Steve Pettinger discusses his career as a skilled trades electrician and member of the UAW/ GM Safety Lockout Team at the Fisher Body plant in Lansing, MI

Michael Fleming: We're the Fisher Body Historical Team here on October 14th, Friday morning at 8:15. [0:13] Could you please state your name, uh, and, uh, address for me?

Stephen Pettinger: My name is Stephen Pettinger. It's P-e-t-t-i-n-g-e-r. [typing throughout recording] I live at 868 South Waverly Road, Eaton Rapids, Michigan.

Michael Fleming: [0:29] Your marital status?

Stephen Pettinger: Married.

Michael Fleming: [0:32] Um, children?

Stephen Pettinger: I have seven children.

Michael Fleming: [0:37] Um, education?

Stephen Pettinger: [Inaudible 0:40] graduate from high school. Uh, I had training in the military in my service duty with the U.S. Navy. After that, I lived in Grand Rapids for a year, worked for National Cash Regis-, Cash Register Company on computers. And from there I left, came to Lansing, uh, went through several jobs, found out what I didn't like and that's when I applied and got on my electrical apprenticeship. I went through a four-year electrical apprenticeship through the International Brotherhood of Electrical Workers, um, after which I completed two more years and [inaudible 1:19] got my contractor's license and my master's license.

Michael Fleming: [1:23] Military service?

Stephen Pettinger: I had, uh, a little over three years with the navy. When I went in the navy, they had a program if you joined before your 18th birthday you got out with full service qualifications on your 21st birthday, so.

Michael Fleming: And I am Michael Fleming with the Fisher Body Historical Team.

Doreen Howard: Doreen Howard.

Doug Rademacher: Doug Rademacher.

Cheryl McQuaid: Cheryl McQuaid.

Linda Johnson: Linda Johnson.

Marilyn Coulter: Marilyn Coulter.

John Fedewa: John Fedewa.

Michael Fleming: It's very interesting the education that you've been through, Mr. Pettinger. [1:58] Uh, could you tell me the date and the department that you hired into when you came here?

Stephen Pettinger: Originally when I hired into General Motors, uh, I was hired in over at the 652 location at the old main plant that used to be there. They sent me over to Plant 2. I worked at Plant 2 as an electrician over there for, uh, just shy of 10 years, at which time when they completed the Reatta program they laid a lot of skilled trades off. Out of the 54 electricians they had in that plant at the time, they kept 12 and laid the rest of us off indefinitely. So at that time I waived my 30-day wa-, wait rights and started receiving mail and then I went to work down at the Tech Center down at Warren for General Motors. I worked down there approximately 7 ½ months. Uh, when Lansing had openings in their plant to where they were hiring skilled trades back, I was high enough on the seniority list that I was the first to be asked to come back if I wanted to, so I filled out the paperwork and when I transferred back to Lansing that's when I hired in at Fisher Body and that was in July of 1992.

Doreen Howard: [3:19] And your original hire date was?

Stephen Pettinger: My original hire date was, uh, November 28, 1983.

Doreen Howard: Okay.

Michael Fleming: You're more or less what we consider an original GM gypsy [laughter], uh, which means that you've been quite a few places throughout the corporation. [3:41] Um, the shift that you came in to and, uh, uh, some of the things that happened on your first day, can you talk about that, please?

Stephen Pettinger: The first day when I was hired in I – they put all skilled trades on second shift. Um, generally, at that time, the electricians were always put out in the old main line, underbody line. That's the line where the [coughing] assembly process, all the component parts to make up the undercarriage for the body was, was all assembled and built and welded. Um, it was a different experience for me 'cause prior to that I had been used to working in construction – uh, well, I shouldn't say that, other than the 10 years that I spent over at Plant 2. Um, it was a different atmosphere to come in to because at Plant 2 when we built the Reatta automobile, the production rate over there was eight vehicles an hour, [laughter] which was a drastic difference coming to Fisher Body because the rate when I hired in they

were building, uh, 54 bodies an hour and that increased. That was – of course as time went on, as the year went on, that always increased and we averaged, on the old underbody line we would average anywhere from 68 to 82 bodies an hour that we were building.

Female: [5:10] 68 to what?

Stephen Pettinger: 82.

Doreen Howard: Hm, the people...

Stephen Pettinger: The people, the equipment...

Doreen Howard: ...were movin'.

Stephen Pettinger: Yes.

Michael Fleming: [5:19] Talk about the underbodies so they all know what you mean.

Stephen Pettinger: The underbody is where they build out component parts. The first section is the motor compartment. The motor compartment is made up of the rails, the side rail assemblies that they can fasten the outer fender components to and is made of the tie bar assembly across the front end that holds, used to hold or still does hold the radiator assembly, the component parts all around the front end. That was the com-, the motor compartment section. The floor pan section was the middle section that's tied to the dash and the motor compartment. Uh, the floor pan is the area obviously that pulls the seats and the interior compartment of the, of the automobile. And another segment of that line was the, what they call the rear pan assembly. The rear pan assembly is what had your rear wheelhouse, your tail panels, etc., for mounting the outer skins, etc., of the vehicle and where the trunk space was located. These three components were all built up of smaller subparts. On the main line that I worked on, these three components were entered into a line and would go through a series of presses where they had welders in'm that weld all the, welded all of these components together.

