Narrator: Victor Martens (VM)

Company Affiliations: Canadian Grain Commission (CGC)—Grain Research Lab, Canadian International Grains Institute (CIGI)

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Summary: In his second interview, former director of the Canadian International Grains Institute Victor Martens continues his discussion of the Canadian Grain Commission's Grain Research Laboratory's routine and specialized work, their connection to other research organizations in the grain industry, and the long process to get protein testing introduced into terminal elevator facilities. Martens then describes his role in the creation of CIGI from concept formation to government lobbying to becoming the Institute's first director. He details the process of hiring staff, getting equipment, setting up programming for international and domestic customers, and travelling with CIGI specialists to customers around the world. Other topics discussed include grain handling technology around the world, organizing the 6th International Cereal and Breads Congress in Winnipeg, the challenges of working in the Grain Research Lab during the Second World War, gifts CIGI received from international program participants, and his admiration for Canadian grain inspectors.

Keywords: Canadian Grain Commission (CGC); CGC—Grain Research Laboratory; Grain research; Grain inspection; Grain varieties; Plant breeders; Grain grades; Grain protein testing; Terminal grain elevators—Equipment and supplies; Canadian International Grains Institute (CIGI); Grain marketing; Canadian Wheat Board (CWB); Government of Canada—Department of Agriculture; Grain export destinations; Grain trading; Certificate final; Visual grain inspection; International Cereal and Breads Congress; World War II; Wartime industry

Time, Speaker, Narrative

NP: Research Lab. Good afternoon, Mr. Martens. This is the second of our interviews. Nancy Perozzo is interviewing Victor Martens at his home in Winnipeg, and this is a continuation of the interview that we had late last week where we didn't quite get covered all of the information that I felt would be really valuable. So I'd like to start today with just continuing more about the Grain Research Lab. And as I started to think about it, I became a little confused about how various other entities that did research in Canada interacted with the Grain Research Lab. So the ones that I'm thinking of are the scientists with the Department of

Agriculture, the scientists at the National Research Council, and scientists with the various educational institutions, such as the University of Manitoba. So could you just tell me a little bit about the interaction with those groups?

VM: Well, the Laboratory basically, at the time that I started, they had approximately 15 employees working for them, and over the years—Dr. Anderson was there for, I guess, 25 years or so—and over those years, the Laboratory was built up to a very large entity. Insofar as what the Laboratory did, they did the support work for the inspection branch. The Laboratory is part of the Board of Grain Commissioner. It operates under the Board of Grain Commissioners, or the Canadian Grain Commission [CGC] now. The actual work of the Laboratory—and I still think that it's still doing that to some extent, maybe in different ways—but first of all was to assist the inspection branch in the inspection of grain, whatever came under them, for instance, the moisture content, and then later on protein and so forth. You know, that was all part of the quality testing of the grain, which is rather a routine part. You know, you call it the routine part of the Laboratory. And I would say that probably, well, more than half of the Laboratory's responsibility was in that area. Then the Laboratory had six, seven, eight PhDs working in various fields in grain, but in the view of research work, not control or anything like that. They were doing research work.

NP: When you talk about different aspects of grain, for example, what? You'd have a barley expert and--.

VM: Oh, yes. We covered all the grains—oils seeds, barley was a big one. We moved the malting equipment from the University of Manitoba, which was then made very large units, and they were all brought to the--. The Laboratory was in the old Grain Exchange Building at that time, and we brought all that equipment there. There's some really interesting stories in that because the barley testing equipment, some of it, was very, very large, and it couldn't go up an elevator or through doors and that sort of thing. So we engaged the lift people, you know the ones who do the crane work of all kinds. And we were on the eighth floor, and they took this equipment and hoisted it up by whatever contraptions they made up at that time and opened the big windows and put the Laboratory equipment in at that time. That's a long, long time ago, but that was the--. Because it started out at the University, and then they brought it to Winnipeg. And there again, there was control work, assisting inspection and so forth in the area of barley, and then also scientific research work in the area of quality of malting barley and whatever relations. So you had one section of the Laboratory devoted to barley, basically.

