Narrator: Maurice Grinstead (MG)

Company Affiliations: Northland Machine Inc., New Idea Sheet Metal

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Summary: Sheet metal worker Maurice Grinstead discusses his connection to the Thunder Bay grain trade through his work replacing and updating dust control systems, installing grain cleaning equipment, and repairing various machinery around the terminal elevators. He describes several vivid events in his career, including a flashover fire, an explosion at Cargill Elevator, old-school safety equipment uses, and workplace fatalities. Other topics discussed include sheet metal apprenticeships, terminal elevator computerization, changes to safety equipment, the operation of the union, dangerous working conditions, the changes to the grain industry in Thunder Bay. Grinstead also describes some of the local sheet metal companies, his colleagues, and typical equipment and tools used on the job.

Keywords: Thunder Bay terminal grain elevators; Sheet metal work; Grain elevator repair; Grain elevator upgrades; Northland Machine Inc.; Trades apprenticeship; Trades work; Skilled trades; Dust control; Dust control technology; Automation; Computerization; Modernization; Grain cleaning; Grain elevator explosions; Grain elevator accidents; Workplace accidents; Workplace fatalities; Health and safety; Labour unions; Labour organization; Contract negotiations; Labour strikes; Canada Malt Elevator; UGG M Elevator; Viterra A Elevator (SWP Pool 7A); Cargill Elevator; Viterra B Elevator (SWP Pool 7B); Richardson Elevator

Time, Speaker, Narrative
EE: Well, it's a pleasure to have you with us, or to be in your home more precisely, Moe, this fine day to do an interview on your involvements with the grain trade, which have been not right there in the terminal elevators all that much, perhaps. But anyway, lets begin by my asking you to give your name for the purposes of the record. MG: Sure. It's Maurice Grinstead, and--.

EE: And to describe then how you came to work in the grain industry to the extent you did, or conceivably to describe your moving into the trade you pursued.

MG: Yeah, I started in June of 1971 as a sheet metal apprentice, and the company that I was first working for was working in the grain industry making repairs and improvements to all the houses on the waterfront. I spent almost 25 years on and off on the waterfront. Every house that's--. Even derelict ones that are there now, I've worked in them all and repaired them all in different phases of production.

EE: So from 1971 through to 1996 roughly then, over that 25 years?

MG: Around 1996. You can look into your own history when the Soviet Union went bankrupt and stopped paying for their grain, it's when the elevators stopped shipping. Their volumes of shipping went way down, and their repair requirements of wear and tear went way down, so a lot of our industry went from—I don't know how many companies there was—five or six repairing the elevators down to maybe one or two.

EE: And you found employment in another context a little later, I guess?

MG: And at that time, a lot of the pulp and paper industry was busy. I actually did work in other parts of construction as well. I put in a lot of commercial air conditioners and worked on hospitals and paper mills, sawmills, steel mill. I worked all over, but there was a pretty long stretch from basically starting in '71 right through to the mid-'90s when the focus became paper, for my career anyway.

EE: Sure. Did your family have any connections with the sheet metal trade or the grain trade for that matter?

MG: I actually got into the sheet metal trade two ways. I had a buddy who was living in Fort William whose father owned the company that I started working for. I was over having dinner one night, and being in university and not enjoying the courses I was taking, I had said, "Well, I've got to get a job." He says, "Would you like to be a sheet metal worker?" "What's that?" And a few days later, I had a job. I did know indirectly the business agent for the sheet metal workers that I didn't even realize it at the time, who was a friend of my father's.

EE: Your father wasn't in the trade though?

MG: Oh, no my father, at that time, was an accountant working for a local company. But it was coincidence that after you have to go and sign up, and I said, "Oh, Mr. Taylor, how are you?" You know? So it's somewhat a small world kind of thing at that time.

EE: The small world one discovers in the process of getting to work.

MG: Yeah, getting to work. And it actually worked out great for me. I worked--. My apprenticeship was done in less than five years. Worked straight through. But the early 70s were terrifically busy. You could always, if the company wasn't being nice to you, you could go to the one next door at that time because they were always looking.

EE: So you were working for what company specifically?

MG: I'm trying to think where I started.

EE: I mean the sheet metal company.

MG: Yeah. Oh, they changed their name. They became Northland Machine or Northland Machinery Limited eventually. What was the original name? Harry Crawford, Vic Blazino, John Skoropad.

EE: Were the principals of the company?

MG: Were the principals there. Yeah.

EE: Ok, well that's sufficient. And you worked for this company throughout that 25-year period?

MG: On and off. With construction--. The first five years of apprenticeship I worked several years in the grain business, and then I went to a company called Fab-Air and worked in the commercial air conditioning business. Heating, ventilation, air conditioning, HVAC.

EE: Is there anything distinctive about apprenticeship in the trade?

MG: The apprenticeship that you took in Thunder Bay, because it involved the grain trade, was quite a bit different than the apprenticeship you would take in Toronto. In Toronto, it was all about highrises, heating and ventilation, air conditioning. And the teacher would immediately recognize somebody from Thunder Bay because they knew what a rivet was. We knew how to rivet

pipe and elbows together. It was kind of a part of the trade that if somebody happened to pass a phrase "blind rivets," only Thunder Bay knew what that was [Laughs] because we used it. It was a technique, and it's an older technique. And a lot of the Toronto apprentices never learned welding the way we did. We all had to learn in the shop how to do proper welding and procedures and stuff so that you're building heavier equipment. It was an industrial setting rather than a commercial setting.

[0:05:52]

EE: Or residential.

MG: Or a residential or domestic setting.

EE: I see. You had some instruction in Toronto I take it then as well?

MG: Yeah. Part of the apprenticeship is three trips to Toronto, two months each time. I was doing mine in the fall—September, October. It started in 1972. I went for two months, and then the following year and again the following year.

EE: Where was it offered in Toronto? In a college?

MG: George Brown College.

EE: George Brown College.

MG: The first time I went down in 1972, George Brown was still in Kensington Market on lower Spadina at the old school. Then the second time I went down, the next year, I helped pack all the tinsnips and tools into boxes and put them on the moving truck, and then we all piled in somebody's car and drove to the Castle Loma campus and unpacked all the tools. The students of my class moved all the equipment, hand tools, and books and textbooks and stuff.

EE: Yes.

MG: So we got the new school. We were the first ones in the new school.

EE: Was the instruction all done in Toronto then? Or was there also--.

MG: The union runs a night school here, and you're obliged to take it. The apprentices have to register for night school. They have to pay their fees—quite high, hundreds of dollars in advance—and if they don't attend enough days of night schools without a legitimate excuse, they won't get their deposit back. But if they come to night school, in the spring they get their several hundreds of dollars back. It's kind of like a negative-positive incentive. [Laughing] They didn't like having to put up the money, but they made sure they showed up because they were looking at getting the carrot in the spring. That course is still going on. The night school is still obligatory, and it's taught by other members of the local. Somebody that's successful at teaching or running a shop, doing pattern development layout, would--. And you get paid a little. I guess some kind of honorarium for it. It's at Confederation College now.

EE: Oh, yes.

MG: It was at Hammarskjold for years, but the Lakehead Board wanted out of it and sold all the equipment.

EE: That takes care of that! So the five years of apprenticeship and you applied the training you were getting at various grain elevators.

MG: Yeah.

EE: What sorts of things were you doing in the elevators in those days?

MG: Basically, in the early mid-'70s, the original grain elevator dust control consisted of fans drawing the air out of the building through a piece of equipment called a cyclone. A big conical thing where the air comes in at--. **[… *audio skips*]** Releasing the dust and heavy particles, but of course, all the fine flour from the grain rubbing together is extremely fine. It doesn't draw up, and so it was all pumped out into the atmosphere. The federal government mandated that they would stop doing that. I could be wrong about the year, but around 1973 or '74, the government stepped in and said, "Well, we'll give you grant money or tax breaks or something, some incentive to put in filters." And our industry, of course, did the job of pulling all the cyclones out and replacing them with an actual bag filter that can--. And they're self-cleaning, there's air injection, and shakers and stuff.

All the dust when they first started doing this, they were absolutely amazed at the volume of chaff and dust. They couldn't believe how much had been going outside. So they started to collect it, and, "What are we going to do?" **[… *audio skips*]** And put a pellet machine in there and started making pellets. At first, Sask Pool was happy to give away their dust, but then they discovered he was selling his pellets at $25 a tonne, and they started to count on their fingers how many tonnes of dust they were shipping. They were going, "Hey, wait a minute!" And they started making their own. The brought, put in--. And of course, that's part of our job. We

put up the new pellet plant buildings and put in millwright staff, working for our company, would come and install all the grinding machines and pelletizing machines. Of course, the whole process requires dust control, so there'd be all dust pickups, filters, fans, and all of that. We installed it all.

[0:10:28]

EE: This sounds--. We were interviewing someone who worked in '47/'48 in the original--. With the installation of the original equipment that you were describing a few minutes ago. What that equipment was basically doing then was relocating the more coarse stuff--. **[… *audio skips*]** For the, you say it came out?

MG: Dumping is what I think they were doing with it.

EE: But within the--. They had the locations where they were dumping the coarser stuff, and the finer stuff was being given to the city, in a sense, I suppose?

MG: Oh, big time. Huge. I remember the first years, like 1972, we worked at it was called the Stewart Elevator—now it's called Saskatchewan Wheat Pool B which is now Viterra B—and we went to put in the filters there. It had to be I think 1972 or '73, and the dust levels were just beyond your imagination. If you didn't wear a dust mask outside the elevator, you couldn't stand to be along the wall because there was just hundreds and hundreds of these cyclones. Hundreds of them! Pumping dust straight into the air. It was a literal cloud. And your eyes, you could come home, and your eyes would be sticky with, it's flour.

EE: Yes.

MG: And the moisture from your eyes would be like glue. You were like constantly with a cloth wiping and cleaning your eyes out.

EE: Now you grew up in these conditions?

MG: Oh, I worked--. **[… *audio skips*]**

EE: Was that stuff that had accumulated on the floors—largely on the floors, or wherever it could lie in the elevators—was now being relocated to more restricted locations within the elevator or into the atmosphere. I wonder if after '48, the air conditions around in the city of the Lakehead was worse, actually, than it had been before the equipment was put in.

MG: Oh, I could believe that. The reason they did dust control to begin with was not for health and welfare, it was for explosions. As you know, you must have talked to people, but--.

EE: Yeah, the old '45--.

MG: Grain dust is hugely explosive. I saw a flashover fire once, and boy that's one scary thing that you don't ever, ever want to get involved with. And it was outside, 40 below outside.

EE: Wow.

MG: And I saw a flashover, and I'm going--. Everybody froze, but you can't run far enough fast enough if the elevator's going to have an explosion. But the dust is incredibly powerful. **[… *audio skips*]**

OM: For us, what was happening?

MG: Uh, ok. Now we can get into trouble. [Laughing] Ok, I'll tell you basically. I won't say names, that's all. But I was working for a contractor, and we had a large number of cyclones to take off the wall. They're outside. And the job, of course, is done over the winter starting in January when the boats have gone, and the lake is frozen. The elevator was still working during the week receiving grain. They would bring in their cars, unload them into one tank, and during the course of the winter, would clean it and keep transferring from tank to tank until by springtime they were loaded with clean, so they could start shipping on the boats.