Uh, the end product when they come off at the end of the line was a total underbody and that was ready to be shipped over to another segment of the plant where, uh, other additional components were added on as they slowly built up to build the shell of the automobile on it.

Michael Fleming: And it would go over to what was called Cartrac and that they would assemble the side rings and the rest of the vehicle and that would in turn come down to the line. So the 68 to 82 an hour was fast enough to keep the line running at about 54 to 58 cars an hour.

Stephen Pettinger: Yes.

Michael Fleming: So the underbodies in Cartrac had to move faster than the line just to keep it moving.

Stephen Pettinger: They had a bank, uh, between our underbody area, what they referred to as a bank. It's a holding area where the conveyor system holds quite a, quite a quantity of underbodies prior to those underbodies being delivered to the Cartrac line for more assembly process. Uh, our bank on our line – of the two lines, I worked on the M-line system. Of the two lines, our line held 106 underbodies between the end of our process and the beginning of Cartrac, so sometimes Cartrac could pull faster and we would have to keep up. Other times if they had issues, then we still had to, had to keep building underbodies to keep our line full so that we wouldn't be holdin' another department up.

Doreen Howard: [8:18] So the purpose of the bank was?

Stephen Pettinger: To create a float so that, uh, anytime any given department should have issues, if they had, uh, problems with their welding equipment or any part of their process, if there was a slowdown in that area, uh, the other, the other departments could fill those banks and keep the banks full so that when the other departments that had issues or problems started pulling vehicles, um, they had a, a full bank to pull from. And it, it created a flow between the different departments so that any time any department had an issue, the other, the other departments if they were lagging could get caught up and keep the flow going so that, uh, anytime somebody wanted to draw, they could maintain whatever their rate per hour was for the vehicles, for the component that it was building.

Michael Fleming: [9:09] Steve, when you came in, um, you – were there any retraining or any, uh, opportunities to retrain, uh, at General Motors? Can you explain that process as to how you [paper tearing] got up to speed with our, our process?

Stephen Pettinger: Yes. When I hired in at Plant 2, um, the robotic industry was a new concept to any of us who had come out of construction. We were aware of robots and how they were used in the industry. As far as working on them and the training involved to be able to work on those, troubleshoot'm, program them, uh, General Motors supplied along with the UAW in a composite effort supplied the training to where they sent all of us to some training classes and that was across the board. It didn't matter if you was a new hire coming in in skilled trades or if you had been here for any, any amount of years prior.

General Motors in their process of constantly updating equipment and going to a newer technology, um, has to supply training programs in order to keep their people up to speed on what's going on with the, the latest technology and what's being utilized in the equipment they're building. Um, we were always going through a constant training every, every cycle of any given vehicle. When they went to a new cycle of vehicle, a new platform, uh, they would introduce new equipment, uh, perhaps a different robotic manufacturer. Each manufacturer had their own idiosyncrasies so they had to supply a training program that people could be involved with and get to know the equipment so that they would be more proficient on working on the equipment out on the floor, so there was constant training going on. It's, it's always been interesting.

Doreen Howard: You started to touch base on some of those changes that happened. [11:09] Um, describe how it was as far as you said you were in the body shop?

Stephen Pettinger: Correct.

Doreen Howard: [11:16] The, the way that it was when you first came in to the way that it was when this plant closed the, what's the difference as, as far as the technology and the changes that you've seen?

Stephen Pettinger: Initially, in the body shop to build up small component par-, parts and on the lines they used to have for the weld process production people would have to handle manual guns, weld guns. A lot of times the guns were big, heavy, cumbersome to handle. Um, so the trades were always involved in working with trying to assist them in making the equipment easier to handle, uh, whether it be through lift assisted equipment or whatever so people could handle the guns and be a little more efficient doing their job.

The interesting part to me was that initially the old lines they had an area, several lines where they had areas that we used to refer to as the jungle because of all of the manual weld guns, all of the black electrical cables that would come down to feed those transformers and weld guns that people used on the line. It was a cabling system that was just black, a whole line of it for several hundred feet. And it was always funny because if you were trying to locate somebody you could go that line, go down that line of cable. If anybody stepped into those cables, they disappeared, you couldn't find them. [laughter] So the old applications where they [throat clearing] had the manual weld guns was really interesting. Uh, it was a lot of maintenance, a lot of work to keep those going. The people did a fantastic job of working and manually handling those guns.

As the processes changed, they've, they started going to hydraulic weld, uh, robots first. The issues they had with the hydraulic robots, uh, is with

hydraulics you have O-rings for all the cylinders and seals, while as the equipment gets used, those O-rings will wear. As they wear, they develop leaks. The various components of the robot, as those cylinders, as the O-rings wear they would not maintain their degree of accuracy. Initially, what, what I'm referring to is initially when you program those robots, you would program the welds to be at given locations or spots [inaudible 13:41] welding process for whatever [sniffing] task was it is gonna do. Um, as the O-rings wear, those programmed spots would alter or change and start drifting, so they were a constant battle to go in and constantly, um, keep reprogramming those so that the, uh, the location [coughing] of where the welds needed to be could be maintained. The other issues they had with the old hydraulic robots were they would develop leaks. The lines feeding the hydraulic systems for, for the weld guns and the lines develop leaks. They'd spray and of course being a welding application, we would have fires and I think a lot of people remember the fires we used to have. So after that, General Motors, from what I remember, went in with a company called FANUC and originally...

