

Nuts and Bolts: Stories from New Britain Manufacturing
Connecticut Humanities CT at Work Project
CCSU Students Rainysha Spann and Alexandra DiBacco
Interview Subject: Peter Morran
Factory subject worked at: Fafnir
Date of Interview: February 14, 2014
Location: NBIM

Interview with Peter

Alex and I met Peter at the New Britain Industrial Museum at 11 in the morning on February 14th. Peter, a man in his 60s, is wearing a white shirt, khaki pant, and has enough light in his personality to make you forget how nasty it is outside on this wintery day.

R: How did you get your job at Fafnir?

P: See, I got out of the service, like a lot of people, and basically I think that was the first place I went to get a job. And they hired me. That was right after the Vietnam War, well it was during; Vietnam was still going on, so I'm a Vietnam era veteran. The company was booming at that time so they were hiring a lot of people. They were hiring as many as 40 people a month. And then another question you'll probably ask is a lot of people who worked in there had worked for years. I had to do a thing on the 25 year watches, and we had close to three hundred 25 year watches. Now that's a lot of people. Even though there were three thousand workers, three hundred were getting their 25 year watches the same year. They were people who were hired during the Korean War. You know, so they were hiring at that period of time. So they started hiring an awful lot of people; like I said, about forty a month.

R: And did you need any experience, or did they just hire you off the street?

P: No they just hired me. The reason why was because there was so many different jobs in the factory. There was clerical work, there was machines, and they would train you on any of the machines. If you already knew how to run some machines that would be a plus. But, they were hiring so many people, they trained people. They had schools, training schools to run certain machines, like the automatic bar machines, which were made by New Britain Machines. I'm pointing over there because the machines are over there. Matter of fact, I'll show you. Come on. This is important to the conversation. Fafnir Bearing, the main machine that the bearing starts with is this machine right here. It's called an automatic bar turning machine. A lot of people called it the screw machine. This one has eight spindles, Fafnir had six spindle machines. It depended on how big the steel you were turning. What those machines did was you'd put eight bars in there, inside the machine, and the machine had eight tools. Each tool did a different thing than the last, and this would index. Every time it indexed, that bar would be in a different

location doing a different machining job. The last one would cut the ring off. It was the most important machine at Fafnir, a lot of companies actually.

A: So what did you do at Fafnir?

P: What did I do? What didn't I do? I didn't run the machines. I wouldn't have been very good at that. I worked in the sales department, I worked in personnel, I worked in engineering, industrial engineering, and I ran the suggestion program for a number of years. So doing the suggestion program I got to, all of the people actually had suggestions, so I got to know everything about every machine.

R: Just not how to run them.

P: Nor did I care to. (laughs) No, yes I could run some of them. I could probably run some. Certain ones I couldn't, I just wouldn't run. Not no way in hell, cause some of the machines were pretty turdy. I mean at the end of the day you were a mess. In some departments they actually had showers, cause the guys had to take a shower everyday because they were so filthy. And they'd always keep a set of clothes in the ford shop they'd call it. You should've seen the shower, it was rough. I was really rough, the guys got really dirty. It was called the ford shop, where they forged large aircraft bearings. Too bad we don't have a forge bearing here. That starts out as about a seven inch piece of round steel. They cut it off, heat it up, and they punch a hole in it. And then, they keep heating it, they keep heating this steel and it goes through a series of dies. Eventually it forms this (points to bearing), but it starts as a solid piece of steel. They heat it up, turn it over, flatten it say like it was clay, punch a hole in it, then it goes through what they call ring rollers. They keep heating it and heating it, like it's a piece of clay, but it's not, it was like 1800 degrees. And you end up with this.

A: It looks heavy too.

P: Well the guys that worked there, you should've seen them. I mean, you never seen guys as big as these guys. They would take that ring there, and some of the rings were much bigger, they can take it and hold it right on the end of a tong. It was 1800 degrees coming out of that furnace, so the people in the office would say, "Oh those poor men down in the forge shop, they must be so hot down there." Well, fact is, it was always hot there. They would think of them when it was 100 degrees out, they didn't realize it was always hot. So it made no difference. And from what I found out, they said if it was 100 degrees outside, they didn't find it any hotter because there was so much heat down there and no moisture. You probably burned off all the moisture. So when they left there, even though they were in a hot environment, when they stepped out of the building it was hotter. If you could understand what I'm saying, it was hot, but it was always hot. And in the summer time there was no humidity. They said it was worse in the winter, because you're in the heat and then the building was open, it was like a