[0:05:07]

And the principal interaction which you were asking about with other organizations—the Department of Agriculture in Ottawa and the laboratories here and so forth—we were involved primarily in the area of plant breeders' varieties, testing plant breeders varieties for barley, for wheat, and for oilseeds. That was all part of the--. That was, you might say, routine work. It wasn't basically investigative work, but it was routine tests on plant breeders' varieties. Every year, they would send in X-number of

samples, small and large, and then the Laboratory would make tests—milling and baking. And there were some very, almost sad stories because the plant breeders, you know, spend years and years developing a line of wheat or whatever, and then we made tests at different times. And there was a quality standard, which was actually written into the first Canada Grain Act, which was Marquis. So then we would make tests of Marquis as the control and whatever other varieties there were, you see.

[Woman]: Hi, hi!

VM: [Laughs] I'm on!

[Woman]: Sorry, sorry! See you later.

VM: That happened every year. And the sad part of it was the plant breeders would, "Boy, this is a high-yielding variety, and the growing period is short, and it has all the qualities you would want agronomically." But the last test is always quality. How is it in the final milling and baking of wheat and malting barley? So there we would say, "Okay. You've got a good one here, but it doesn't qualify." The Board of Grain Commissioners did have the last say, and the Laboratory was it. If we said, "Don't--." Because we were responsible for providing information for the licensing of the variety, which, of course, is handled by the Department of Agriculture, but the grain has to be licensed to be grown in Canada. You can't grow grain without it being licensed by the Department of Agriculture.

NP: Is there a special group within the Department of Agriculture that does this? Have they sort of--.

VM: Yes. They also have milling and baking testing, but we would be the final say to them as far as--. We would say, "It's okay." For instance, one of the characteristics that's very important is rust-free varieties, you see. That was the other test. So they would get a variety that is near-on rust-free for the various rust strains, and then if they didn't meet up in quality, too bad. So that was very important work in the Grain Research Laboratory. I'm sure that's still going on to a lesser or greater extent, but that was regular work.

NP: The National Research Council, then had--.

[... audio skips]

VM: Areas, you know, doing--. They would, of course, also be involved in all of Ontario and so forth, where we never--. We were strictly Hard Red Spring wheat and barley grown, grain grown in the western part, three Prairie Provinces you might say.

NP: Is there a great deal of difference between the strains and varieties that grow?

VM: Oh, yes. Tremendous. Primarily--. Well, now things have changed a lot too because you now have winter wheat, which we had at that time in the early years, there was no such thing as having a winter wheat that would go through the winter. Now we have, so there's winter wheat planted here. And Ontario, of course, would be mostly winter wheat, you see. And then as for the local production, the export is limited, but we also did have--. [... audio skips] With grain from Ontario, but our primary responsibility was western Canada.

[0:10:42]

NP: Connected with this, I think, in a little way, is something that came up in our last interview, and that was the issue of segregating for protein.

VM: Yeah.

NP: Okay. In reading Dr. Anderson's autobiography, he had mentioned that, I think, he had first brought forward the suggestion that Canada segregate for protein back then.

VM: Yes.

NP: But I think you had said that, you know, it wasn't until the '70s, was it? Have I got the dates right?

VM: Yeah, that's right.

NP: Why did it take such a long time to do that?