Female: S-...

Stephen Pettinger: FANUC, F-A-N-U-C, it is now FANUC Robotics. Initially, General Motors, uh, went in as a partner with FANUC and the original robots that they built were electric robots. All of the motors that drove the different axis on those robots were electric motors. Uh, the initial robots that they built they used to call'm GMF robots, of course for General Motors and FANUC com-, composite effort. After they developed those robots, they tested the robots and it was interesting to me because they would take, they took an electric robot, set it up in a room, put up a side hydraulic robot. They programmed these, both these robots to do the same task and they fired'm up and they let these robots run doing the same task for seven days. In that process, they recorded any failures or downtime between the two robots. At the end of the seven-day run, they found that the [throat clearing] electric robot maintained all of its position points that it was programmed to without having to go in and constantly [inaudible 15:48]. The hydraulic robots had constant failures due to O-ring wear, uh, drifting of the, the weld spots, breakdowns.

The other problem they had with the hydraulic robots if they were shut down for any period of time, the hydraulic fluid got cold. When they would first fire them up, you had to stay out of the way because you never knew what direction it was going to take off. They might run into another robot. [coughing] If somebody was in the way, they could have hit somebody. So they were, they had, they had multiple problems with hydraulic robots, the fires, the danger to people, uh, the inaccuracy of the weld programs, just a multitude of problems. So when they went to the electrics they found that the, the, the reliability was so much greater they,

they couldn't believe the difference. So General Motors worked with FANUC for, if I recall, approximately five years. After that period of [throat clearing] time, General Motors split back off and FANUC became independent. They're still in business today. They, they build a very reliable robot part of the reason I still believe is because they were sort of the new kid on the block, they started out with robots. Since then, a lot of other companies have started building robots but they don't have the experience and the time of development that FANUC has, so it's very interesting when I go look at all the different robots now.

Michael Fleming: [17:12] While you're talking about robots, talk about how you started your day as an electrician, whatever department you were in and talk about that department, uh, and what your duties were to begin your shift, uh, as far as the, um, as far as your, uh, what we call spot welding or resistive welding and if you've ever gotten wet?

Stephen Pettinger: [laughter] Yes. [laughter] When I first started out, before the robotics I started on, they always put new hires on the manual weld guns. And part of your process at the beginning of the shift, you generally had to [thumping] come in and put new welding caps on the shanks of the weld guns. As a new hire, everything was explained to you once. [laughter] Generally, the second day you come in, you, you don't have anything down to a, a habit or a science yet, so you forget to turn the water off or you forget to clamp off the water line. So I don't think there's any electrician that's ever changed caps that's not pulled the cap and got sprayed [inaudible 18:23] [laughter] after he completed his task had to go out and change into dry clothes again and come back down to the floor because that's just part of the process. Um, it's part of the learning curve and part of the process of working on that equipment. It was always fun because if I went into any of the stories, I wish there could be a book printed on some of the, [throat clearing] the stories that the skilled trades have had with experiences just such as that because it would be a best seller for, for a comical book or a comedy book because there's a lot of experiences we could relate and talk about but pretty funny instances, uh.

Doreen Howard: [19:06] Was that one of the initiations that...?

Stephen Pettinger: Yes.

Doreen Howard: ...they gave to the new hires that...?

Stephen Pettinger: Yes.

Doreen Howard: ...came in?

Stephen Pettinger: It's – you, you were given the equipment, the tools. It was not like you were not informed but, you know, you're new on the job. You're, you're, you're trying to work with everybody else. You're trying to learn the system so that you're going to show them that you can do your part and you're, you're going to be part of the team. While in that process of trying to say hey guys, you know, I can do this, [laughter] well, you forget things and you get wet and [laughter] you all have a good laugh in, in the process. That's when you really become part of the team. If you, if you didn't go through that, if you didn't get wet, if you didn't go through some of those, that's part of the indoctrination. It wasn't done to be mean or, or facetious or anything like that. It was done – it was just part of being a tradesman. After you all have a good laugh when things like that happen, you just become part of the team, which makes it nice because, uh, it doesn't matter whether it's in production, skilled trades, the people, that's the best thing I like about people, we're all people.

We like – this is what we're about. We can build vehicles. We can, we can do a lot of different things but we [inaudible 20:26] people and we, we find ways to work together and have that companionship, camaraderie. If it's in skilled trades, the fun you have, the indoctrinations you go through, that's just part of it. It makes you part of the team and, and I really enjoyed that because you feel like you're part of the team or part of the group.

Michael Fleming: Steve, you've been at quite a few different plants and you had an opportunity to work with a few different workforces. [21:00] Can you tell us what, what the Fisher Body plant itself, what type of an environment is that to work in versus working in the other places that you worked?

Stephen Pettinger: I found it scheduling-wise, because of the other places I worked, the demand for the work you were doing was greater, there was a much higher demand and I'm basing that on the two plants that I worked at prior, one when we built the Reatta when you're only building eight vehicles an hour, that's really not very high volume. You still have work you need to do but it's not as demanding where you're on your feet being there as much. Um, then when I worked down at the Tech Center, you're working more of a maintenance, as a maintenance person down there working on equipment but because of what the Tech Center does, there's not any high volume or high demand that, that you be there every minute.