But removing heavy equipment such as cyclones from very difficult locations—sometimes 100 feet on a vertical concrete wall—was pretty difficult. We were using a bosun's chair and a hammer and a chisel.

EE: The chair would be dropped from the top of the structure?

MG: We would tie the chair at the top, but it would be extended 100-feet long down to the--. **[… *audio skips*]** Bin and assist, because coming down, gravity is on your side. But going up 100 feet, it's a long haul with a four-part line to get up there. You have to haul 400 feet to go 100 feet up. So he'd go up there with a hammer and chisel on a frame, and he'd be whaling away, and eventually the bolt would snap off. He'd cut through with a cold chisel. So we got permission from the elevator to use a cutting torch. It was outside on a Saturday morning, and they had shut the elevator down on Friday at 5:00. So the elevator had been down for quite a few hours—12 hours or more. Say 8:00 Saturday.

EE: Should be safe.

MG: Should--. Well, the dust should be down, and it was inside. No equipment, no fans running to spread any sparks. So they said, "Well, it's 40 below. Nothing can flashover at 40 below." Well, I got news for you! When he reached over with the cutting--. You know, you keep in mind there's a guy tied to a rope in the middle of no--. **[… *audio skips*]** held up by a hand winch, a small portable hand winch, like has the weight. Cuts the last bolt, well of course the tension on the cable comes tight, the thing drops about ten inches—it's not even a foot—but of course it swings out from the wall and swings back against the wall. There's a *clap!* And--.

[0:15:40]

EE: A spark.

MG: And he's still got the torch running! Right? He's got--. It all happens in a heartbeat. But let me tell you. He goes *cht* and cuts. *Bang!* But there was a film of dust on the outside of the concrete of the house, and the bang of the cyclone coming back against the wall, just a little film of dust. Boy, that fire thing went up about 100-200 feet.

OM: A ball of fire?

MG: Ball of fire.

EE: It would be like a wall of fire! A curtain or--?

MG: Just a thin, thin, you know, like a one-foot thick, 100-feet high. Just *whoo!* And it was gone.

EE: And the elevator was clean?

MG: And the elevator was clean, and that was it! [Laughing]

OM: It's like cleaning out your barbeque.

MG: Oh, yeah. [Laughing] At that point you couldn't run far enough fast enough to get away from it, so we all just stood there holding our breath. "Well, I guess we're good to go." And the boss went inside, and he went--. And before we had started this

process, he had gone through and made sure all windows were closed, that there was no open access from outside to inside just in case something like this happened. The whole flame stayed outside the building. It was actually outside in the open air, and it was like a 40 below day too. It was brutally cold. And I think that saved it too because the dust was so cold physically and there was so much frost clinging to the elevator that the fire didn't go anywhere. It was just that little film that was shaken off the wall from the impact of the cyclone swinging on the cable. But--.

EE: So this potentially very dangerous stuff was collecting all over the elevators, all over the cars in the parking lot, on the ground, and--.

MG: Oh, yeah.

EE: And probably across Port Arthur and Fort William for that matter.

MG: Well, I've noticed myself, just in the last couple--. **[*… audio skips*]** I can remind you that the boats are back. They are shipping now.

EE: So the elevators are working.

MG: Those elevators, even though they're reduced the way they are, are now putting out a lot more grain dust than they do over the winter.

EE: Well, this gets us back to what you were doing around 1974 then. You were aiming to capture this stuff, to keep it from--. The equipment you were installing.

MG: Oh, and we did. The difference with the bag-house filters made a huge difference, especially inside. The cleanliness inside the elevators went way up.

EE: When you first got into the elevators in '71 or through that period—when you were starting to work there—did they appear dirty? Still dusty and so on or not?

MG: Yeah, just to clarify, dirt means flour dust.

EE: Primarily.

MG: Yeah. It's not--. Don't mistake sand and gravel and dirt.

EE: No, no.

MG: It's not that, it's dust. And they were very dirty, dusty places. There was chaff and grain dust everywhere. Some places--. **[…** ***audio skips*****]**

EE: Been in '47 or '48.

MG: Oh, no. Yeah, that's--.

EE: It really hadn't come to grips with the problem.

MG: They were just pumping out grain. They weren't interested in all the housekeeping and all that. Things like vacuum systems for vacuuming the floors, I spent a big part of my career doing that too. I put 150-horsepower vacuum cleaners in all these places. Central vac.

EE: But that was new?

MG: We were putting that in the '70s, early '80s.

EE: And so then a workman—workers—would carry these things around and vacuum up the stuff that was laying--.

MG: You'd have 50-foot of hose and a central vac plugin on the wall with a cup covering it. You'd open it up and put it in there. Very powerful vacuums if the system was running right.

EE: And the end result of all of this work, then, was that the elevators were finally clean?

MG: Well. Yeah. It was getting better. Getting better and better and better, to the point that the number one for cleanliness--. **[…** ***audio skips*****]** Oh, Canada Malt is considered a food process area because of the product that they're selling. It's a processed food. And you can pretty well almost eat off the floor at Canada Malt.

EE: So it's really a matter of the management's--.

MG: Attitude.

EE: Accepting the challenge there in keeping the place clean.

MG: Yeah. See, like a lot of places where it's just raw grain, it didn't make much difference. The other thing that happened with the new filter systems is that there also came new grain cleaning equipment. And I worked for Thunder Bay Northland that had their own line of grain cleaning equipment.

[0:20:17]

EE: Now, this would be for cleaning the grain that was coming in from the farms for shipping?

MG: Yeah. As the dirty grain comes off the farm, there can be sticks, chaff, rocks, all kinds of stuff that the machinery would pick up in the field. I mean there wasn't tonnes of it, but it was in there. And of course, with vacuum air pressure, screens, different kinds of grading equipment, the grain--. **[…** ***audio skips*****]** Cracked wheat into the grain. You know, their grain, it was overachieving their goals.

EE: This equipment that Northland, that you were helping install, had they developed it here in the city?

MG: Yes. They had a factory on Central Avenue. It's now called Emco. Emco? Ecco. Pardon me. Ecco. It's Ecco Supplies. It was Burgland Supply that had the right to sell the machines, but that was also--. He was a co-owner of the Thunder Bay Northland in the later days.

EE: Had they drawn on technology from elsewhere, or was this entirely developed in town? From your knowledge.

MG: I think there was a designer, R&D guy, in Vancouver called Burnaby Machine Works. Basically, they had taken that equipment that they were running and selling and said, "Well, we need to change this, and we need to change that." **[…** ***audio skips*****]** Design it to fit. But then they did get into doing some engineering here too. They had a small line of cleaning machines for the non-Board grains—canary seed, canola, stuff like that.

EE: What would the machinery consist of? Are there different, many parts to it or is it--? If you have this--?

MG: Yeah. There's quite a few different kinds depending on the kind of material that you're screening.

EE: I can imagine that there'd be different sized sieves.

MG: Oh, but--.

EE: But it's more complicated than that, I'm sure.

MG: Oh, yeah. There's different ways to clean it. What they would do is they would have a battery—what they called a battery—and that battery would be gangs of machines. There'd be like five machines in a group on one floor, but there'd be five above it on the floor above it, and there might be up to 25 machines in a battery. And they pour the grain in at the top, and the first machine would take the large stuff and put it into this spout, and the small stuff and put it in that spout. Then it would clean it because there's air passing over it, and it would grate it down into different categories. The cracked grain would go out a different spout. And that was also part of our trade. Each of these machines had these little, small spouts of cracked grain, overs, and chaff and stuff, and it would all have to be ducted with dust control at the top to take the dust off the machine.

But it would go from one machine to another machine to another machine, and they would have that grain. They knew exactly what was coming down each spout. And depending on the product--. Barley isn't handled the same way as grain.

EE: No. As wheat.

MG: Yeah, as a wheat. Yeah, pardon me. I guess I should correct myself there. But barley's done through a screen that rotates. Like think of a big cylinder, and it's quite long. It's 40-feet--. **[…** ***audio skips*****]** All little holes in it, and then there's a little bit bigger and a little bit bigger. And the chaff and the overs comes out, but the biggest barley ends up at the farthest end of the machine until it can finally get out. And of course, when it finally gets out, it goes into the large sieve, and that's used for whiskey or something like that.

EE: So the highest quality barley that gets to the end of the pipe?

MG: Well, it's physically the largest too, the way they steep. Then the smaller barley might go for beer or something else, and the overs--. They love the overs because they make really good ungulate animal-type food for cattle food, pig food.

EE: Well, I tend to think of barley as primarily a feed grain, but I recognize malting barley. Dad talked about malting barley. I don't know whether he ever grew it. Although, what you're suggesting is that any good quality barley could be put through the machine and could produce a portion. A portion of what was being put through could end up--.

MG: In the malting process, yes.

EE: With that quality. Yeah.

[0:25:02]

MG: And those machines—there was an interesting story there—they were designed in Montreal. And to save money, the company, I believe it was Canada Malt, went out and bought the machines, brought them to Thunder Bay, and gave my company that I was working for the job to install them. So we put them all in, and within the first month, there was a catastrophic failure of the machine. It literally tore itself apart from inside out. I got a call on my walkie-talkie from the superintendent of the elevator that his barley wasn't coming through, and I should go and check my machine out. Of course, it really wasn't my machine at all. So I took the cover panel off, and it had turned the whole inside of the machine into a rope because the main drive shaft had broken, but the gear shaft was still turning one end, and it took all the screens and spider bars and everything and turned it into a giant rope full of barley. [Laughing]

There's no repair possible. It just literally, with the power of the gearbox, had destroyed this very expensive, very brand-new machine. It had only been running a month. So I put the power off. There's a power disconnect right there. I put it off and put a lock and a safety tag on it. I snuck away to phone my boss to tell him to phone the manager at the elevator that he had a problem, but I wanted the problem coming from the top down, not from the bottom up. [Laughing]

EE: Well, you hadn't put a hammer in or anything and broken the drive shaft.

MG: No, it was a design failure.

EE: Yeah. So what did they do then? Did they turn back to Montreal for another?

MG: Oh, they phoned Montreal. They flew their engineers up, and they had to redesign it. The ironic part is that it was doing the job so well that Canada Malt was thrilled with the speed and the quality. It was doing everything they were promised. So what Canada Malt was doing was opening the slide gates and just pouring the barley through, just--.

EE: So they'd overloaded the machine?

MG: They--. Yeah, quite frankly that's what happened. But of course, the Montreal company said, "Well, ok. We're going to have to do something different." And basically—it was a pretty tricky little thing they did—but they sent them a new whole innards. Basically, the only thing that was saved out of the machine was the casing, the metal casing. Everything inside was all new, but it had a reinforced cage in the centre, and they put a drive chain around it. It wasn't even a motor, but it went up to a bearing on a sprocket on the ceiling so that the centre of the cage was supported. It was putting so much weight that it went down, and as it rolled, finally, it had to snap because it was always flexing in the centre. So the new improved machine worked like a charm.

EE: Did they have smaller intakes as well or--?

MG: No, that's not how a company works. They want production. Everything is faster. One time in Canada Malt, in the elevator house, there was 37 men working there. Now there's four or five, and they're doing maybe four or five times more product because it's state of the art. The elevating legs are bigger. They're faster. They've got better buckets on them. All of the slide gates are all automated by pneumatic pistons now. It's all controlled by computer, can be controlled from Vancouver if they want.