VM: Well, it was a very, very major change in the grain control of western Canada's wheat, primarily Hard Red. At that time, when we had, what, 5,000 shipping points or whatever it was, the grain that was shipped out had a fairly high degree of uniformity because of the way that it was shipped out because you had one funnel going west and another one going east, and those were the two. Then there were 5,000 points where you had a mixture so that by the time it got into a terminal elevator, it was fairly thoroughly mixed. Not perfect, but it was fairly thoroughly mixed. So the buyers of our grain were getting, let's say, a good average quality of everything with limited variability in protein. [... audio skips] Little from this and the reasons why the

requirement became greater is that particularly in the Japanese market, which was coming on very strong, they had developed bread making machinery equipment. Huge. They would have a ball of dough the size of this kitchen and so forth. When you're dealing with automated bread making equipment, you must have uniformity of the product that you're putting in. It's okay for a small bakery. You bring in ten percent protein once and 11 percent the next time, they can handle that. But when you get that in huge—and the Japanese had very, very large baking equipment they developed—so they needed very uniform product.

How do you do this? What are you going to determine if you can't know what you're getting specifically, you see? So that was one of the reasons. The other reason was the Americans were doing it by small volumes, not a control on the product. The Australians much the same way. They didn't have--. So that's how that happened. But you're referring to Dr. Anderson. For many, many years before we were able to introduce protein, we were doing—under his supervision, of course, of control—we were doing tests for introducing protein into the grading system. But it was a very, very difficult thing because at that time all--. [... audio skips] Couldn't do it fast like you can, but we did it in the laboratory with tests and so forth.

[0:15:06]

The vision wasn't there at that time to put into this system where it had to be very simple. I mean, you can develop laboratory determinations and quality tests and so forth with all kinds of samples, and you put it together, and you say, "This is going to--." But how can you fit this into a system of handling throughout the whole grain handling system? The protein determination on the grain once they got that, to get that through right to Vancouver or Thunder Bay and have it binned separately and so forth and the--. [... audio skips] You know, that you'd have a whole new way of binning and so forth, so it was very complicated. Simple in the laboratory to play with samples and make tests and say, "Okay," but then from there, you've got to go to testing in elevators, which we did. I think I mentioned that to you.

NP: Yes. Yeah.

VM: So that's how that really happened.

NP: I guess I was just wondering why such a long delay in the change.

VM: It took a long time, yeah.

NP: So was there objections from farmers and from elevator companies, or was it strictly the issues that had to do with a broad inspection system?

VM: Well, the objection or the concern—let's put it that way—was, "How do we handle this? How do we start it? Where do we start it? Do we do it at the terminal? Do we do it at the country elevator? Do we do it at the farm level?" All this had to come. It--. [... audio skips] part. It had to be very, very simple so that everybody along the line could understand what is happening and, "How do we implement what you're asking us to do?" So we did all that, and it worked, even with the Kjeldahl laboratories that we put up in Calgary, in Thunder Bay to--. I told you about how we did it on the basis of car lots from the country elevator, you see, because we made the determination in those laboratories, and then the information had to go, be wired right back to the terminals as soon as they got the tests on each specific car lots. But it worked. We never made--. In fact, what happened is I think I was still there when we started it, and then when I moved to the Canadian International Grains Institute, then I think that was maybe a year and a half or so, and we hadn't had any errors. Then they got one huge complaint, and this was the first time. I know they came up to me and said, "You know what? We're in trouble with one huge complaint that we got from the Japanese on one cargo." And I said, "That's interesting, but we've been operating quite smoothly for over a year." So anyway, what had happened, it had nothing to do with the protein. They opened the wrong bin, and they actually--. [Laughing] So of course the Wheat Board properly compensated the Japanese, and it was found, you see. But otherwise, it worked very, very well.

NP: So they opened the wrong bin in shipping?

VM: Well, you bin by protein levels now. You have here--.

NP: So at the terminal elevator--.

[... audio skips]

VM: They're huge cargo lots. So anyway, these are all interesting things, and I'm sure they're still happening in other ways.

NP: Good. That clears up those points for me. So now, I think we're ready to move on in your career and to the establishment of the Canadian International Grains Institute [CIGI]. So if you go right back to how the concept came about.