When I hired in to Fisher Body, I found it really interesting because the rate per hour that you're building vehicles, um, because of the demand that you learn the equipment, pay attention and you're on your feet a lot more taking and maintaining that equipment. Even, even during production, things will happen, you have to, you have to be there. You, you, you always want to be there to respond so that you can – basically our job is to

keep that line running. And the biggest thing I found, [clicking] there's a much greater demand, uh, of your time and I didn't mind that, that's why I hired in [inaudible 22:42]. Uh, I figured they hired me in, they wanted me to do a job. I enjoyed the fact that when I did hire in, being new, people will test you to see (1) how you're going to respond, whether you're going to be a part of the group; uh, the other, whether you're going to do your job and of the different stories you always have a few that don't always respond and they get a bad name. Uh, there's a matter of personal pride and I think the majority of the people at Fisher Body have proved they have that but there is a matter of personal pride.

My job was to – my customer was production people, so if they had issues with any of their equipment, to respond to me. I always enjoyed working with them because I had built a rapport with them. If they needed something, I don't care what it was, I would do my utmost to try to give them that and it could have been simple things. If somebody wanted, had a, a locker that they set up for a coffeepot [throat clearing] and wanted power to it, if the line was running good, I would go do whatever was necessary and run power and put plugs in there so they could have their coffee. Um, to me that's just the human nature thing of us working together being people. So I didn't want to get off track but it's really interesting because the demands are on all of us. We, we have, we have to have, we have a product we have to put out. We have so many an hour we have [inaudible 24:14] [throat clearing]. In that process, we find ways to do that, still have fun and get the job done with the greatest quality [inaudible 24:23].

Michael Fleming: You're certainly not off track and that was where I was more so going was the environment, the people within Fisher Body versus the people in the other facilities. It has always been said that the people at Fisher Body tend to not let each other fall, they always help one another, they're always there for you. If you're fallin' behind, they'll help you get whatever it is done until you learn the process. [24:50] Could you explain, do you have any experiences like that here?

Stephen Pettinger: Yes. When I hired in, one of the things that I've always done and most tradesman do [inaudible 24:59] I constantly walked the equipment, the process that I was responsible for, so the press line, the motor compartment, the dash lines, [throat clearing] the [inaudible 25:12] lines, things that I had to take care of and maintain. I constantly walked and I would study each one of those, go through and study the, the production process. First off, to me to be a more effective tradesman, you need to understand the process. Once you understand the process, then you can get into understanding the various components from my, from my viewpoint, the electrical process that needs to take place for that produ-, for that given production process to, to go from start to finish.

Uh, what I was alluding too was that in being new and learning the equipment, everybody knows you're new, you're a new face. You get tested by, by certain people. They'll, they'll make things happen with the equipment that'll make it fail just to see if you could look at it and find it and, and that's part of the process of learning. Um, the interesting part of that, I was tested when I hired in the Plant 2 also. At, at Fisher Body, the things that happened here, um, various production people would test me but they found, they, they found that I would, I would go after it. I would find the problem. I would learn the problems. After a while, you could see a pattern develop of different things that would happen and after a while when they found that they couldn't [inaudible 26:37] so to speak anymore, then you were part of the team.

But the thing they enjoyed most was that if there was a process that went down, I didn't sit and read a paper or read a book. I was over there responding because to me that was the fun part, working with people [inaudible 26:56]. You can have a lot of fun with them and I enjoyed that [thumping] because you get tested. Uh, after they feel that you've passed the test, after they feel that they have a, a vote of confidence in what you're doing that you can take care of the, the equipment, they worked [thumping] great with you but you'd have to go through a test process. And I don't, I don't blame them. I would do the same thing because first off, in my opinion, you got to find out whether the person is worth their salt or not. [laughter] That's the way I look at it. So to be tested is – I enjoyed that because I have to prove where I'm coming from and prove to them that I can handle the job. Once that's proven, I know they can handle our job. They've been doing it a lot longer than I have, so it made it a lot of fun working with them.

Doreen Howard: I...

Stephen Pettinger: I really enjoyed that.

Doreen Howard: I, I want to take you back a little bit. You, you started, um, talking a little bit about safety issues. Uh, you talked about fires and, and, um, the machines being locked out and things like that. [27:59] Um, tell me a little bit about your current position that you're in and, um, some of the safety requirements and safety issues that, that you've come across in your current position.

Stephen Pettinger: Currently, I work in safety lockout. Um, after I had worked here a couple years here at Fisher Body, I was looking at some of their lockout processes and what I did not understand for General Motors being a corporation that had multiple plants and going and looking at lockout systems that they had at Plant 1 and at Plant 3 locally here in Lansing and, uh, th-, then over to

Plant 4 and looking at the various lockout processes including what we had here at Fisher Body, I did not understand why General Motors didn't have a common lockout process they used throughout the corporation. They had a lockout procedure.

Doreen Howard: [28:57] Explain what a lockout is.