barn, so you didn't have to step very far and you were outside. So you'd go from that extreme heat to the cold, so it was really worse in the winter time. In the summer time it was all the same temperature all around you, but it was hot. So people in the office, they'd walk through there and say, "Those poor guys." That's the only time anyone ever felt bad for them. They didn't stop to think that a pretty tough job anyway. But, they were compensated for it, it was one of the highest paying jobs in the factory. If we were to go back 100 years ago it'd be not a high paying job. It would've just been a real tough job. It was a real tough job, but it required a lot of skill. Because you need to know what temperatures with the steel, because you're turning, you're shaping it. And it's got to be just the right temperature when you put it in the ring rollers. Then you take it out and put it back in the oven and then you keep doing furnaces and furnaces; you would put it back in the furnace and take it back out and you kept rolling it and moving it out. If you didn't have any skill, they would be junk, it would break. Now where does that bearing go?

R: They're used in a lot of places, aren't they?

P: Well that particular bearing over there. Those bearings are used in only one thing and anybody who worked at Fafnir knows exactly what they are.

A: Is it aircraft?

P: Correct. They're the main engine bearings in a jet. Have you ever seen a jet engine?

A: Huge!

P: You ever see what it does, it spins? It spins on that.

R: I would've never put the two together.

P: Well jet engines, you could see the fan spinning. It's gotta spin on something, right?

A: And it spins on that.

P: It spins on those bearings. So how critical are those bearings?

A: Very critical.

P: Right, they're very critical. If the bearings fail, what happens?

R: It would crash.

P: It would crash, right. And no airplane has ever, ever crashed because of a failure of a bearing. They replace them periodically; they have a life span, they pull them out of the engines. They put new ones in or they refurbish them.

R: About how long do they last, would you say?

P: I have no idea, quite a while. But I would bet it goes by hours. If you had a Pratt and Whitney guy tell you how many hours. But automatically after so many hours they come off. And they refurbish them and then they put them back in. So that steel hub is very critical, it's gotta be perfect. And the steel costs almost nine dollars a pound, thirty years ago, just the raw steel. Now you gotta end up making the bearing out of that steel. And it's called M50 tool steel. It has to be perfect, it can't have any impurities. And that steel, they call it double vacuum melted steel so there's no impurities at all. You ever seen steel made? There's always a big slag on top of it that comes off with all the junk that's in iron and rises to the top. Well that stuff, any of that junk there is gone so it's perfect. It's as good as steel as man could make. Literally it's as good as man could make. Man can't make anything better than that steel. And like I said, it came in and the men in the forge shop formed it into the rough shape, not the finished shape. When it got done it was called a donut.

A: When it was done?

P: Yeah, when it was done from the forge shop. Then they had the machine to get it done. So that took a long while. It only had the basic shape that you see there. Then it was put through machines and they'd have to hog it out, put holes in it.

A: How long do you think it took to make it?

P: Once again, you'd have to get someone from production. Well, you could do it in probably a matter of a week or so. But you got a production line of everything going on so it took months. It probably had a six month lead time, something of that nature. They put the orders in years ahead, and they'd end up with that. That's the ultimate bearing right there (points to bearing in glass case). That's the ultimate in technology, the aircraft bearings, which you see in this room. Now see those bearings on top? Those are called rod end bearings. Have you ever flown in an airplane?

R: Yes.

P: Okay the engines on those, and those over there are the rod ends. Have you ever seen the flaps go up and down on a plane?

R: Yeah.

P: They're controlled on those things. And those were made by Fafnir Bearings. Some company today bought that part of Fafnir out, to make those. And they had trouble finding someone to buy it, because they're very difficult to make. Most bearing manufacturers would not be bothered with them. Once again, they have to be made of high quality steel like that. And they're an odd ball shape, so you have to have odd ball

machines to make them. The machines are very odd. Nobody else had machines like it. Nobody wanted to compete with them. They said, "Fafnir you could make them all you want." Because, how many airplanes are there?

R: Hundreds?

P: Well there's not like millions of them. It's a limited market for those. So Fafnir did rod ends. They were exclusive on those. They use them on automobiles too; racecars use them. Some of them are threaded, there's male and female threading (pointing in glass case). They use them in racecars, have you ever seen racecars get the suspension and everything? They use those also, because it can be adjusted. If you ever see Nascar and they talk about adjusting the frame, that's what they're adjusting, those things. Because those control, they move, you can see how they move.