[0:19:51]

VM: Yeah. We go back to 1968, '69, '70, in those years, and Otto Lang became the Minister Responsible for the Canadian Wheat Board. He was a wonderful guy. He understood things technically and made it his own knowledge. It was amazing. He never had half a dozen--. [... audio skips] He was able to handle that all himself. A remarkable man. At that time, 1970, I guess—maybe '69-

'70—we had wheat that we could not market. We were oversupplied with grain. Then I don't know who developed the concept, but Otto Lang was the one that saw this thing through, and I don't know whether anybody has mentioned this to you yet, but he instituted a LIFT program. Have you heard about that?

NP: Yes. In fact, he mentioned it in his interview.

VM: Lower Inventory For Tomorrow was what it was, which was good for some people, but very objectionable for others. In retrospect, I think probably the thinking was you were going to pay farmers for not growing grain. This is not unusual in some countries, but I think it was a first for Canada. [Laughs] Because of that, there were a lot of newer concepts coming out. "What can we do?" I think Otto Lang got a \$10 million program through to help in creating a marketing or investigating marketing systems and whatnot. The Canadian Wheat Board had been involved for years and years in bringing people over to Canada, showing them the industry—senior people—on a rather informal basis.

So then we got some knowledgeable and some people that maybe not were quite as knowledgeable but good people and Wheat Board commissioners and the Canadian Grain Commission, and they assigned people. Then we got to the concept that was mainly, I guess, maybe from the Canadian Wheat Board. "Maybe we should have something more structured and definite insofar as this part of promotion of grain sales is a concern." With a lot of meetings and a lot of talk, we thought that maybe we should have regular programs where we provide information on the whole part of Canada's grain industry or the grain industry at large—the handling part, transportation, the control part, inspection, and so forth, quality controls. You had all that. Then gradually, the concept of an institute. "How do we do this?"

So we got a group together. Dr. Bushuk was one of them, and a gentleman from, I think, he was from the University of Edmonton as an economist. Somebody that was neutral because the group that was leading this was from the Canadian Grain Commission and the Canadian Wheat Board and the grains department in Ottawa. They had a small grains department. Well, we'd get around and talk. "What can we do?" Bushuk, myself, and--. [... audio skips] of the Institute developed. What it really came out as is that we should have an institute that has specialists in all aspects—of grain marketing, the way we do it, and so forth. So we took on technology where we had the Grain Research Laboratory and all the information on quality testing and so forth, and then we went to the transportation part, then we got into the grain companies, how they're involved and all that, and then we went on the trading part, the marketing through the grain trade and so forth, and government-to-government contracts. So we looked at the whole aspect, and we developed how we could do this. So the concept of the institute came about.

[0:25:46]

So we would have, for the quality testing part, we would have laboratories for baking, milling, and grain testing. And the concept in this area was that all the final product and the testing had to be done the way it would be done in customer countries. In other words, we wouldn't be testing our wheat for our bread making, you know? Maybe they don't use our wheat for bread. They may use it for all kinds of other products. So that was the concept in the area of technology is get specialists here that would be able to simulate the testing of noodles and macaroni and what not, pasta goods in these countries, how they're doing it, and the bread making in these countries. That varied so much from country to country. So we tried to get a specialist in the Institute that would do that, and then the same with the transportation part and the handling and so forth. Then the other critical area would be the trade, the marketing of it where the Wheat Board would come into play and government-to-government contracts, and then the private marketing companies.

So now how do we do that? You can't possibly have a whole lot of experts in this area and get them together and have them develop because it would just be impossible to pay for that. So the concept was when we got this idea together that we would go to the trade, and we would tell the trade, "This is the concept we have for market promotion of Canadian grain. We would want you to be part of these programs on a cost-free basis. We want to help you in this area." That has been very, very successful, that concept, and we developed that concept. So we used the expertise of all the people within the grain industries—the top people in the grain companies, in the area of transportation, the railways—and it was surprising. I was--. Well, I'm getting to the part where we're operating. I should start at how we were set up or how it happened.