Stephen Pettinger: Lockout is a lock system that's developed to lock out all energy sources on equipment, including a spring, something that, something that would be held in a, in a spring compression [coughing] state that could be released and injure or hurt somebody. Locking, lockout involves supplying pins if need be that, that components can be pinned so they can't move. Uh, shutting down electrical power, bleeding off pneumatic or air, uh, air lines so that there's no stored energy that could be released while somebody is working in the machine that could possibly [sniffing] make something move, injure or hurt them or put them in harm's way.

So in looking at lockout, the initial systems they had were very cumbersome. And people need to understand lockout like any other thing that's been done within General Motors whether its robotics or whatever, there's an evo-, constant evolutionary changing process. The thing that I looked at and the reason I initially went into lockout was (1) from my experience of being in the business, knowing specifications and knowing standards, I felt their standards were not being followed and not through anyone's particular fault. Uh, if you dealt with engineering, engineering people go through school to be an electrical engineer, mechanical engineer, whatever. In that schooling process, their safety training is usually very minimal or limited. They usually pick that up on the job wherever they hire in. So to point fingers at anybody, I really don't point fingers at anyone. It's, it's a learning process for all of us.

Um, the initial lockout process that, that they had, uh, an example, anything fed electrically was all fed separately from the [coughing] main bus, the main power buses, [coughing] so instead of having a main distribution panel for a tool that they would bring power in the main, main distribution panel and then distribute the power over the tools so you had one lockout point per se electrically, they did not used to do that. Um, so it was very cumbersome. Uh, the old press line that I worked on, to do a proper lockout required 39 locks. For a skilled tradesman to apply 39 locks, when are you going to have time to get in there and do the job you need to do? So in looking at these cumbersome methods of doing things, I didn't feel we were where we needed to be from a lockout standpoint.

After I took the job, I started getting involved first off with the people on the floor. I would take ideas the people had on the floor, based on their experience. They knew the equipment. They know the equipment. They

know the machine. People on the floor are the greatest resource. And I would take that information, take it into meetings with engineering and I would ask engineering why is it that if General Motors standards say that you need to have as much as possible one electrical source, [sniffing] one pneuma-, one main pneumatic source or one hydraulic source for shutting something down and locking it out, why is it when you design the tooling you don't do that? Of course [thumping] they, they were unfamiliar with it, so I would bring in the standards and specifications that General Motors had to help train them, bring them up to speed on what we should be doing, my point being that from a standpoint of anybody that's trained in lockout that has to work in those cells or on the equipment, let's make it quick and simple. If we make it quick, fast and easy, that's our human nature, we'll use it. If it's bulky and cumbersome, people won't use it.

And all the plants across General Motors proved that when they did time studies, um, people, trying to make people use lockout, they found that the systems were so cumbersome that people would short cut'm and sometimes put themselves in, in jeopardy when they shouldn't have to. In looking at that and working with engineering, we started slowly changing the lockout process to put in a main, main power distribution panel for a cell or station so when you shut it down, it shuts down all of the robots, the tools and everything electrically in that, in that station. The only other electrical we had to deal with is the power that's needed [throat clearing] for all the weld controllers. Because of the amount of power that's used for all the welds, there are several lockout points but their, their pneumatic systems they used to have all individual feeds. They started building a main [inaudible 33:55] and then they had to build a secondary manifold and everything that needed pneumatics they would feed off the secondary manifold, so from a lockout standpoint you have one point to lockout the pneumatics. Electrically what used to be as much as 50 points electriti-, electrically to lock out, we got'm down to 7 points.

Doreen Howard: Wow.

Stephen Pettinger: So by really focusing on this and getting engineering involved, they also took that information [sighing] to, uh, NAO, which is North American Operations for General Motors and they started working on it and started looking at it and they started liking these ideas and they started incorporating these as they started designing and building the plants. So the good thing is, bottom line, my concern is people on the floor, our safety. Being a tradesman I see a lotta, lotta places where they could be exposed to a hazard. If I work with engineering to try to design those out, then it makes it a lot safer environment for all of us to work in. My bottom line is I [throat clearing] want people to go home the same way they come in.

Michael Fleming: I'm sure. It sounds as though you had the old classic case of the right hand not knowing what the left hand was doing. The process was there, they had it in writing but the engineers had never seen it or knew anything about it.

Stephen Pettinger: Correct.

Michael Fleming: So they couldn't [inaudible 35:22]. [snapping]

Doreen Howard: [35:23] What, what was the timeframe of this? Was this, um, a department that was there when you, when you first hired in or is this something that they brought on and brought, uh, hourly employees into that or was this something that engineering...?

Stephen Pettinger: Initially when they started lockout, they really started taking serious looks at lockout in 1982.

Doreen Howard: '82.

Stephen Pettinger: In 1982, Fisher Body put one electrician and one pipefitter on lockout, the reason being the Fish-, the, uh, pipefitter had the knowledge where they could look at any pneumatic systems or hydraulic systems that they used to have a lot of with the old hydraulic robots.

Doreen Howard: [36:08] And that was – they covered the whole entire body shop?

Stephen Pettinger: The, the whole plant.

Doreen Howard: The whole entire plant.

Stephen Pettinger: Yes.

Doreen Howard: Two people.

Stephen Pettinger: Yes.

Doreen Howard: Okay.