And in fact, in the middle of the night at 2:00 in the morning, there's nobody working in the house at all—in the elevator house—but the brew master wants to start a new match of steep, and he needs to call for a certain kind of barley. He goes on a computer in his office, suit and tie, and he clicks on a bin that says the right kind of barley. He knows what's in each or that kind of barley is what he wants to make this batch. Customer specific. And he says, "I need 90 tonnes." And he clicks on his mouse, and the dust control starts in the elevator, runs for five minutes, so that gives a chance for the velocity of the air to pick up. Then the elevating leg starts up, and once the ammeter says that the leg's up to speed, the belting that's going to run the barley from the house over to the malt plant starts up. And when all the lights are green, the bin starts dropping barley onto the belt. The belt hauls it to the leg, the leg distributes it to the shipping belt back in the basement—it has to go up one leg and move over the elevator sideways and come back down again—and then it arrives in the malt house and the same thing is--.

[0:30:01]

From one click of the mouse has started all the appropriate machinery. The spreading machine that spreads the barley over the germinating tables. Or no. Actually, it goes in—pardon me—it goes into the tanks first. It would fill one tank with 30 tonnes and fill another tank with 30 tonnes, whatever batch sizes he's putting in to make. The right correct amount of water is added, and then

all of a sudden, you'll see the belt shuts down, the leg shuts down, and the dust control will run for half an hour or so afterwards so that if there's any residual dust in the lines and that it all has a chance to clear up. Then it shuts off. And there's nobody there.

EE: Where is the person who set this going be?

MG: Oh, he would be the maltster, the guy who's requiring a batch of malt to be made, and it would be in the malt plant at the front of the property. There's almost two businesses, if you want. There's the actual process plant, food process plant. I mean, when you go in there, everything is sterilized. They're using Javex every day. Everything's sterile. Food sterile. Stainless steel.

EE: And he's come in there and that's where all the computers--?

MG: He has an office, and he has a--. There's a control centre, and there's a guy sitting at the control screen. It's all done off the computer. I can give you--.

EE: Right. But he doesn't need any people back there? It's all--.

MG: Not at 2:00 in the morning. But of course, the next morning, he's made his malt, and he's dried it in his kiln, and he has to send it, and he sends it over to the house. But the railroad will push in ten cars the next day, and they have to load malt of a certain kind and quality into these cars. Well, you have to have men to do that, and then there's one guy that does housekeeping. He starts on the top floor every day, sweeps every corner, every dust. Every particle has to be cleaned. But it's most--. And they have a pellet plant running there too. So there's one guy in the pellet plant, one guy on dust control, and maybe three or maybe four with the foreman loading cars.

EE: Do you know anything about the installation of this computer system?

MG: I really don't, no. Except that how it affected--.

EE: Yeah, you saw that.

MG: There was a day--. Like in 1970 or '71 when I started, to open a grain bin, a guy would go out and untie the rope off a cleat on the wall, and he would jump up and down on this rope until the gate would open. And he'd go and he'd look to see how much grain was coming out, and he'd know by eye and 20 year's experience that that was enough or not enough. And he would operate--.

Nowadays, it's all done by computers. And when you're working in this environment of computers and PLC control, as a contractor you have to be very careful.

I almost got caught a couple of times where we shut equipment off, we hadn't locked it, and the guy in the other office noticed there was a red flag on his computer screen. "Oh, that machine shut down!" Went with a click of the mouse. Before we could get the locks in place to lock the machine out, it fired up again. So we actually had to pull the power, put a lock on the pull so that you have to physically disconnect the power to them because all that equipment is started by computer. Somebody quite remote from where you're working. And it would be the start up. He might not even know he's starting that up, a belt or a leg. It's a process somewhere else in the plant, but that belt has to run for that process to take place. He doesn't even care about that belt, but if it's in the process line of the computer program, on it comes. So you had to--. Eventually, that affected my trade is that you had to be very, very careful. A couple of times I was like a half a heartbeat away from having an accident. So we got more and more careful.

EE: I can imagine.

MG: We didn't realize how far into the process that computerization went. It got to be places like M house were so computerized, nobody was up on the top floors ever. They'd just dial up, "I need this. I need that."

EE: This is UGG's [United Grain Growers]?

MG: Yeah, M house.

EE: M house, right.

MG: And Canada Malt's like that today. Like the whole plant. Everything. Distributing floor, the old conventional one you'd have a spout on wheels and a swivel on the ceiling. And two guys would go out, and they'd shove this ultra-heavy piece of equipment on wheels over a hole, and they knew from experience you had to cover the hole just this much or you'd get too much spray out the bottom or the flow would be too fast to the machines that it's going to to clean it. But nowadays, all the spouts are connected to all the holes, and there's just a little rotary turn head at the top. Somewhere in the malt plant—not even in the house—in the malt plant, somebody wants malt to be shipped or they want barley to be shipped or malt's coming back into the house, and all this distributor heads just line up. *Click, click, click.* And you've got to--. You can't be up there. The machinery doesn't care that you're in the road, I'll tell you. You have to be aware that "Don't go there."

[0:35:31]

EE: Be nimble on your feet.

MG: You have to lock it. It was never like that at the beginning. It was like that at the end though.

EE: Would Canada Malting be the most automated of the elevators on--?

MG: I would guess that they are because, like I said, there used to be 37 men working in the dry end of the grain elevator, and it's down to about five now. And that includes the pellet plant and car loading and housekeeping and everything.

EE: Quite incredible. The elevator companies, of course, saw the potential of automating as well, but I suppose it's perhaps more difficult to do it in the big terminal elevators? Or not? It costs money, of course.

MG: Places like Viterra A—which was called, of course, Sask Pool, Saskatchewan Wheat Pool A—we did major, major automations, especially in car unloading. As the grain cars came in, they used to have car hauls on a cable, and they'd pull a car up and somebody would go by hand and crank open the--. I mean, beyond boxcars. We're getting beyond boxcars even.

EE: With these hopper cars that would take--.

MG: With the hopper cars, which just made things incredibly quicker and safer and more volume. But nowadays, you don't go out and open them by hand, you sit in a little booth—in an air-conditioned air ride chair with a joystick—and you send a machine along a track with a camera on it, and with a little experience you can unload two tanker cars at a time. And it just goes out to the far of the car and zips open the four gates, and it's dropping into a separate pit than the second car. **[…** ***audio skips*****]** Draining, it runs over and closes the first car. And as soon as he's got that, it comes over, and by the time he gets back, he closes the hatches on the second car. And an automated machine--. The operator presses a button, and it moves the whole train two cars, and the robot is already back at Gate One waiting. As soon as the gate stops moving, *zip, zip, zip, zip!* First car's done. *Zip, zip, zip zip!* Second car's done.

The other thing they did in conjunction with that—you don't see it—is that they put in new elevating legs. Twice as big. Twice as fast. Twice as many buckets on the belt inside the leg. So that 90-tonne car of grain is gone in just a very few--. It used to be, oh, 20 minutes for the draining out of the pit. You've got five minutes, that 90 tonnes is gone. No, but fast! And of course, as a sheet metal worker, we had to put all new spouting starting at the top down because you're elevating it, now instead of 16-inch-wide spouting, you've got 24- and 30-inch wide. And these things are vertical. Nothing will hold anything back.

EE: Did they have to rebuild the legs themselves?

MG: All brand new. Tear out the old ones completely and that. Well, not in every case. Of course, some of them, they could just speed up. The big ones at Sask Pool, their production levels, they put in big stuff. Don't fool around there. Cargill put in one that was six, seven feet wide. It was like this massive thing. They can--. Sorry.

OM: Did the materials used change because of the increased volume?

MG: That I used?

OM: In the spouts or--.

MG: Yeah, the lot--. We went from mild steel liners in a lot of the spouts. Grain is incredibly wearing on spouts, especially with the velocity now like I'm saying that--. They're bringing all this high volumes of grain up, and they're putting it into these large spouts. So we started using tempered steel liners. And if there was any zones—and there were a few in each elevator—that were unable to take the wear and tear, we'd put--. **[…** ***audio skips*****]** The only drawback to ceramics is that in the old days, the workers would go around with some kind of a hammer and bang on the spout to see if there was stuff flowing in it. And if you--.

EE: Ceramics don't take to that.

MG: Oh, ceramics do not like having—especially from the glue side—somebody banging because then you'll lose a tile. And if there's an obstruction like a missing tile, that's just like an invitation to punch a hole right through the--. Grain will cut through steel in the wrong--. If you get the wrong circulation pattern on the grain, come right through the side of the steel–and fast. A month, two months. So we started using a tempered steel, hard plate.

[0:40:18]

EE: These ceramic tiles, this sounds like the underside of the shuttle.

MG: Yeah, kind of.

EE: Is it somewhat similar to that?

MG: I don't know if it's the same material or not.

[Woman]: Oh, ok. Excuse me.

MG: Ceramic tiles on the shuttle were for heat more than--.

EE: Yeah, yeah. Because the heat built up and they were protecting the shuttle itself. In this case, of course, it's--. **[… *audio skips*]**

MG: Inside a spout.

EE: Polished?

MG: It's polished to a mirror, and it's mild steel. It's just, you pull it out, and wherever there's a wear hole that's come through, it's like a razor-sharp--. Polished to a razor-sharp edge. You had to be very, very careful. Yeah.

EE: Yeah.

OM: Just one more question. What are their back-ups if there's a power failure? Let's say the grid goes down for a week.

MG: Uh, for most of the time I was down there was nothing. The problem with a grain elevator in that sense is that the equipment is so huge. The motor running a leg—say the elevating leg—two-, three-, four-hundred horsepower, and it would be a three-phase, very high, powerful motor. Back-up powerlines, that just doesn't cut it. They did have at the end, at especially Viterra and UGG—which became Viterra—and Manitoba Pool, they had back-up diesel generators, but that was only for--. **[… *audio skips*]** Most of the time in my career in the elevators, I always carried a mini-mag type flashlight on your belt. We used to carry a folding knife and a mini-mag flashlight. And we used ropes for everything. You know, holding stuff, stabilizing stuff. And if a rope ever got snagged, you always wanted to have a sharp knife in there to cut yourself or whatever it was that was snagged, the equipment.

EE: Release it, eh?

MG: Be able to cut it away in a hurry.

EE: So the short of it is that this is industrial power that's being used, and if the power went out, the elevator was down.

MG: Oh, absolutely. The scope is not in the range of any kind of--. If you think of residential or commercial, it's got nothing on these industrial. These are huge places.

EE: I wonder how they compare with the pulp and paper mills. A little less power, I suppose.

MG: Oh, the paper mills are number one, sawmills maybe number two, and grain elevators. Viterra A must use massive quantities, massive quantities of electric--. It's not one or two, it's thousands. And big, big, big equipment.

[Woman]: Which one uses thousands?

MG: Oh, the industrial grain elevator types.

[Woman]: Oh, the grain elevators. For changing air?

MG: For everything. For everything they do.

[Woman]: Oh, for moving the belts.

MG: Belts and stuff. If you look at an annex—Viterra or UGG—you're looking at 200 metres of belt, seven belts wide, loaded with grain. How many tonnes is that? You've got to--. Minimum 200-horsepower three-phase motor at the end running it.

EE: Were you involved with the belt systems as well? Or would that be, I suppose, the millwrights would be responsible for that?