A: Did you take pride in your work?

P: Well, everybody takes pride in their work. You must make whatever you do, the best you can. If you ask anybody that worked at Fafnir, they all took pride. They took a lot of pride in what they did. Some guys ran machines, if you ever saw the things they ran, you'd say, "That guy runs that?" Not only does he do it, he loves what he does and he's very good at it. And if you or I tried to do it, we'd make an ass of ourselves, because we couldn't do it. There was a gentleman I used to see all the time, his name was Claude Violet—I still see him he's 90 years old now—he ran a machine, he ran a bunch of machines, one of them was a belt polisher. He'd use a clothes line, do you understand what I'm saying? He'd use a clothes line and pumice and he would polish, by hand, the bearings, with a clothes line. And other bearings he would polish with leather. By hand with a piece of leather.

A: All by hand?

P: He did it by hand. But what he would do, there were short runs of bearings, and he could polish them by hand as good, or better than a machine could do it. It was labor intensive but they would be short lots. That's how primitive the machines were, if you saw them you'd say, "Are you kidding me?" Here we are in, well by that time it was say 1988, and here's a guy polishing the races of a bearing by hand with rope and leather. They had other machines that were oscillating polishing machines that automatically you'd put a bearing in and it'd polish it automatically. But that was done by hand. And also the forge shop, which I mentioned to you, there were guys down there; they had blacksmith back in those days. He made the tools, the hand tools for the guys who ran the machines. The tongs and things they used to pick up things were made by a blacksmith. He used coal, bellows and he would heat things up and pound them out, just like you would see in the 1800s. He was a blacksmith, and what he was doing was making tools for something, eventually became that. See what I'm saying? He went

from the most primitive, blacksmiths go back to the Romans, and he was doing the same thing they did to make that. That was the blacksmith. That wasn't the least skilled job, but it was the most primitive job in the factory. So what I was trying to explain to you was that Fafnir had some modern machinery and some of the most primitive. Matter of fact, I was walking through the forge shop, and I ran into Tony Cooper—whose family founded Fafnir, he was vice president—we were walking through the forge shop and there was a machine in the forge shop and Tony says, "You know, that's the best machine my family ever bought." He says, "I walk by that machine and it's running every day, and they bought it used in 1918." And it was running just fine. He says, "I never walked by it and it wasn't running." The machine was called an up-setter. You know it was forged steel, but the process had never changed. The machines that do that now are very modern, but they basically do the same thing. There just not as labor intense, that the only thing that was taken out of the equation. In the old days a lot of things were labor intense, nowadays machines do most of the work. Do they do better work? No, absolutely not. They do it with less people. Are they more productive? Not necessarily, but they don't have as many people. Some machinery is very productive, they can do it faster than people, but not everything.

R: So it sounds like a lot of machines that the people were working with were dangerous.

P: Yes they were, and they were old. The machines, what was it, 1986? Most of the machines were purchased during World War II, the majority, or before. So let's call the World War II machines because they bought them for the war and they just never changed. And the people were as old as the machines. Matter of fact, towards the end, people would retire and they would run certain machines. That was it, the machines never ran again. When the guy walked out the door, the machines, they shut them down. Because nobody else could run them, they never taught anybody and the machines were old. So like you were saying with pride, those people had so much pride, those were their machines. And that was true with everybody; their machines, that was their machines. They were proud of their machines, and they knew how to run them. And one of the things, they made good money too.

A: Yeah that's one of the questions. How did they get paid?

P: Most people got paid piecework. Majority of the people were paid piecework. And the people who set the standards for the piecework were pretty liberal. Their piecework wasn't very tight, it was very liberal so everybody could make a good living. If the piecework was very tight people would not have made as much money, and their quality may not have been as good because they would have let things go. But if you're paying them decent piecework wage, they're going to make sure they are going to make money and the parts are going to be good. And the piecework was pretty liberal and

they made good money, but they also made good product. You'd be surprised how fast they went, but it wasn't so fast for them. You or I, we would've made a mess of it. And a lot of departments were exclusively women. Some were exclusively men, but there were more that were women exclusive. Putting the bearing together, the finished product was all women. There were no men who did that.

A: And did they get paid the same?