Stephen Pettinger: So they had developed lockout placards and lock systems for the equipment and it was a growing process as they, as they learned to work with the, with the equipment also. And the reason, it was my understanding in asking a lot of questions about that, the reason they put a pipefitter and an electrician on was those were the two primary [sniffing] sources of energy that most equipment had that was most detrimental to people gettin' hurt.

Doreen Howard: Now from what I recall what you talked about earlier, ‘82, wa-, there was a lot of equipment in here at that time compared to the amount of equipment now, so...

Stephen Pettinger: Right.

Doreen Howard: ...that seems like that would be an overwhelming and daunting task for two people to...

Stephen Pettinger: And that...

Doreen Howard: ...to do that.

Stephen Pettinger: And that’s the way it was but, uh, they, they meaning management, recognized that they needed to, to address this and try to work towards making a better, safer environment for all of us to work in. Um, initially, they put two people in, these two tradesmen. [throat clearing] The tradesmen went out and assessed one machine at a time and they would have to develop lockout placards and make them put’m on the equipment as well as locks. It was a slow process. I think, [throat clearing] from my understanding, from the time they started in 1982 but I came, I started in lockout in 1994, so that 12-year period ahead of me coming on the job [sniffing] the people had gone through the body shop because the body shop being the most important because that’s where they have a lot of individual equipment, a lot of personnel as far as production people handling parts and components on all of this equipment, so they started with the body shop first. That was the, the biggest mindset to get that [throat clearing] under control. After that started gettin’ caught up, then they started reaching out and getting into the paint department and the trim department to look at any equipments that were there but...

Doreen Howard: You talked about a placard and other lockout stuff. [38:22] What exactly is that and what did they, what did they actually put on the machine?

Stephen Pettinger: A lockout placard is a – now the new style which we have are, are, um, a form that is 8 ½ x 7 or 11 x 17 inches. On that form, [throat clearing] it has a graphic, a pictorial graphic [sniffing] of the tool and it’s like a bird’s eye view of the tool so that around that you can locate, uh, any lockout points whether it be electrical, pneumatic, hydraulic, whatever the points are, you can identify those by a, we have a, a tag system. Of course, electrical being E, pneumatic or air being A, [thumping] so they just, they have, now we have common letters that represent those various energy sources and there’s also a color attached to those now so that graphically on that placard people can more easily recognize what the hazards are, what the lockout points are, whether it be electrical, pneumatic, steam, whatever it is.

Below the graphic area on the placard are four columns. The first column identifies the energy source, electrical or pneumatic, hydraulic, whatever. The second column identifies the location where this, this is located on the machine or in relationship to a building column. The third column defines the action the person needs to take to lock it out, whether it be shutting off the valve, let, letting the air bleed off, uh, pulling an electrical disconnect switch. And then the, the fourth column when you actually lock it out is looking for a validation. So if you, if you shut a pneumatic valve off [thumping] and it's supposed to bleed the air off of the load side of this valve to lock it out, the problem you have with pneumatics is with the various cylinder components on the equipment you still have stored energy on one, one side or the other of cylinders. So this, at this validation column you need to put the information in there to tell people to manually activate valves to check and make sure that [thumping] all air is bled off so that there's no stored energy for their own protection. The lockout placard also has, uh, tags that are [inaudible 40:48] around the equipment so each point defined on that placard is defined by a tag that's actually on the valve or the disconnect switch or whatever the component is that has to be locked out, so that's part of the process.

And then we have a captive key system. Initially when they started lockout, anybody that was trained in lockout was issued three personal safety locks and they were to use these locks to protect themselves for whatever segment of the tool they was going in to lock out. Now we have, [paper tearing] it evolved into equipment having more than, requiring more than three locks. While from common sense standpoint, they knew people were not going to carry a bushel basket of locks around with them, so [throat clearing] they started what they developed what they called a captive key system. Any station that required more than three personal safety locks they developed a captive key lock system. What they actually did is developed locks. So if you had a cell that required 12 locks, they would put 12 locks on that cell that would all be keyed the same. The captive key part of it was the point that the, the key was locked up in a captive key lockbox so when people used that to lock out the system, then they had to put their personal safety lock on the lockbox to ensure that somebody couldn't go around, get the key and go around and un-, unlock what they had locked out.

Um, it's a process that General Motors and other companies have found work real well. Um, the people are more apt to use it because they don't have to carry a bushel basket of locks around with them. Uh, the systems are in place where they're readily usable and that was part of the goal and the insight we had, put everything out there that we can to make it quick and easy for people to use because my outlook is that it's human nature,

um, if it's quick and easy to use, they'll use it. If it's cumbersome, well, there might be areas I'm going to take my chances.

But I had to – I drove this point a lot with engineering. Uh, initially they used to ask questions why you do that. And I, and the only way I could express to them to get my point was that I asked them if you had a computer salesman come in and tell you he had a computer here that would do everything you want it to do, the catch is you have to go to school two months to learn how to operate this computer, then you have another computer salesman come in [inaudible 43:23] says, well, my machine does that same thing but it's menu-driven [inaudible 43:28] self-taught, you can start using it immediate. Which one you gonna buy? The point is whatever is quick and easy to use, that's our human nature. So I keep looking at it from the standpoint try to keep simplifying it, make it quick and easy to use, keepin' the safety first but then make it quick and easy to use so that our people would be glad to use it, then I'm happy because I know I can sleep at night 'cause they're goin' home with all of their fingers intact and that's important to me.