MG: It depends on the particular installation contract. Installing the belts was not my job, so our company also had millwrights working for us. So Jerry and the boys would come in, and they would set up all the idlers and start pulling the belts in. But once the belt was in, the sheet metal belt covers inside the house were--. **[…** ***audio skips*****]** Put dust control pick ups all along it, spaced every so many metres. Especially in what they called the workhouse section, the main body of the house, as opposed to the annex, which was the storage tanks–in-shore annex, out-shore annex. The annexes couldn't have belt covers on them because they had trippers, which is a machine. Now, you're on top of the tanks and you have to put the grain off the belt into a specific bin, and they would have a machine that travelled up and down on rails—like a small-gauge railroad—and the belt ran through it. And it would trip on the machine, and it would come out a spout on the side that was lined up with the correct spout for the tank that it was going into.

Most of the elevators aren't automated that way. You have to have a guy run up there. Like Viterra, aguy would run over to it, pull a bunch of levers and a way--. Using the speed of the belt itself would carry off down, and he would line it up with--. Somewhere in the computer away, miles away, somebody would push a button and that tripper would arrive at the correct tank. And when the green light was on, the grain would start flowing, or barley in that case. But trippers were all our– because they all had dust control on them and big, long dust control lines running down the annexes.

[0:45:25]

EE: And there's a protective structure over all of this system? It's not exposed to the air up at the top?

MG: No, it's inside the top floor of the roof. Yeah. You can't have water and grain dust. Glue! Paper mâché glue. It--.

EE: So the protection, the protective structure up there is really very carefully built tight and watertight and so on?

MG: Oh, it has to be 100 percent watertight. You can't have water inside.

EE: Because the winds driving along the waterfront, driving at those elevators at times, the rainstorms--.

MG: You may not realize, but all the buildings are built with windows that were explosion windows. They had little chains on them, and so if there was ever an explosion, the windows are designed to blow out--. **[… *audio skips*]** And you can check the year. Was it the late '70s when Cargill blew up and the fireman got hurt? And basically, all the explosion panels came off. He survived. He was right in dead-centre of the blast central, but he had his rubber mask, his Scott Air-Pak on. And except for extreme bruises and a little bit of burning around his face, he walked away from blast central. But there was no pressure because all the window and the wall panels were designed to pop loose, and they were all hanging on their chains all around the top of the building. But these structures are designed not to contain the explosion, to release the pressure of it.

EE: You would want to get rid of it. So you've described in this first part of our interview how many different aspects of the elevators that you worked in. There's first the dust control and the vacuums and all of that.

MG: Vacuum cleaners, and then--. **[… *audio skips*]** Or repaired all the loading spouts for the boats. The big spouts that swing out over the lake. Some of them are 7,000 pounds or more to take them down and rotate the spout. You have four sides on a round spout. So. [EE laughs] As it wears on one bottom side, what we'd do is we'd take the bottom and turn it all the way around, line up the holes again, and bolt it back on so the worn spot is on the top. And then the next year we'd come back, and we'd roll it half a

turn, so it was worn on both sides and solid on the bottom. And then you'd get one more year out of it and roll the last the fourth side down, and then the fifth year, you'd be putting new pipes in. They were a gas pipe, but that was all built in our shops. All the guys would work a month or two ahead of time, and we'd build all our spouts in the shop, and then we'd be out in the field putting them in and changing all the spouts. Every elevator has spouts to load the boats.

EE: You said 7,000 pounds. Three and a half tonnes?

MG: Yeah.

EE: Did it come out as one--. **[… *audio skips*]**

MG: Sask Pool are pretty big. Cargill, the original ones at Cargill were like 20 tonnes. They were so big that nobody could deal with the. Because to repair them you had to bring in all this extremely heavy equipment, like massive, like 400-tonne crane to lift up a 20-tonne piece because of the reach. So they took them down and that was done by sheet metal workers. They took them all apart piece by piece by piece and took them down and put up the 7,000-pound ones, which--. One of the last jobs I ever did in the grain elevator—in fact, it was actually in the elevator—was March 1, 2008. I did the four spouts at Cargill. I rotated them all, repaired a bunch of stuff on them, torqued all the--. Put new bolts, mounting bolts, torqued all the bolts to specifications, and did basically a service inspection to--. Because what happens with those spouts is they swing over the dock, and at any time you could have--. **[… *audio skips*]** The cables aren't going to break, or that some part of the other equipment, shivs and pulleys and stuff, aren't going to break.

I actually did an inspection at one of the other terminals—which will remain nameless—who hadn't been doing their inspections. I took a three-quarter inch wire rope, flexed it with my bare hands, and broke it in half. And I was in shock. It was literally so brittle it was like taking three-quarters of an inch of spaghetti in your hands and going like this, twisting, and it literally broke into pieces. Three-quarter inch wire rope cable! I took it into the superintendent of the elevator, and I said, "You know, you can't leave this job for ten years, and I'll show you why." And I went like this, and I broke his cable with my bare hands. I changed everything that year, and it was the best cable money could buy! [Laughing]

[0:50:19]

EE: I can imagine!

MG: Because if that cable ever broke, you have a 7,000-pound missile with people working underneath.

EE: He'd thanked his lucky stars that you'd come along and fixed it!

MG: Well, they had hired us, and--. **[…** ***audio skips*****]** Down there and do an inspection, material on top.

EE: And was your name on the—or the company name—on the end result?

MG: Yes, there was.

EE: So the company had liability insurance?

MG: Because none of their personnel from these grain elevators, the local millwrights and repair people and the supervisors on the millwrighting staff, they were not prepared to go 100 feet in the air, put on a rope, and climb out onto a boom and go and inspect a pulley at the far end. They were not prepared to do it.

EE: But you were paid to do it?

MG: Well, we were paid to do it. We used to joke that my crew was the Wallendas. It was kind of a joke on the waterfront because if it was really, really high and difficult to get to, they phoned my crew. And Mark and myself and a few others--.

EE: How large a crew would it be?

MG: Usually about four, maybe five depending on what I needed, depending on the sizes. Some of the spouts are smaller, smaller spouts on it. Most of the UGG A house spouts are smaller, but some of the newer more modern ones—Viterra A—are bigger and heavier and, of course, the Cargill ones are the biggest ones.

EE: Sure. And were you the lead hand or the foreman?

MG: Many times, I was, yeah.

EE: Of this crew.

OM: Who were your crew members? Do you remember their names?

MG: Uh. Rick Caputi, Mark Anderson, myself, sometimes my friend Larry. Who else was down there? That was our regular little crew. John Nachuk, he's passed away. He was the superintendent on our--. He was sometimes split between several crews. The Labelle brothers, Bruce and Rick. I think that was that steady little crew that went for quite a few years.

EE: How many men worked for Northland during these years? How large a part of the total crew were you, or the workforce? I say the sheet metal workers, the office workers as well.

MG: I think, boy, that's a good question. In the early years when we were doing changeover from cyclone technology to dust control and bag-house filters, there was a lot of people working there. They had a production shop on the floor, and they had another 25 or 30 on the floor fabricating, and they probably had 30 in the field fabricating. That doesn't even include a couple of engineers, secretary, accountants, managers.

EE: Was the company doing all of this work? Was there no one--? Or was there someone else? Was there anyone else doing it at the elevators as well?

MG: Oh, there was several companies probably doing it. There was Day Company, which was Simon Day originally, and I was working for Northland, and they were in direct competition. Eventually, Nu-tech Metals got into it quite a bit. North--. I'm trying to think of the place that's still going. It's down off Cumberland. Northwest Products? Or Northwest Installations, that's what they call themselves. They still do some, but.

EE: So much of this work is not patented stuff. I mean, the machinery for Canada Malting that you were describing out of Montreal was probably patented, but much of this is a matter of turning steel of various forms, flat steel--.

MG: Flat sheets of steel into round shape and--.

EE: Into very important, very valuable pieces of equipment.

MG: And that became the expertise that I had and that I became known for, was doing layout design on dust control. You have a round pipe that's got to shoot across a wall and go up 25 feet through a hole, up another 90 feet, over this way and that way. And a lot of the locations—if you remember pictures of the old Sask Pool 6 that they imploded there—all along that half roof called the scale floor half roof, there was a bunch of filters. I worked on, with a crew, putting all that piping and all those things in. So when you get the pipe there, you can't be measuring and fitting and bolting and then connecting. You have to have the whole thing

assembled, lift it all up, and the guy in the bosun's chair makes the final connection. He puts some caulking on the joint and bolts it together. Took a ratchet wrench and a spanner up there and connected it. So you have to have all the other length run—you know, 30, 40, 50 feet—connected.

[0:55:22]

EE: And your specialty was what? Doing the measurements and--?

MG: Yeah. I would measure from where it was going into the filter to where it was coming out of the wall, and I would lay it all out.

EE: On paper?

MG: Well, I would take drawings—I would make rough sketches actually—and using mathematics, trigonometry basically--.

EE: Some of your university education.

MG: It's actually a funny story because one of my interests was computers, and I wanted to build a kit computer, but I wanted to understand more about what I was doing. So I took a college course at night. And doing circuit analysis, I discovered how to use the Pythagorean theorem—the formula they used for that in electronics—to convert AC current resistances. I'm getting complex, but on your calculator, not only does it give you the offset, it gives you the angle and the distance of the offset. And I was doing electronics calculations and I said, "Oh ho! This is perfect for my business." So I learned it by accident, just by my other interest outside of the trade.

EE: One of the eureka moments!

MG: Oh, it really was! And so I went back and I started using it. Nobody could figure out what I was doing, but I always had my calculator with me. And they said, "Well, what formula?" I says, "Well, I can't explain that." [Laughing]

EE: It's really beyond you!

MG: I have to tell you, as I went along, as I got more apprentices coming in—and I would have, say, four journeymen and an apprentice on my crew—when they saw me using the calculator, I would take them at lunchtime, and I would bring paper and pencils, and I would teach them.

EE: So you explained it to them?

MG: And I said, "It's too simple!" It's basically called rectangular coordinates and polar coordinates. If you think of a rectangle and the diagonally opposite corners. If it's 00 on the left, the top left has got to have two numbers that describe how far along X it is, how far along Y it is. But you can describe that point by the angle up and the distance, which is the hypotenuse. The calculator does that straight. You enter in--.

EE: You just get the answer?

MG: Rise and run, and it'll give you the distance at what angle. So it gives you the angle of your offset and how much material you need in between. So I taught all of this. I did a job in Domtar in Red Rock, and it was a dust control job. They were having trouble in their digestor room with too much dust, and it was catching on fire on the hot equipment. So we put in a dust control. But it was one of those jobs where there was absolutely no way to get there. You know, you stand at this vertical concrete wall, smooth concrete wall, 90 feet up, and it required an offset and a corner. And so, you can't--. It's in space. You can't connect out there. How do you assemble it? So I assembled the whole thing on the ground. I put, you know, 30, 40 feet of pipe together, and I held it with a couple of winches. And then I, on the ground, picked up the next piece and put in the right angle of elbow and then put on a 90-degree elbow and another 40 feet of pipe and built it on the ground as I raised it up. And then a set of three winches, I hauled the whole thing 90 feet into the air and bolted it on. And the boss came out the next day, and it was already installed.

EE: This is your boss from--?

MG: My boss from town here. It was New Idea Sheet Metal at that time. He said, "Well, how many times did you have to put it up before you got it right?" I said, "Just once." I says, "I don't want to have to do that job twice." Because I did over 100 feet of 18-inch diameter stainless dust control line all in one pass. Funny story again, it's the same kind of thing.