P: Yeah, no matter who did the job, they all got paid the same. It's just men didn't work as good at it as women. Their fingers were better, smaller. It was all women who assembled the bearings. You know what the men used to do in those departments is they'd bring the parts to the women. They'd bring the inner and outer rings of the ball and women would put them together. And it was a very skillful job and they got paid very well. Then the inspection of the ball, that was pretty much women too. I talked to one woman one time and she was inspecting the balls that go in the aircraft, under a light on a black card and she'd move them around with like a little ruler. She'd roll them and roll them checking for any imperfections, doing like six at a time. She had white gloves on and if she saw it was no goo, pink, she'd throw them out and she'd dump the good ones. So one day I say to the woman, "How long have you been doing this?" She says, "Forty years." So I said, "Forty years? Isn't it kind of tedious and boring?" "Oh, no. We change sizes every now and then." What do you think about this? So now we're going to go from a quarter inch to a five-eighths. So we're going to do a different size. She could spot anything. An imperfect ball was not going by her. And she wasn't the only one, this was just one woman I talked to and she was there the longest. There were machines that did that too. What they did is they'd have machines that would inspect balls that went into the average bearings. Once again, if you got into these (pointing to airplane bearing), by hand, human eye.

R: Where the machines as good as the people?

P: Human eye, at that time, was better than any machine. The balls inspected for those bearings, the machines basically had a human eye in there. Mirrors or whatever it was, it would reject the bad ones. But not those bearings, they were done by human being, under a magnifying glass.

A: She would just do it all?

P: For forty years. Could you imagine doing that for forty years?

R: No.

P: She loved it. They changed sizes!

A: We need people like that.

R: Yeah, well that goes back to the pride thing. She took pride in her work.

P: Oh absolutely. Do you think the foreman would want to lose her? No way in hell would the company want to lose somebody like that. No. You're right; everybody, no matter what they did, took pride in their work. And not only took pride, but they felt they were the best in whatever they did. And for the most part they were. No matter what it was, they were the best and they bragged, "I could do more than this guy or that guy." And many of the jobs were pretty filthy, but once again, they were compensated. They were paid well. That's the bottom line, people work hard if they're compensated. If they weren't compensated, the company wouldn't exist. That was a union factory, they all worked too. So they built the city. They did. If you pay your people lousy wages, you don't have much of a city. What do you have? You have zero, you have unhappy people, and these people can't buy anything. All these people, you have to remember, they had nice homes, they had new cars, and they sent their kids to college. The big thing is they wanted to send their kids to college so they didn't have to do the job they were doing. Not that they minded doing it, they just didn't want their children doing it. They wanted them to do something better, so they worked they set on piece work. Some people, mostly all of them, but one guy I talked to said if he needed extra money he would go faster. If he didn't need extra money, he would just go along at a pace. You know an acceptable pace. But if he really needed some cash, then he'd crank it up. Then he'd get paid more piece work. And I think that was with everybody. Then there were some people that always wanted to make more and they always went crazy. But you have to remember, their pieces had to pass inspectors so they couldn't make junk. And they knew that. If they made junk, that was the end of the piecework, wasn't it?

A: Money, money, money.

P: Yeah, everybody wants to make a living, but they had the opportunity to make a living. For the most part, I never heard anyone say they hated their job. I never did. Younger people, because they hate to work. I think back and I don't remember anyone who hated their job. I'd look to their job and say, "There's no way in hell I'm going to do that." But they didn't mind it, because they were compensated. And that's kind of important. Why did people like their jobs? Because they were paid well. Bottom line, so they took pride in what they did. And a lot of force in their pride was if you didn't do it well you didn't get paid. You know, it all works together.

A: So outside of work, did you socialize with your fellow workers? Like community clubs or bowling teams, anything? Did you have friendships with them?

P: I was involved in community things. I was involved in the United Way. I was involved in all the Salvation Army, Red Cross, and that was a big part of the factory too. Fafnir was special. They had a thing called FCSA, Fafnir Community Services Association.

They put out four-tenths of one percent of your pay and put it into this big account. Most people did it. You could put more than that that made forty cents on the hundred. So you made a hundred dollars, you gave forty cents. You made two hundred; you gave eighty cents a week. It doesn't sound like much, but eighty cents a week times thousands of people. I'll give you an example, at the end of the year there was a board—I was on the board for years, and years, and years—we'd sit down and see how much money we had. We'd base it on a monthly figure. We knew how much we had coming in per month. And then we'd make our commitments to United Way. So one year the United Way had a million dollar goal. So we were at the dinner, the board from Fafnir—the board was comprised of management people and union people—and we all made the decision who the money was going to go to. Mainly it was going to United Way, the bulk of it, ninety percent I think. So one year the goal was one million dollars and myself and a gentleman named Keith Wartner, we walked up on the stage to make our pledge we had a check made out, like a big check, five or six feet by a couple of feet copy of a check for 180 thousand dollars. That was over thirty years ago. And the goal for the city of New Britain was one million dollars, and we donated \$180,000. That's a lot of money. That's a lot of money now. And that was from all the people in the factory. And that was pledged to the United Way. We donated every couple of months; we'd send them a check We didn't give them \$180,000 right away, but in a year's time, they knew they'd have \$180,000. We would pay them every couple of months, and towards the end of Fafnir's career money was still going in, it was dropping, then it was every month just to clear it out of a check book. It was like three or four thousand by that time. There weren't as many people working there anymore. But it was still three or four thousand a month.