Well, the concept that I've told you about, we went to Otto Lang and told him, and the government had assigned \$10 million to try to find new ways of doing things. So we thought, "Well, we should get a chunk of that, you see." So we developed this concept. Dr. Bushuk was part of it and myself and Jim Leibfried from the Canadian Wheat Board and many others. Then in order to make this as neutral as possible from the grain companies, Dr. Bushuk at the time was a professor at the University of Manitoba, but he was very knowledgeable because he had been in the industry. He had worked for Ogilvie's I think it was for a number of years in Montreal, and then he had been in the Grain Research Laboratory for a number of years. So he had the technical aspects of it. Then we got, in order to keep it out of just the Canadian Wheat Board coming up with ideas, we got somebody from the University of Edmonton, I guess. Alberta. I've forgotten his name. He came, and we got three or four core people together that wrote up this concept of what we were going to do and how we were going to do it—that took a while—and how much money it was going to cost and all that.

[0:30:49]

So the final part of that story is that Jim Leibfried and I, when they got all this together, how it was going to go, now, "How do we go to the government with this?" So we wrote a proposal. We looked at the Canada Grain Act—the new one—and the Wheat

Board Act, and we just simply said, "Under the provisions of the Canadian Wheat Board Act and the Canada Grain Act, we propose this institute." It was very short. We had it really condensed, and how much it would cost. Otto Lang, we were pretty cagey with him because we had some proposals that we knew wouldn't work, [laughing] and the one that we wanted to try, but he was very good. And he said, "Okay. I'll take that to the Governor in Council." I guess that's the federal government, the Cabinet. They can do that, you know. I didn't realize it. It's not an act of parliament. This was a Governor in Council, and we simply had a two- or three-page thing there with cost and what we were going to do. And he got it through, through the Council. Of course, he was a very--. He and Trudeau were--. Trudeau liked him because he was so smart. I don't know whether he was that good politically. [Laughs] But he sure was a fine guy.

NP: So what percentage of the \$10 million did you end up getting, do you remember?

VM: Well, we got it on a--. I'll tell you about how that came about or what part because it's a matter of time, not just that \$10 million. It was a matter of time. But we took that document to Ottawa, and then it went through the Governor in Council. Otto Lang got it through, came back, said, "Okay. You've got--." I think we had a five-year plan, and we wanted to start off with about \$400,000 for equipment and so forth. We got all that. So then it was a matter of who is going to do all of this? You've got money now. You've got all kinds of fancy stuff that we wrote in there in order to--. [Laughs] Then it was a matter of getting a director for the operation to start off with, and I had never considered anything, but Gerry Vogel sometime came to me and said, "You know, there's only two guys I think could start that. One is J. Anderson, and one is yourself." And I just said, "Gerry, I don't have a PhD. You want me?" He says, "You know the grain industry. You've been in it a long time." It took me a while. I didn't do it overnight, and I didn't do it in a month's time, but eventually, I did take it. So then I had the \$3 or 400,000, and now we needed space and everything else.

NP: So is this the classic "Be careful what you wish for you might get it"?

[0:35:01]

VM: Oh, yeah. Absolutely. And the other thing, I think I told you that before, because I was--. There's a famous quote of "Success has many friends, and failure is an orphan." I felt like I could be an orphan if this thing isn't successful because I don't think I had too many real friends at the time. [Laughing] But anyway, then we worked it up that there would be—the Institute staff—there would be three principal areas, and each one would be headed by a director. One, the technology part—the testing and the laboratory services and so forth—and the other one in transportation and elevator operations and that physical handling of the grain, and the third one the marketing. How do you sell it? Government-to-government contracts and through the Boards or through the private companies and so forth. Can you turn that off for a minute for me? I've got to get a drink of water otherwise I'll--.

[Audio pauses]

NP: Oh, wrong pause. Sorry, Marion.

[Woman]: I was--.