So, I'm thinking, I'm planning. I'm always thinking about this stuff because you've got to plan every little detail before you start. Because you'll get up there and you'll go, "Oh. This doesn't work." And you have to take the whole mess down. So you don't want to do that. So I had made this ductwork so it was on hangers. It was stood out from the wall. I didn't want the ductwork tight to the wall. So the engineer came over to me, and he said, "Well, why did you stick it out so far?" I said, "Well, now the ductwork has

room for insulation." I says, "You can wire tape. Have the electricians wire tape it and insulate it so it won't freeze in the wintertime." Because he was hauling hot air from the digestors inside, running it along this wall, all the way around the corner, down the wall, across another wall, and back inside. And he said, "Oh, it'll never freeze. It's too hot." Well, that whole system that we put in, all stainless-steel tube, it failed in about the first hour it hit 40 below. It was totally, totally frozen right from bottom to top, and then of course the ice swole up and burst the whole thing. I told him! But sometimes people don't listen. It's just one of those--.

[1:00:33]

EE: He was an engineer. Probably a mechanical engineer would he have been?

MG: Well, I assume. Yeah. Or a flow process engineer of some kind. Yeah.

EE: But I guess he didn't have an appreciation for heat loss through steel.

MG: I said right to him. Well. When it's 40 below, it just takes a frost on the inside of the pipe. And then five minutes later, it's one millimetre thicker. And it doesn't take very long. And it's steam coming off digestors. I mean, it was heavy, heavy moisture load in the air. You know, just literally destroyed the system,

EE: So did you have the task of replacing it?

MG: No, they threw it away.

EE: Oh?

MG: It failed. They just took it all down. I don't know at what expense. It was failure as a design. We told them that the day we were putting it in. But--.

EE: Anyway, that's the pulp and paper industry. [Laughs]

MG: Interesting thing--. Yeah, that's the pulp and paper. But in the grain--.

EE: Grain elevators never did anything like that?

MG: Oh, of course they did. [Laughing] More than once. You know, having worked in the business for, say, 20 years by that time running a crew, and somebody would say, "Well, we're going to do this." I'd say, "Oh, no you're not. Come with me. You have to go talk to the powers that be." You call the engineer over and say, "This is just nothing but trouble." So our engineer for our company, he would listen. I could phone him and say to him, "We have a little situation here. This is going to be a problem. How about if we do this?" "Oh, yeah. Yeah, ok." And so it was--.

EE: Who was your engineer?

MG: Alex Marshall was one. He's passed away. Uh, Siggy. What's--? I can't think of his last name right now.

EE: Still with us?

MG: I think he's still alive. But of course, he'd been long retired. I mean I've been retired two years. He would have been retired 15 years ago.

EE: Well, a smart engineer always listens to the people who are actually doing it.

MG: And they worked in the business, and they worked with me everyday. So when I phone and--. Alex, I could phone Alex and say, "Alex, you know, could I have this? Or could you arrange for that?" And, "Yeah, yeah. Good idea," or, "No, no, no. You can't do that. It's not structural. You can't do that." [Laughs] So we had bright ideas that didn't fly either.

EE: Yeah, an engineer who'd know structure strengths and so on.

MG: But a lot of the stuff was, like you say, it was self-designed, especially with repairs and stuff, you know? I did one job—I was talking about the vacuum cleaners—we had the pump, and the motor was all came in one unit. All mounted on a steel skid frame. But they didn't build these elevators with any access to repair them. I swear. They should've thought about repairing these huge industrial complexes, and they had no way to get equipment in the door. Especially a fully assembled skid frame with 4,000 pounds of equipment bolted to it. And the motor and the pump are machine-aligned, you know? They have to be perfectly aligned, 200 horsepower vacuum pump.

EE: So how do you get them in then?

MG: Well, in this case, we put a big steel cable out the window on the southside of the elevator. We ran it right over the top of the roof with an eye in it and put a pulley on the top hanging at where would be the gutter of the roof at the top. And the cable three-part line—the block went on the loop with three parts—and it went all the way down to the dock, and we skidded it down the dock with a winch. This was at Viterra B, what it became. It was Sask Pool at that time. Then we put a second winch over on the dock across on the other slip. It was wintertime. No boats or anything. We put a dock on the bollards at Canada Malt, and so we tied this 4,000-pound load on and start dragging it up the wall. But instead of letting it drag, the winch from a far elevator would pull it back, and they would go up and up and up. Of course, it got to be an angle so that he couldn't pull too hard because the winches would be--. So you had to, at that point, start releasing. We basically took it up and set it down, and we had to take a window out of the building and skid the--. You know, you can't lift this equipment by hand. You can't--.

[1:05:13]

EE: Well, not at 4,000 pounds, you certainly can't! [Laughing]

MG: It's like you've got to think the size of a pick-up truck and lift right up. It went just--. We had measured. It just fit between some of the filters that were already installed. If we could get it to the wall, we could turn it, and we had taken all these measurements and skidded it. We got it in. We got it in the door. In the window, actually.

EE: Sort of adds dimensions to being a sheet metal worker if you're doing that!

MG: Oh, we did high rigging. I mean, the half-roof is 120 feet from the dock. So you're working right on the edge of the half-roof watching this stuff come up. And I've got a guy on a winch over behind me, and I got a guy on the other dock, and you're doing hand signals and radio signals. And one--.

EE: This is all happening very slowly, I assume?

MG: Oh, very, very slowly. That's the rule. Make small moves. Make small–. Don't try and--. And nobody does anything without instruction. So you put one guy in—when you're hoisting something like that—one guy is in charge. No one else signals. Everyone is allowed to yell "Stop!" Or a winch operator, if he thinks the wire's too tight, is allowed to stop, and then he can--. **[*… audio skips*]** Ahead without a direct signal from whosever in charge. And we would assign one guy, whether it was me or somebody on the roof that could see better or whoever was doing what. Stuff was heavy and expensive. You don't want to drop it, eh?

OM: No!

EE: No! [Laughing]

MG: You know, you airmail a 4,000-pound vacuum pump out of the sky, well then $20,000, $30,000 damage, $40,000. The sky's the limit depending on where it landed.

EE: Yeah, you could do a lot of damage to a number of things.

MG: *Whoosh!*

EE: So what else did you do in the elevators? [Laughing] Around and above--.

OM: Did you wear a parachute?

MG: Oh, a parachute, that was one of the innovations. When I first--. Oh, there you go. There's a story. The old guard. I was working at doing a dust control job—new filters—at UGG A house, and we had just about--. Two years they'd been there, and I was there about a year. And Richardson's job was coming online, and they had the advance crew was setting up winches and setting up a lunchroom and all the other advance guard stuff. Getting ready to go. **[… *audio skips*]** Over and these guys that were over at Richardson's, I didn't know them, but they were like the old guard, right?

EE: They knew how to do it, eh?

MG: Yeah. I was a, say, 10- or 12-year journeyman, and they were like 30-year journeymen already at that point. So I said, "Well, where are they working?" "Well, just go to the far side of the elevator and look up." He says, "You'll be able to--." Because they were cutting down cyclones. It was the same job we had done at UGG A house, or whatever Viterra's calling it now. Three?

EE: Used to be the old Sask Pool 7A and B right?

MG: Well, it was Sask Pool 7 A and B, but then Sask Pool bought UGG A, so I think they're calling that Viterra 3 now. Because it went to--. They had another name in between times. Agricore Untied. Anyway. So anyway, I go to the far side of the parking lot, I look up, and you see these two little tiny figures, and they're right just below the top of the highest part of the building. They're like 250 feet--. **[… *audio skips*]** By two-inch quarter-inch web, angle iron frame with a cyclone in it, and you could see they had a

winch cable on it. And they were up there, and they were chiseling away at the bolts. They were standing on the angle iron that they were chiseling! [Laughing] And I'm looking and looking--.

EE: Now, they'd be roped? No rope to the--? [Laughing] Ok, carry on.

MG: So, I go upstairs. You know, typical elevator. I've been around for ten years. I know how to find my way upstairs. I find my way upstairs. I stick my head out there, "Hey, boys! My name's Maurice. I'm supposed to come give you a hand." "Bring your hammer and chisel, come on out!" I said, "Nope! Not coming out there." I says, "Where's the safety rope?" "Oh, well, you know. We don't like to use them. They get in our road." [Laughing] They said, "What, are you afraid of heights?" I said, "No, I'm not afraid of heights at all." I says, "It's the sudden stop at the bottom." [Laughing] "Yeah, smart guy, eh? Smart guy." I said, "Well, I'm not coming out there without a safety belt on." So he goes out, down to the millwright shop that was part of the elevator complex, and he gets this great big heavy rope--. **[…** ***audio skips*****]** Rotten, and I'm going like, "I wonder if that would hold anything up?" They give you a waist belt. The safety belt was just a belt around your waist. You know a back-breaking thing if you ever slipped.

EE: How wide was it?

MG: Oh, it was maybe two and a half inches wide, and it had a big D-ring on the back. [Laughing] You would fold up like a, yeah, if you ever landed.

[1:10:10]

EE: Like a wallet!

MG: Yeah. It would tear you in half, literally, if you ever--. So that's what we used. And then he got me this old rotten rope and a safety belt and out we went. But now, they started bringing in the parachute where the belts went around your thighs.

EE: Let's finish the story with these two guys! [Laughing]

MG: Oh! They were out there chopping it down. They were standing on what they were cutting. They were relying on the last bolt.

OM: To hold it.

MG: To hold it. And they were going to reach out the window. One guy was going to hold the other guy by his pants while he cut the last bolt off! They didn't have a swing seat.

EE: Now none of these bolts were ever rusted, I don't suppose.

MG: *Boom!* [Laughing] Like--. **[… *audio skips*]** Bolts. I'm the young buck here, but not without at least a belt on! At least they have a chance of surviving. Now, whether the rope would hold or not.

EE: So you managed to cut them all?

MG: Oh, we did it. How many we cut down. And I says--. I used to fight because--.

EE: Well, I mean on this particular thing? You got the job--?

MG: Oh, yeah. Everything held and held and held, and then he, like he said, he got out the--. Got the last bolt and held onto his pant belt, and he leaned out the window and chopped that last bolt. "Ok! Let her down! There's the first one." That was the first one to come down of the old cyclones. And there was like 50 of them on the wall, it was just the beginning of a major, major--. All those filters that are up at Richardson's now and all those fans, that was all when it started.

EE: And these two fellows carried on doing--? Did they change their style at all?

MG: No. [Laughing]

EE: And they survived the job?

MG: Oh, they--. Well, Ray suffered a bit. On that job, later on--. We were there for a couple of years on that job. It was a big, big job.

EE: I can imagine.

MG: He stepped on a frog, which is the track shift--. **[… *audio skips*]** Quite frankly, but he wouldn't go to the hospital. He limped around on that job, and I guess his ankle just healed that way. But he was one tough man, I'll tell you. He would--. There'd be after lunch—of course you come down for lunch at 12:00—at 12:30 we'd be all in the carriage going back up. But the grain elevator

elevators were pretty small, so it could only have half the crew. He would run up the stairs, and he was going right to the roof. And you would hear him on the steps: *bump, bump, bump, bump, bump, bump, bump, bump*. And he would run all the way up the stairs.

EE: After he'd broken his ankle?

MG: Oh, that too. He used to go a little slower, that's all.

EE: Boy!