Doreen Howard: Steven.

Doug Rademacher: Steven.

Doreen Howard: Oh. You...

Doug Rademacher: [43:58] Steve, what was the environment within trades working with, uh, females and, uh, minorities within the trades group that you saw yourself or between the groups?

Stephen Pettinger: [sigh] Initially, most people – I've never had a problem with that. I, I like people. Um, initially, when I go back, I've been in the trade now for 36 years and when I started out I would see little things that happened and at the time I was an apprentice. When you're a first, a first-year apprentice you're on probation for that whole year, [sniffing] so everybody tells you if you're really going to get along in the trade, to get by your first year, you keep your mouth shut, [coughing] do what you're told. Uh, well, after that first year was done and probation was lifted, you got three more years of training as an apprentice but you spoke your mind. And I worked in construction at that time and I would see little things that would happen. And without going into detail, uh, of course the experienced guys would think it was funny and I would not see [beeping] any humor in it because I would ask them, you know, how, "Is that the way you were treated when, when you started your apprenticeship?" "Well, no but..." "Well, then why do you do it to somebody else?" Um, I would see that. It happened with, uh, Mexican people that would come on and with blacks and with women and it always infuriated me because we're people.

If you demand respect from somebody, you don't demand it, you earn it. And for – to see that kind of thing go on, it used to infuriate me. [throat clearing] As time went on, as I worked with more people, I started seeing that loosen up. The people that used to pull pranks or whatever, they started alienating most of us that didn't like that and then they found out that they were really a minority group themselves for pulling pranks. So the lesson that we try to convey and I try to instill that in my kids is that I was always raised to treat people the way you want to be treated, I don't care who they are. It does not matter who they are. It does not matter what lifestyle they come from. I don't care if the guy is a street person who lives that way or if he's the wealthiest man in America, they're equal to me because we're people. That's what we're supposed to be about.

So I would see things happen and I would hear comments and I would say, "Wait a minute." One instance I remember is, is a woman apprentice and how she was being treated and I would say, "Well, wait a minute, did you take the time to train and show her the same things that you took the time and train, to train the apprentice [inaudible 47:07]?" "Uh, well, no." "Why?" "You as a journeyman are supposed to be training apprentices. [throat clearing] An apprentice is an apprentice. It doesn't say that they're Caucasian or they're black or they're Spanish American or they're women or whatever, it doesn't say that. It says they're apprentices. Treat'm the same." And it's taken a long time but I've seen a lot of that has fallen away and I think being persistent in that has helped that.

Um, I found it interesting, uh, one of the electricians I presently work with by the name of Tom Lu-, Tom Douglas works also in the body shop. I remember Tom, he started the apprenticeship a year after I did, Tom and I always got along together. We always shared learning together as far as looking up code problems for electrical code. We learned a lot together. We just grew together. Um, but it wasn't only Tom, it was other people that come up through that I felt they weren't given the equal opportunity as far as how they were being treated and I, I never, I never went along with that. I think if, uh, I got to live with myself and I, I want to be remembered as a person being fair and that's all I ask of anybody else, be fair. So I, I don't want to paint a bad picture. People have come a long way but I think it's because of constant effort of everybody trying to put these type, types of things behind'm and get rid of it. It's taken a long time but I'm, I'm glad to see it, it's come around to a point now I don't see those issues on the floor anymore.

Doreen Howard: Mm-hm.

Stephen Pettinger: I think a lot of people have woke up to the fact that it doesn't matter, we're all people.

Doug Rademacher: Well, it's obvious you feel that way. You just shared that Tom came in and you, you learned and trained together. You said Tom was – obviously Tom is a man to you. [49:18] Uh, what is Tom? Is he, uh...?

Stephen Pettinger: Tom, Tom was a black man.

Doug Rademacher: Okay.

Stephen Pettinger: Uh, I think about all the black people I've worked with, I don't look at them as a color. To me they're people and I, I got to thank my parents because I feel that's a part of the way we're, we were raised as Christians [papers rustling] and in my mind God does not look at me for what color I am. In my mind, God looks at my heart. What am I doing to work with people, to live with people? [papers rustling] That's important to me because that's the way we were raised. So I don't look at people as being black or Mexican or a woman as far as a racial type thing or a minority type thing. I don't look at them that way. It's important to me, when I was raised I was always taught if you want respect you earn it and it's true. It's – I've never seen anybody be able to demand respect and have it. They can demand respect from a power position but the respect is it really there? Somebody may do it because that person has a title that they have to follow but as far as the person really respecting that person, do they really know'm enough to respect'm? I doubt it. I mean these are my own personal outlooks but, uh, I think it's important.

Doreen Howard: On...

Stephen Pettinger: People need to understand that.

Doreen Howard: [51:01] On that, that note, um, can you give me your personal thoughts on Fisher Body and the [coughing] closing of the plant and, and how that's affected you personally?

