowadays is really good. You can't hardly find a bad car. But we had a lot of auditors. And they did a lot of things. They auditors for example on the safety aspects, we had to demonstrate to them how we checked brake fluid. Brake fluid, if you have any moisture in brake fluid, you're going to have no brakes in that car eventually. So that was a big deal. And it's a kind of thing that nobody really wants to pay attention to. Every batch of brake fluid comes in in 55-gallon drums. Every batch you have to test. You have to boil it, it's a whole bunch of little procedures to make sure that there is no moisture in that stuff. And occasionally we would find a bad barrel and it would have to be sent back. So these were the kind of things that you'd have to take the auditor down there and actually have the guy do that job. Watch everything he did and make sure that he adhered to every single step along the way. Including a clean rag to wipe out the vessel that you're going to put the fluid in. And that's just one little example. And so there was a lot of people looking over our shoulders.

QUESTION

Were you there for the Q1 Award? And what does that mean to a layman?

00:22:05 DEL

I can't remember exactly but I think that would tie in with the Demings types stuff. It would tie in with your ability to adhere to this statistical process control that they started using. And if you're able to satisfy those requirements plus your warranty looks really good, they check up and they coordinate all of these measurable standards. And whoever comes on up on top, if you meet a certain level, you become a Q1 type thing. But I wonder if they're still doing that. These things get into vogue and then they go out of vogue. You can't leave anything alone, ever. If people get too used to anything, it gets to be too common, too ordinary, somebody's got come around and shake things up. And change something. Start something new. Something different. Something better. You hope.

END