MG: But he just didn't want to go to the hospital.

OM: So just finishing off, the parachute--?

EE: Over to the parachutes now. I had to get those guys fit in!

MG: Oh, the parachute harness is the new style of safety belt. That was a huge thing. Not--.

OM: The energy wasn't all--.

MG: Well, the parachute harness works because the main belts are around your thighs, which is your biggest bone in your body. It tightens through your crotch, Then when you land on it, you don't bend in half. You stay upright--. **[… *audio skips*]** Hindsight and I got dumped out of a swing stage by my so-called partner at work. [Laughing] Did something foolish and dumped me, but we both went off the swing stage, survived the fall, and I didn't even have bruises. Electrician came out, leaned a big ladder up, and we climbed down and went back onto the swing stage and went back to work.

EE: After you'd had your little discussion about it?

MG; Yeah. [Laughing] "What for you be doing that?" [Laughing] And that's the polite version. [Laughing]

EE: So it was the parachute harness?

MG: That saved me. Oh, you wouldn't want to go in a belt harness or a waist belt.

EE: No. No, well, that sounds--.

MG: You know what? It was proved to us. When they first came in, "Oh, they're too encumbering. They're no good." Because the safety committee was trying to get every--. You know, "You have to wear them. You know, you're going to go up there, you're going to wear a safety belt anyway. You might as well wear the safe one." And we were in the shop, this was G. M. Mitchell Holmes. They were one of the big players in the early years too. That was on Fort William Road there. They had an overhead crane, and they picked him up very, very slowly off the floor. Within ten seconds he's screaming to be put down because it was so painful. Then they put a parachute harness on him, they picked him up, and he was like, "Oh."

EE: "Take me higher! Take me higher!"

MG: It just didn't hurt! But it was a huge leap forward in safety. It really, really, really was. And everybody used to say about the bosun's chair, "Oh, that's old technology." That thing was the safest thing that we ever had. No one ever got hurt in it because you always respected it. In our business we had rules. Number one is that you always set up your own swing stage or bosun's chair. And if it's been hanging on the wall—like sometimes, you know, we're going to do part of project where you need it, but it'll hang there for a few days—if you're going in it, you were responsible. Go all the way to the roof, check all your clamps, make sure nothing's been damaged, and then you come down and use it. But you never went in it without doing a personal inspection. If somebody else erected it--. **[…** ***audio skips*****]** Done up there. Ironworker might have laid a big heavy piece of steel across your supporting cable or across your safety line, which would risk cutting them or damaging them or--.

[1:15:31]

EE: Were there serious injuries or deaths in the workforce you were in over the years?

MG: None to the construction crew. I mean, we had the--. The big thing with sheet metal workers is cuts to your hands.

EE: Yeah, I can imagine.

MG: And it was in the early 2000s that that was eliminated. They brought in Kevlar gloves that--. They look like a garden glove, a cotton glove, but they're made of Kevlar, and you could wear them under your leather gloves. Virtually eliminated the cuts to the hands if people wore them. I was on two jobs--. The job had its dangers. I mean, I almost got killed about two or three times. Close. Like--.

EE: Well, you've told us about work that must be very dangerous. Potentially dangerous.

MG: The most dangerous thing about a grain elevator in particular is the belts. **[… *audio skips*]** Surround the pulley itself, and it's a pinch point. And if you get any--. You've got to watch and make sure you don't have a chain fall. Chain, you're pulling on a chain, you can't have that chain touch because the incredible power of these machines—hundreds of horsepower—they won't slow down. They just don't care. And if you get caught in there, you'll get killed.

EE: Yeah. I can imagine.

MG: And I was on two jobs where other workers—not ours—got killed. One was at Cargill, and it was a new retrofit. The old--. After the big explosion, about a year later, they were doing a bunch of repairs, and with the repairs they were modernizing all the equipment. They were making it all computerized. So to run all the conduit, instead of running it on the surface—which collects dust—they ran all the conduit on the floor. And then they raised up all the belts and all the idler pulleys and everything by two or three inches, and then they were cast, eventually, they cast a brand-new floor. **[… *audio skips*]** With no dust collectors, which is a good idea. But of course, to raise up all the belts, they have to take all the machine guards around the pulleys off.

So they were still trying to run production. And two of their guys were walking through the plant in the middle of the night, and the one guy tripped on a conduit that wasn't cast into the floor yet, and when his foot came down it went into the head pulley of the thing. It tore him in half. His one leg went through, the other leg didn't go through. Literally tore him from his groin. Tore him right through. Tore him in half! The guy next to him, I was told that he was in the LPH [Lakehead Psychiatric Hospital] for a couple of months because it was--.

EE: So gruesome. It killed him instantly, eh?

MG: Oh, yeah, of course. He died instantly, but literally his insides were sprayed throughout the building. In a heartbeat. And the guy next to him got sprayed is basically why he had problems. And then I was on the job in--. **[… *audio skips*]** Guy that got killed made a mistake. I don't know what he was thinking about, but--. Maybe he'd just been around. Millwright, been around the equipment so long and just wasn't thinking. He was doing something stupid, and he got his hand caught, and it tore him from above his belt, took his arm and his shoulder to right up inside all the material in his neck. So he had a gaping--. The whole side of him was ripped open, peeled open. There was people there right away. One guy took his coveralls off and tried to shove it in the wound, but there was nothing they could do about it.

EE: Far too large a hole.

MG: Yeah. He lasted two hours, but--. When you're in a mining site—that was Winston Lake Mines north of Schreiber—when you're miles in the bushes --.

EE: Yeah. You would be getting a chopper in, and they probably didn't have them. Weren't available at the time.

MG: Well, yeah. They had phoned for the chopper, but actually the doctor from Terrace Bay come in the ambulance. I was onsite, but I was working in a mechanical room with a lot of equipment running and I didn't know anything about it. I had worked all day, and we worked--. You know those days when you're out of town, you work long hours and then you took Friday off. So we'd work until, say, 7:00 Thursday night and then drive home from Schreiber. But it was like a Wednesday that it happened. So Thursday morning at 6:00 in the morning I'm having breakfast at the restaurant, and somebody said, "Well, what are you guys going to do?" "What are you talking about?" "Well, the site's closed because of the fatality." I was in shock. I was right--. Not that far away, but with all the equipment running, I just didn't realize that it had happened. It was just a series of stupid mistakes. And he should have never done what he was doing. He was--.

[1:20:29]

EE: Did you get involved for the union perhaps or at your employers on a health and safety committee? Were you formally involved? Because obviously you were very mindful of the importance of safe procedures, but--.

MG: In many respects, with automation it got much more dangerous because equipment would start. I said that already. This is what happened in Winston Lake. The equipment wasn't running, but the technologist that was putting motion sensors on the machine so it would tell the computer that it was running had left his flashlight on the belt—but not on the top, in between—and it had gone on the tail pulley and crushed. All the debris from this flashlight was going through the pulley and dropping on the belt, through the pulley and dropping on the belt. And the millwright who had installed this belt was coming on like, "What is that stuff in there?" And tried to sweep it with his fingers, and he was done. That machine does not care. It's just too big, too powerful.

We never got into the committee thing, but what happened, is they started a program—I guess this had to be accident and workman's comp and all that—what they called a tool--. **[*… audio skips*]** We would have a meeting at five after 8:00 in the morning when, you know, ready to go to work we'd gather. When I was a lead hand, I'd be given the program that we're going to conduct today in the field before we went out on site. You know, "Don't leave debris on the ground that you can trip on. If you see something that's dangerous, like a bad cord, don't just throw it back in the job box. If you see a cord with a bad end on it, take your

pliers and cut the end off. Make sure that no one can use it. Just immobilize it. And you should be tagging it." So we were trained, and on site we were starting to--. But that program was coming from, what is it, Accident Prevention--.

OM: Industrial Accident Prevention.

MG: Yeah, IAPA or whatever they call themselves. Industrial Accident Prevention Association. So it start--. Because if the company was negligent, it got to be to the point where people were being sued and all the--. Company you're working for doesn't want accidents on site because, you know, when that guy got killed at Winston Lake Mine, that mine went. Production went out for a week because they had to--. By the time the investigators had to fly into Schreiber, it takes two days to get there, couple days of measurements and inquiring who did what that day and why. So they didn't, you know, they just don't want it. Nobody wants it!

And so, what it became with me is my apprentices, as an apprenticeship situation—you know, veteran journeyman lead hand—I used to tell them, "You are your own accident prevention committee. You are getting paid to do it safely. You are not getting paid to do it dangerously. You will not do that kind of behaviour. Don't do it around me. Don't do it around me ever because you're not going to stay on the job. We'll put you off the job." And I've had to take--. Fire, literally, guys that were just--. They get cocky, they think they know everything, they start doing stuff. And basically, one I had to fire out of all those. I reprimanded some other guys and said, "Listen, you're not doing that." Or send them back to the shop with a warning. "This guy is irresponsible. I don't want him." One guy, I just marched him out to the gate and said, "Don't come back." "Oh, you can't do this!" "Oh, yeah. Buh-bye."

And there was one guy, he was a really nice guy—that was the unfortunate, good guy—and I just put my arm around him and said, "You know what? You better find a new career because you're going to hurt yourself or you're going to hurt somebody else. You know, you're smart, but you just don't have that attention span that--." We go places and do stuff that you have to pay attention to what you're doing because one stupid little thing and somebody can get really, really hurt right up to being killed, you know? No, it's just by the wits sometimes. I've come close a couple of times.

EE: Every one of those occasions sharpens the sense of what one needs to do, I'm sure.

MG: And I always made a point as a journeyman of trying to, "This is what happened to me and how quickly it can happen." You're not going to save yourself. You're not going to hang on Harvey. When an accident happens, it happens so fast that you're done like dinner before you even think of saving yourself. I said, "Don't put yourself in that position," because if you get hurt, they just get rid of you. Anybody that thinks differently, "Oh, no--." No, no. You're out the door. You don't work again. And even if you heal, the other companies all would say, "Oh, he had that bad accident. Don't hire him."

[1:25:35]

EE: So it's really that brutal in that trade?

MG: Construction? Absolutely. If you don't work, you don't get paid. You talk to the boss the wrong way, you're out the door. There was no seniority. Even I worked at one company 20 years, there's no seniority. The day they don't need you, out the door. You're allowed one-hour notice that you don't ever work there again. That was our only protection.

EE: And that's general across construction?

MG: No, not entirely.

EE: But it was for the sheet metal workers?

MG: In our local here it was different. There's 11 sheet metal locals in Ontario. Two of them—Windsor and Thunder Bay—have name hiring. So when the list comes out of who's unemployed, the company can hire. They can pick from anywhere on the list. So I would work almost all the time because they would look, "Oh, Maurice is available. Hire Maurice. George, who is this George?" "I don't know."

EE: So people--. You were known for careful and intelligent work?

MG: The name of the game is making money. If you made money for your boss and didn't cause him any aggravation, he would keep you working, and you would work. But if you were cocking off and talking rude and being belligerent or having an attitude or being lazy or dangerous, they would just walk out and say, "Go home. I'll get somebody else." And they would. They could literally send one guy home, phone the hall, and say, "Who else is on the list? Oh, Frank is there now? Yeah. Because Frank got laid off yesterday, send him over." So there was always that solid core. I worked all the time, and I used to have guys in the trade mad at me. "How come you work all the time?" I said, "What can I say to you? Smarter than you?" [Laughing]

One guy, he was trying to do it, embarrass me in the lunchroom. I said, "Well, I'm smarter than you." I said, "I do my work smarter, I do it safer and faster, and I make more money!" It's about making money. I mean the boss doesn't want you there if you're not making money.