Stephen Pettinger: Well, first off, it's sad. [throat clearing] Fisher Body, it's my understanding, this, this building, this plant is one of if not the oldest plant that General Motors has and to see them build vehicles for over 100 years and then to see it shut down it is sad. I understand why. Uh, the new systems demand a more efficient process in order to be competitive in the, in the automotive market. Um, the processes we had here were more cumbersome, uh, a little more archaic in how things got done. We got the job done, we built quality vehicles and we put out the quantity per hour that they wanted but as far as being efficient in, in how material was handled, how it's supplied to the lines, it's not an efficient process. So I understand why they're going to the new plants and building them the way they are but it, it's sad to me 'cause I look at the, the human side of it.

Um, my wife's family, a lot of her relations worked here at Fisher Body, retired here from Fisher Body. She had two uncles and a cousin and several other relatives that worked and retired out of here.

Um, so the history of this plant, me coming into it, uh, even being a late bloomer coming in late as far as in my trade, um, I really enjoyed working here. I enjoyed most the people. All of the people here was great to work with. It's for as – what surprised me, Plant 2 was a small plant in relationship to the number of people who worked there [thumping] but the people worked together more as a family and I figured going to a bigger plant, uh, I wouldn't see that but I was wrong. When I came to Fisher Body and looked around at the people and saw how they worked together and the things they were doing, the common effort they had and the fun they had doin' it, working together to do it, uh, that was what was important to me.

To see all of the people who were involved in the Body plant, the percentage of them being laid off indefinitely or going into Jobs Bank until the new plant comes up to speed and stuff, some of the people may enjoy that but the bottom line, I think once we're back in the plant all together again, we will continue on to be that way. We will continue on to be a family, to build a good, good product. The biggest thing that mean, means something to me is that a lot of the people that are transferring over are the same people that built the reputation this plant had so – and that reputation was built from working together and enjoying each other as people not, not from browbeating or any, any of that tactic in my mind. It's, it's more of a people wanting to do a good job.

Doreen Howard: [54:17] And you will continue on to the Delta plant yourself?

Stephen Pettinger: Yes. [throat clearing] I have approximately eight more years to work before I retire. Yeah. Because of that, I'm moving to the new Delta plant and I've been involved with the engin-, engineering there and the safety there and a lot of carrying over some of our processes that we had here and it's been interesting.

Michael Fleming: Very briefly, you said you had, um, some relatives that worked here prior or your wife had relatives. [54:52] General Motors products, uh, or specifically Lansing-built products, did you [inaudible 54:59]?

Stephen Pettinger: Yes.

Michael Fleming: [55:02] Tell us about it, could you tell us about it?

Stephen Pettinger: Um, I have owned General Motors products. I've always bought General Motors products. Uh, initially growing up in Lansing, to me I, I know that

Ford made a product, Chrysler made a product, uh, but I figured I come from a GM town prior to even working for GM, I just figured I'm gonna support the town, the community, so I bought GM products. I started out, being in [throat clearing] construction, of course I started out with a pickup truck, so I drove pickup trucks all the time till I come into the plant. But, uh, my son bought – and this is something interesting too, is my, my children [papers rustling] know how I feel about our products, domestic products and, uh, they buy domestic products. My son, the first car that he bought was a Grand Am GT. He was in the service at the time. That's what he wanted, that's what he bought. It made me feel pretty good. I says, "Why did you think to buy a Grand Am?" He says, "Well, you work there. I kinda wanna keep you workin'."

Male: Oh, that's great.

Stephen Pettinger: Well, a year later my eldest daughter had gotten married and, uh, she and her husband needed a car. They went out and bought a Grand Am. I thought [throat clearing] this is interesting. This – maybe somewhere along the line they really were listening but I didn't think they were. [laughter] My, my, my children bought, buy General Motors proje-, products. Uh, working here at Fisher Body, my kids were buying Grand Ams. Uh, the ones that were unsure, my third daughter bought an Alero, so they were buying our products. To me that's important because [beeping] part of our economy, part of what we do, keepin' the money in the community is important for the community to grow.

Doreen Howard: Mm-hm.

Stephen Pettinger: Um, I was never in favor of foreign products coming in. I know we can't stop it but for foreign products to come in, I'm not a proponent of that. I never have been. Um, the basic reason being I don't care if they build plants here in the United States, yes, people are working in those plants, people are making a livelihood, the other segment that sometimes people lose sight of in my mind is where are the profits going. Eventually that undermines our country because the profits are going overseas, wherever it may be, it's going overseas. That undermines our country and undermines our economy and I, I'm always afraid that [phone ringing] [inaudible 57:51] people are going to wake up too late. So it's important to me and I – that's probably why my children buy General Motors products. I still drive pickups. I myself haven't bought Grand Ams and stuff but my kids do and all our products have been General Motors products.

Doreen Howard: [58:09] Does any of your children work here?

Stephen Pettinger: No.

Doreen Howard: No?

Stephen Pettinger: No.

Doreen Howard: Okay.

Michael Fleming: Well, Steve, it's been a wonderful interview. I want to [phone ringing], I want to thank you for coming in.

Stephen Pettinger: Thank you.

Cheryl McQuaid: Thank you, Steve.

Male: Yep, thank you, Steve.

Female: Thank you, Steve.

Stephen Pettinger: I hope I said enough and got enough information for you.

Female: You have.

Male: It was wonderful.

Female: [Inaudible 58:25]. [recorder clicking]

/mlc