[Audio pauses]

VM: Three principal areas.

NP: Okay. I'll just start with that comment then. So before we took a little refreshment break, you were mentioning the three branches of the Canadian International Grains Institute that is referred to fondly as CIGI by most people. And you had three branches: The technology branch, the transportation and handling, and the marketing branch.

VM: Yeah.

NP: So anything else you'd like to add to that in the development of those?

VM: Well, those were the--. First of all, I had to get a good secretary that could do everything and look after the finances and take dictations and the whole bit, you see. I was lucky in that. I got a very nice lady from the University of Manitoba who is--.

[... audio skips]

NP: Who is that? Name escapes you?

VM: [Laughs] Yeah.

NP: It's not important at this point.

VM: It is, but anyway--.

NP: Yes. We'll fill that in later.

VM: Then Walter came on as my technical director. He was a professor at the University of Manitoba. He took leave of absence, and he gave me over a year, I guess, because we were getting equipment and staff and so forth. Then I was fortunate to get Dennis Stephens who had been--. No, who was the director of the transportation for Federal Grain, which was one of the largest grain companies, and Federal Grain was bought out by, who was it? I've forgotten--. [... audio skips] And he came. He was very, very good. Without Dennis, I don't know how far we would have gone, but he was very good. You're going to interview him?

NP: Yes, we are.

VM: He'll give you a good rundown of the Institute and all the other things that happened. In the marketing area it was a little difficult for us because we had to get somebody that was cognisant of government-to-government contracts and the operation of the grain companies when they made the sales, and then particularly the futures market. That was also involved in that. Eventually, we got--. Oh, gee. Names are escaping me. We got another gentleman from the trade itself, so there we had three directors. Then we started to fill positions, and I guess in the first year we had a staff of probably about close to 20, I would think. The trade, as I told you, was very heavily involved in the agreement to take part in our programs. We'd get the top people in the trade. The CEOs are not always the best lecturers or so forth, so we found that out fairly soon, but we had a lot of them involved and so forth, and they participated. And the Canadian Wheat Board commissioners, their staff, they were all at our disposal, and they came. We had very few refusals, so we made up good programs, and I guess it was--.

[0:40:28]

I started in April of '71, I guess, and by that fall, I think, we had our first six or seven different countries involved. And the concept was that we would go to customer countries, and we would ask for people that were involved in some way in the purchase of Canadian grain to that country. They could name the person. We would not necessarily name the individual, but we expected that it be a senior person. Maybe not in the selling and buying area, but let's say he was a senior person in the area of technology that made the decision as to "This is what we want. This is what we don't want" and so forth. So we had a quite successful probably three weeks, I would say, maybe the first one. By that time, we had already laboratory equipment. We showed them tests---. [... audio skips] Terminal elevators to the farms at the farm level. We had certain selected farms we'd go to, you know, and that all became very successful, that concept. I'm assuming that it's still going on up until---. I used to visit every once in a while, but they don't know my name anymore. [Laughing] That concept carried on so that we didn't have to hire people. We paid their expenses, but we never paid them anything except for a few people where we had ocean freight and something that we needed to have that information, but we didn't have it for freebies from somebody from New York. So we would then give a contract to somebody in

that area that was responsible. [... audio skips] That would be the few outside of our own staff, which of course, were fulltime people. So it became a very successful operation.

NP: A few questions that come out of your comments about the development of it and how it actually worked. Which countries do you feel became the most involved in sending their people to the sessions?

VM: All of the customer countries. They were all customer countries. I'll tell you some real funny--. Well, not funny, but interesting stories. The other thing that we did, we also invited senior people from these countries to provide lectures in our programs. Then we got--. [... audio skips] Some Canadian people thought it was, but I thought of the idea, "Well, why don't we have the chief of the Australian Wheat Board come to Winnipeg, and we'll give him a half a day. Let him talk about what they do." So we did that, and it worked. We did that with the Argentinians, and we did that to a lesser extent with the Americans because they were always a little bit difficult, the Americans. But we did that. We'd pay their way. The first time with the Australians, the head of the Australian Wheat Board—I think it's called Australian Wheat Board—we were sitting around talking, and he said, "You know, would it be good if we became part of this?" [Laughs] So they thought that. We wanted to do just the opposite, of course, but that's the kind of interest that was shown.