EE: Were you involved with the union to any extent?

MG: Not really, no. I mean, being a member, paid dues, went to the odd meeting.

EE: The union local would be in the keeping of the business agent, I suppose, or the--?

MG: Yeah. One member--. The business agent was an elected member, so you would have an election every four years, and if he was uncontested, he would stay. If we got a good business agent--. Like we had Ron Taylor for many years, but he was good. He ran the business of the union really well. And there's something that might be interesting for this is that I have a really good pension because of him. He had the foresight when in the 70s all of a sudden we were getting raises of $2 or $3 an hour. Instead of taking it all in cash and spending it, he started to put dollars per hour into pension. So the boys today are probably at $6.50 an hour into pension plan.

EE: And this was a pension--.

MG: Which translates into $10-12,000 a year into your pension every year. Every year. Every year.

EE: And this was the pension plan that the local had?

MG: And it's outside of the company's. So that it--.

EE: Sure. The local controlled.

MG: It's totally run by trustees that are elected. So every two years or every four years—I guess it's four years—they have an election for trustees. There's a certain number of guys that want to be, and he says, "I want to be on the pension trustee." And they have four guys, and basically it's controlled by Great West Life or Trimark or whoever they're at the time. And if--. They have probably $90 million invested. This is not a little thing.

EE: It begins to add up.

MG: And so when Trimark says, "Well, we'll give you 0.2 more percentage," then they move the money. They'll tell the other guy, "Either you'll come up--."

EE: Match it or lose it.

MG: "Match it or we're moving it." Then the other guy will go, "Sorry. You know, call their bluff." "No, *Clap!* 90 million bucks! That's it. We're out of here." And that pension plan runs that if it makes—the principal—makes 1.5 percent, it covers all the expenses of all the journeymen that are in retirement. So it doesn't ever go down. The principal never goes down at 1.5. So if it's got 2 percent, they're actually making money. So at 2 percent, they're making 0.5 increase and all their pensions go up.

[1:30:20]

EE: The pension is based on a 1.5 percent return?

MG: Minimum.

EE: Minimum, yes.

MG: You know, you're going to get--. My pension is going to stay the same because I have a contract now. That's what we're going to have.

EE: A lot of the province requires that.

MG: What I was saying is, though, as long as the stock market is returning—and these are mutuals that they're investing in--.

EE: Well, that's very cautiously done. Wisely done.

MG: Oh, yeah. It's reviewed every month. I mean, every month they look and say, "Oh, boy, oh, boy. The returns aren't--." And of course, you get 2001 return where they, "Oh, we just lost--." Or 2008. "We just lost $4 million!" But I went down and talked to the business agent six months later, and he said, "Oh, we made that back."

EE: Yeah. Good. Well invested.

MG: I mean the spike goes way down, but he says, "It came back almost as fast as it went down." Four months or six months.

EE: Did the local ever go on a strike or were they locked out or was that just not--?

MG: We went on strike two or three times actually, and they were fairly long—I think eight weeks, eight weeks, and seven weeks—over the course of the 37 years I worked there.

EE: What were the key points as you remember them?

MG: Ah. The original ones were over money and benefits, like pension money or other benefits. And the way that strikes happen changed dramatically. The very first one was like an eight-week thing. It was with the local contractors. They were making fortunes in the grain elevator trade, quite frankly, is where the big investment was, and it wasn't translating to increase in wages and benefits.

EE: No bonuses?

MG: Well, there was never a bonus, anyway.

EE: No.

MG: The bonus was that you got to work next week. But we went on this long strike, lasted eight weeks, got the big increase, but at the end of the year, you didn't make a dime more. Strikes never win.

EE: No, not in that year.

MG: But the strikes were almost always about money. And in that year, the union itself had rules that if you were working in Thunder Bay, you could go to Windsor if they were busy at the car plant. So half the guys didn't even notice that they were on strike. They just went off to, say, Local 11 or Local 30 down east and they had a job anyway.

EE: Well, that's the time to have a strike, when there's alternative work available, I suppose.

MG: So, of course, the provincial government powers-that-be didn't like that business of you working elsewhere. So what they did is they passed a law that all locals in Ontario have to negotiate at the same time and for the same contract. Of course, what happened to us in Northern Ontario—our 300 members against 3,000 in Toronto—and they wanted $20 a day parking fees, and we ended up on strike because they all voted for a strike that we didn't want. We thought the wages were fine and who cares about $20 a day parking. It doesn't affect us. We wanted another clause put in about working out of town. When you're in Red Lake and you

have to live in a hotel, the per diem—per day—was so low that you were losing money. It was costing more to stay at the hotel out of town than it was to the money they were giving you. We wanted reasonable accommodation and board. That's all we--. But of course, Local 30 didn't care about that. None of their people worked out of town! So--.

EE: Then those two clauses should have been tied together! [Laughs]

MG: Well, it--. But by law, we had to negotiate as an 11-local bargaining unit. So there was a bumpy year that year. I think we were off for six or seven weeks that year, and we were not a happy crew. And then within a--. But we were getting a big increase because the other thing is Toronto, you know, that's the days of Commerce Court and all those big bank buildings going up, and they didn't want strikes taking out the summertime building. And the other thing that was happening is that the sheet metal workers would go on strike, and then they'd settle. And then the carpenters would go on strike, and they'd settle. And then the electricians went on strike, and then they'd settle. And they'd lose six months, seven months of summer building. The good weather. Because everything slows down in the winter.

[1:35:00]

So the next batch of provincial laws came in and said that all construction unions will bargain on the same day at the same time in the same year. So if one goes out, they're all going out. Like there's no--. It'll be a six-week strike, and then everybody's back. So what was usually happening for us in the end is the electricians would settle for an 8 percent increase over three years, so the sheet metal contractors would offer us 8 percent over three years. We'd say, "Atta boy" and "Well done. Good electricians!" **[…** ***audio skips*****]**

EE: The price leaders, price setters of the negotiations?

MG: They usually set the way. It carries. We're not getting the disparity on regional issues because we were blindsided by that happening, but now, of course, we're aware. Our local, when they're negotiating with our fellow locals, have this discussion before the strike starts and saying, like--. None of this blindsiding us with all the other. So there was some issues in the unions, but the union--. There wasn't a lot of company troubles. Like the companies weren't bad companies. They were pretty much good companies.

EE: Bad employers?

MG: They weren't bad employers for the most part. I did have some run-ins with out-of-town companies in other jobs.

EE: The local companies would be, they might employ several score of workers when things were really busy, but you're still fairly close to the principals of the company, I suppose, in the sense of it's a small place and you all kind of know each other. That--. **[…** ***audio skips*****]** In or whatever to--.

MG: That brings up the point you talked about the grain trade. The one being notable was Canada Malt. The name "Canada Malt" belies the fact that it's a totally American-owned company.

EE: Oh, is it?

MG: Oh, yes. It is. It used to be Labatt's at one time. It's totally American-owned now. I don't know what big—ADM [Archer Daniels Midland] or somebody—has got their hands on it.

EE: That would make sense. ADM or one of the others.

MG: It's something. One of those big ones. I'm not sure if it's ADM, but it's a huge, multinational, billions of dollars conglomerate.

EE: Well, that would certainly be absentee ownership there.

MG: Oh, and it's not just absentee ownership, it's attitude. And there's that real corporate American—and I'll say it straight up—it's American attitude that you will do what you're told or else we'll fire you. Everything they say is, "You will, or we'll fire you. You will do this, or we'll fire you." And it's that whole attitude. When it was Labatt's every--. **[…** ***audio skips*****]** It was a, you know, "We're going to look after each other. You make money for us, we'll look after you." Now it's not like that. It's pure mean. It's not a--. Some of the guys don't like working there anymore.

EE: No, I can well imagine.

MG: But, of course, when you're 27 years into a 35-year career--.

EE: You toughen up.

MG: It's only one plant. You've got Thunder Bay—they closed Toronto—you've got Thunder Bay, Winnipeg, and Calgary. Something, whatever. But there was a big change. I mentioned I worked for Metso, which is a paper company.

EE: I don't think you had, actually, but tell us a little bit about Metso.

MG: Metso is more recently– They're a big Finnish company from Helsinki–multinational, all over the globe. But that European, Finnish mindset about how to look after employees was a great place to work. Safety was number one. They absolutely--. If you see a problem, you fix it. You stop. Safety is first of any--. **[… *audio skips*]** Won't send it out. "We don't care if it's you're mistake. We don't care if we have to pay to fix it. If it's not perfect, you don't ship it." Even if it's a forklift scratch on the side of a tank or something like that, "No. We're not shipping that out. You bring that in, $5,000, $10,000 later, we'll fix it. But it's not going out with a scratch. Don't do it." So there's that whole diametric attitude between the European Metso and the American companies like, "Who cares. Turn the scratch to the wall." You know it doesn't matter if it might structurally affect things later on or whatever–rust or whatever. There is a real--. And treat your employees differently. They were just mean. And they took deliberately adversarial approach to dealing with their employees. "Or we'll fire you."

EE: Yes. Some really shortsighted because it gets in the way of, ultimately, of efficiency. The place doesn't work as well.

MG: I digress into the paper trade, but one of the employers was--. **[… *audio skips*]** Lost my train of thought there for a second.

[1:40:09]

EE: Were you going to say something about Great Lakes or something?

MG: Not that. Well, we worked there too in the paper. But it's just the attitude that they had about employees and stuff, you know?

EE: Yes. Did you do any other kind of work at elevators? We should probably try to wrap that part of it up. [Laughs]

MG: Kind of work in elevators. What other did we build? Ours, basically, was dust control and different--.

EE: You may well have covered them.

MG: Yeah, I think so. You know, filters, pipes, belt covers, all that stuff.

EE: I'll move on into some of these other interesting questions. What would you like people to know about the work that you did in the places you worked? If you were going to sort of sum it up, pick the--.

MG: Sum it up, eh? A lot of people didn't understand about coming and going in construction. I mean, that was--. The work there was dangerous, it was outside in the wintertime--. **[…** ***audio skips*****]** Some days when the wind was blowing. And if you didn't work, you didn't get paid. So if you left--. If it was just brutally cold and there's nothing getting done, you would go home, but you didn't get paid the rest of the day. If you worked two hours, you got two hours of pay. I think in the 37 years, I only left the job twice. You know, it was 40 below, howling wind. It was just impossible exposed territory. The other days, you just put on more clothes. I would wear four parkas at a time, and they--.

EE: And remain safe on the job dressed that way?

MG: [Laughs] Well, just think about going up an open concrete wall on the outside of a building on a bosun's chair in the middle of nowhere.

EE: In the wintertime.

MG: And you're sitting on that chair and it's minus 28 Fahrenheit, minus 30 Fahrenheit. It's brutally cold.

EE: And the wind's blowing.

MG: The wind's blowing. Because of the shape of the building, it's funneling the wind all around you. Well, I would wear layers and layers and layers. I would have the eiderdown sleeveless on the bottom, and then I'd have another coat sleeveless, and then I would have two--. **[…** ***audio skips*****]** I was up in the chair and you're wearing heavy mitts trying to work with small bolts. So you would have, in a bosun's chair, you would have buckets, bags, on the side. You'd take your mitts off, you'd shove them in the bags, do up all the small bolts, put your hands under your armpits just for a second, do up more bolts, and put your mitts back on and move to whatever else you were doing.