R: Which is still good.

P: And then we had a pledge to the Cancer Society. They had a new director and I knew I had to give them seven thousand dollars. We'd already figured they'd get seven, so I went down to her office in Plainville. She didn't know who Fafnir Bearing was, and she didn't know what FCSA was. So I walked into her office and I told her where I was from. She had no idea who I was, I was like the man on the moon. "Who are you?" So I tell her, "I'm here from Fafnir Bearing to give a pledge." She says, "Okay." And I ask her, "Are you planning on purchasing anything, or what's going on?" I was going to give them seven thousand. She says, "Well, we're putting in a new computer system. And we're going to do a fund raiser, and do this, and do that." So I say, "How much is the computer system?" I think the figure was 7,180 dollars. So I had this big check book and I say, "Oh, okay. 7,180 dollars, here's your computer system."

R: That must've mad her day.

P: She didn't know what to make of anything. Who the hell was that guy? Is this check any good? So she made some calls and found out who we were and so forth. And of course we got invite to their dinner, and they were very nice. They gave me a plaque. They gave ME the plaque, with my name on it. The president of the union, Josephine, was there. She didn't like that, cause it wasn't me, it was collective. But the woman didn't know any better. I still have it. I had to hide it. It says the American Red Cross and whatever and it has my name on it. It doesn't say Fafnir anywhere on there.

A: Nope, it just says your name?

P: Just my name, like I gave it to them. How do you think the president of the union felt about that? She told me, she said, "You better not show that to anybody." But that was a big deal in the city. Companies did it, but Fafnir did it with a vengeance. I mean they really worked at it. The workers put up the money, but Fafnir every so many years would show a movie and have a representative for the entire factory. So you would tie up an hour or two of every employee, to have the United Way explain to them to sign up. And the blood drives, they used to run those. And you had a lot of people sign up for the blood drive. Now this is kind of important, it's a fact, people were very generous giving to the FCSA and they were very generous about the blood drives. Reason being, these people were all born during the depression or had been through World War II, in Europe. A lot of them, they had pretty tough lives as young people. So everything today was, like, wonderful. That's why they liked their jobs. They had all the things they never thought, as young people, they'd ever see because they'd been through war. There was a lot of them. There was about a thousand people, at Fafnir, who'd been through World War II, had actually been there. And the Polish, they'd seen some pretty horrific things. They never thought their lives would be any good, and they ended up in New Britain, working at Fafnir Bearing making bearings. So when it came to blood drives, they were right there, and giving money. Young people don't do that today, because they haven't been through hell. They used to tell me the stories, the stories were horrific. Just like what you see on T.V; like Syria, it was like that.

A: This was in Poland, right?

P: It was in Poland. Bad as that. The Russians had come in and they'd kidnap people and kill people. Then the Germans came and kidnapped people. They'd been through a lot, so this was all pretty good, this United States. This place was alright. So they worked hard. That's where we are today with another group of people who come here. Anybody who comes here, comes from some place that's not good. So you come here, and you're gonna work pretty hard; same as the people in the factories. This city had every ethnic group, but after World War II it was mainly Polish. Years ago, in the early 1900s it was the Armenians that went through the Armenian Genocide, which you know all about, right? Turks were killing the Armenians, and that was their lot in life. A lot of

them escaped and a lot of them ended up here in New Britain. Their stories were horrific, the same as the polish people's who worked in the factories. I'm just throwing in the ethnic part of it, of the people who'd come here to work. That's a very important part of it, like an ignored piece. The whole city does it, I don't know why, they ignore it. You know all of these people were immigrants. And why were they here? They'd left a terrible place.

A: To have a better life.

P: To have a better life, and that's everybody in this whole country. But here in New Britain, they did well because they got paid well.