I came down one time off working on the chair and the boss was going, "Come on in for coffee." Well, I didn't want to come down because it's so much effort to get back up there. I said, "I'm just about done. I'll stay an extra half an hour." But, of course, he drives around in a truck all day, he only had one parka on. So he says, "You must be frozen to death!" I said, "No, no. It's a four-parka day." That was another joke. [Laughing] We'd rate the day. It wasn't about minus 40, I'd say, "Well, I've got three parkas on

today, not two." Or four parkas. That was maximum. After that, we went home kind of thing. I came down and he didn't believe me. I said, "Well, watch this." *Zip, zip, zip, zip*. "Holy smokes," he said, "You do have four--." **[… *audio skips*]**

You didn't. There was--. We would always have more than what we--. You know, they'd have to be safety boots with insole plates and toes but with the heavy, thick wool liners in them. Typical outside boots. And we would have three sets of liners. And in the lunchrooms of the grain elevators, they would have the radiators, and all of the construction workers would have all their booties lined up. At coffee time at 10:00, you'd go in. The first thing you'd do is change your boots. You'd take those liners out, put fresh, dry, warm liners in because staying dry is number one, and you'd be sweating with the work. Walking, and, you know. As soon as your feet got wet, you were toast. And then at lunchtime you'd change to another set of liners and a pair of socks. So I was changing, you know, into Nipigon nylons at lunch and another. And if you made it--. A lot of the times during the winter the 3:00 is not so cold. It's always cold at 8:00 in the morning, 7:30 in the morning, but by 3:00, a little bit of sun. Not so bad.

[… *audio skips*]

EE: Frost out there. Brutal conditions.

MG: And the other thing is that if you were working, say, on the bin floor is, what, 90 feet off the dock, but you're in the lunchroom at lunchtime, we wouldn't take the elevator up. All full dressed clothes, boots, and everything, we'd walk up the stairs 90 feet just to get your heartrate and your blood pressure higher. You know, build up a little bit of heat in your system. We used to run the stairs just to stay warm.

EE: [Laughs] What--.

OM: And now you pay for that at the college!

MG: Yeah, yeah. [Laughs]

EE: Next question is--.

MG: Well, actually the paying at the college, is the arthritis in my wrists, and that's from hammering. That's why I think it--. You know, you go to the doctor, and you say, "Well, I used to do a lot of hammering." I said, "Doctor, I own seven different kinds of hammers. I was never without." A sheet metal worker without a hammer is useless, I mean, that's--.

[1:45:22]

EE: Yeah. I bet, maybe, your toolbox might interest or surprise people most about the work you did. That's the next question, actually, but--. **[*… audio skips*]** Box contain.

MG: Well, because I did various kinds of works, I had several different toolboxes actually.

EE: I daresay. Well, the elevator one would be what we'd be interested in.

MG: The elevator one. What we found worked best in the elevator wasn't a box at all. You would get a 20-litre plastic pail with a handle, and some of the guys would take the metal handle and put a rope on it. But you could put tools in the open top of a 20-litre pail, tie it on a rope, and when you went up into space in some awkward place in the middle of nowhere, if you took a box that you had to set down, it would always be kicked off and tools would be scattered from here to tomorrow. But an open-top plastic pail is what everybody carried. I did have--.

EE: And what would be in there?

MG: Oh, crescent wrench, several clamping style vice grips, maybe some C-clamp vice grips, pry driver. We didn't use screwdriver for screws very much. We always had these great big, long bladed five-sixteenths and other stuff. A set of pins for line up pins on bolt holes, various sized ratchets and spanners for making bolt connections on flanges. In the early days when we did a lot of blow pipe, we would have a rivet set and--. I don't know what else. We tried to keep it barebones because you're transporting it around.

EE: Yeah. And hauling it way up in the air and whatnot.

MG: Hauling it on a rope. So your partner would go up on a half-roof and throw 100 feet of rope down, tie your pail on, haul your pail up to where you're going to work in the middle of nowhere, and then you'd get on the chair and with your arm strength pull yourself up to your tools kind of thing. Because to put the tools on your person just added that extra 50 pounds of weight onto your belt. And a lot of times you had a drill and a cord and stuff.

EE: The bosun's chair was never motorized? It never had electric motors. It could have, in theory, couldn't it?

MG: Nowadays they have something called--. **[… *audio skips*]** But it's not as flexible for--. You get a whole series of pipes running at all different angles, and some of the places--. To get in the back--. You've got a round pipe like this and it's against the wall. How do you get to those flange bolts? The spider is a physical--.

EE: You were describing a pipe that might be five or six feet wide.

MG: Yeah. Oh, some of them are quite--. You can almost crawl down them quite easily. But to get to the flanges that are close to the cement of the building, you can only reach one can. When you've got a big spider, the physical size of it won't let you get close enough to--. So even when they banned the bosun's chair—which I thought was folly, but—we would sneak the bosun's chair onto the job and not let the superintendent of the elevator see it.

EE: When was it banned?

MG: Uh, that would be in the '90s. But I think that the superintendent of maintenance owned the spider that he caused us to rent. [Laughing]

EE: Oh, is it that sort of thing?

MG: I think there was--. [Laughing] But it was just some of those places. The awkward, awkward, awkward places, middle of nowhere. And it's hard to describe to people who have never been there. When you climb out a window at 100 feet in the air, literally climb out a window and onto a board that's under your bum.

EE: Some of our listeners have lost their stomachs already! [Laughing]

MG: Oh, yeah. You know, it's hard. I mean some of the new apprentices when I worked at Metso, I had to do this job at Cargill, and they said, "Well, take that new apprentice out there." I'm going, "Hm. I wonder." So we go out, you open the door, and you're 150 feet in the air and you're stepping out. It's totally safe catwalk with handrails and everything, but it's an open grate. You can see down straight with nothing, nothing but 150--.

EE: Well, it's an interesting experience the first time it happens!

MG: And there's almost a freezing like, "Woah, what's going on?" I said, "Well, you'll get used to it." And then you climb along, and you go down a vertical ladder—inside a cage—and it's another "Woah" moment. It's when we got to the pigeon coop where

the head of the grain spout starts, and I started taking the grating out of the floor so that it was open. Oh, he started to worry then. I said, "Well, that's why you have a safety belt. Tie yourself on." *Chck!* Didn't have to be told twice.

[1:50:06]

EE: And he had the parachute--?

MG: Oh, yeah. By this--. This is 2008. Everybody's wearing parachute harnesses. But as far as working up high, you get acclimatized to it.

EE: Oh, you do.

MG: When you work up 100 feet in the air every day of your career, you go out. The problem is forgetting where you are.

EE: Yeah, or rather remembering where you are! [Laughs]

MG: But I, you know, there's a couple--. This one guy, Rick, was really bad. He wasn't unsafe, but he would forget that he's 100 feet in the air. I said, "Snap your safety line on. The line is--." And he's got the safety belt draped over his shoulder because he's been out in the building, and he's walked back out to the edge of the wall, and he hasn't hooked on. The safety equipment's all set up. All he had to do is set the hook on. He just forgot because he--.

EE: Perpetual alertness, obviously, is what's required.

MG: And I have to look out for him, and he has to look out for me.

OM: It must have been really close-knit relationships built on that.

MG: Yeah, in some ways. Because you have to trust them. And if it got to the point of not trusting, like I said, put your arm around him and say, "Well, you better find yourself another career."

EE: What are you most proud of in the work you've done over the years?

MG: Proud of, proud of. Well--.

EE: That you survived, I suppose, of course! [Laughing]

MG: Yeah! Well, there you go. I have a good pension. [Laughing]

EE: Pleased! And a good pension.

MG: Yeah, good pension, yeah.

EE: Enjoy your retirement.

MG: I did lots of good stuff. I built, you know, good, solid buildings and--.

EE: And you enhanced the grain trade, the movement of grain through the Lakehead quite clearly.

MG: Yeah. Yeah, we did. You know, gave all my skills and intelligence and talents and stuff to that. I mean we didn't build anything that somebody else couldn't have built. I mean, it was--.

EE: Well, that's what I wondered about earlier. A little of this is patented. The designs couldn't be patented probably when it came to the pipes and all the rest of it. Anyone could do it, but it was the quality of the work, the care with which it was being done, and so on and so forth that would be important.

MG: Yeah, yeah. Stuff like hangers and stuff, they never told us what to hang this material with. They would say, "This pipe size has to run from here to there. You get it there." So once I was on the job as a lead hand especially, I would be going, "Well, I'm going to need a standoff hanger that's 36 inches centre from the wall, this size." And I would be ordering that kind of stuff impromptu on my own. I mean, there wasn't engineer designs.

EE: No.

MG: I guess there was some that was done on long runs in an annex, but a lot of the stuff in the space, that we were designing and building as we went.

EE: Sure. You've given us a lot of vivid memories this afternoon. Are there any others that might be added in the way of vivid memories you've carried away from your work? Especially in the grain elevators or for them.

MG: Well, I guess the biggest change–. There was two changes that really affected things. One was when the Russians—Soviet Union—stopped paying their bills, and for about two or three years, Canada gave them the grain and said, "We'll put it on account." When they finally said, "Well, we're never going to pay you, so."

EE: That was it.

MG: That was it. And when they stopped shipping grain to Russia, Thunder Bay got hit. That was a huge quantity of wheat that came through here, those kinds of grain that went there.

EE: And the other?

MG: And automation, I think, was a big thing.

EE: Automation.

MG: And, of course, when they stopped those huge volumes with the Russians not paying, then the houses started to close. You know, the older houses that were more inefficient, had shallower docks, more awkward--.

EE: Terminal elevators, the whole complex in each case.

MG: Yeah, the whole complexes. And then you get 4 A and B closing.

EE: 6 closes and we knock it down.

MG: 6 closes, knock it down. Number 8 is standing there like a giant fire trap. Ho, they had another fire there again just a couple of weeks ago. I don't know, vagrants or kids or somebody was mucking around.

EE: Oh, yes. Yes, that's right.

MG: But there's lots of them. There's 4A and B are still sitting there. Pool 3 is still sitting there. The, what is it, 5 at the end of River Street is still sitting there. Pool 8. They've been abandoned for years. I don't know what else is left on the river.

EE: Are there any questions we should have asked that we didn't ask?

MG: About the grain trade? No.

EE: Any concluding thoughts?

MG: I'm pretty gregarious, I guess. I've just rambled on.

EE: You've done a terrific job! We're grateful. I do know you, of course, in other connections, but we haven't had a chance—I haven't had a chance—to hear about your work experiences. And I'm very grateful on behalf of the project for what you've told us this afternoon.

MG: Well, gives you some flavour. It was a modernization, and it basically started when I arrived. And maybe one other thing for history wise--.

OM: There's 30 seconds.

MG: Ok. [Laughs] In about '74, 1974/75, there was a huge influx of workers because Toronto and southern Ontario was slow, and they all came here for work. So a lot of those people stayed and are my friends today. You know, London and Toronto came here.

EE: Thanks again very much, Maurice. It's been a pleasure to listen to you.

MG: You're welcome. Was that two hours? [Laughing]

EE: It's been two hours.

MG: Yeah.

End of interview.