[0:45:21]

NP: So if I've got this right, you invited them to present to your international customers.

VM: Right.

NP: Gave them a selected--.

VM: They could say whatever they liked, but they were in Canada, on our grounds. I know some of our people thought, "What are you doing?" But actually, it was pretty good.

NP: What do you think the upshot of that was? Did you lose customers as a result?

VM: No, I don't think so. But I'll tell you what happened on several occasions. Like the Canadian Wheat Board, they make huge, large, long-term agreements, maybe even five years or so, with countries, because particularly the communist or whatever--. [... audio skips] Customers, you see. So what happens then—and I was told this, and I know this was true because I was often called in that regard—but what would happen in negotiating a contract, the Canadian Wheat Board might say at the end of their negotiation,

"Can we help you out in servicing some of your technology, or something like that? We'd be pleased to send someone over." So we did that. We made up programs for the Chinese to give--. Rather than have 10 or 15 Chinese come, we went there with four or five and provided a program for them. Even in the area of technology, we would have specialists. And that's another thing. We would ask people from the Department of Agriculture maybe--. Well, not so much plant breeders. Animal husbandry people, I know, we took to China once with us from there and on our program that we were offering there. A formal program that we would offer. This would be one area of expertise, so we'd do that. All kinds of concepts like that developed.

And I haven't told you about what the cost-sharing of this whole thing was. You talked about the \$10 million. The Government of Canada provided 60 percent of the cost of the operation of the Canadian International Grains Institute. The Canadian Wheat Board paid 40 percent. So it means that the producer was involved in this. I'm assuming that proportion is still--.

[... audio skips]

NP: Through their guest lectures.

VM: Yes. You know, at the end of a program. I would say three weeks or a month or whatever they were. Some were longer and shorter because of--. For instance, the Algerians, I think, we had a program for them, and we had ten people. They'd come over as a group, ten as a group, and then we would give them a whole program. They were particularly interested in the milling part. We had a--. I didn't develop--. I didn't give you much information on the facilities that we had, but we had a commercial mill at the Institute. Have you been there at all?

NP: Yes, I have.

VM: So you've seen the mills and those?

NP: Yes, I have, but believe me, after doing a few interviews, I'll be even more--.

[... audio skips]

VM: There are commercial mill stands so that we can mill wheat there exactly the same way as is milled in a commercial plant. And we had some very, very good millers. I remember the first one that we had. He came out of, I think, Ogilvie's. The Institute staff would come along when we gave programs in another country. So we would have the miller and the baker and another specialist that would be there. I remember in Beirut, Lebanon—yeah, that's in Beirut—beautiful city. So sad to see everything

wrecked, you know. They weren't really milling. They were just grinding wheat, you know, instead of milling it, so our miller would show them what this--.

[0:50:43]

The one part that I remember very distinctly was Saudi Arabia. They were a good customer of ours. We took a group there, gave a program there, and they had just purchased from Switzerland the most fancy mills. But the milling technology--. And I was surprised that the Swiss had allowed it. They provided this very fancy equipment, but nobody really knew how to mill it. They were using it as a bunch of grind rolls and that was it. So we spent some time with our miller who set up procedures with them and so forth. So that's the sort of thing we did, and that, these areas--. 'Okay, here's a five-year deal. What else do you need? Can we send somebody over? Can we bring somebody here in the technical fields and so forth?" So it worked very well, and it still must be. I don't think they've deviated too much except to improve it from the concepts that were initially developed today. But it certainly was going very well. And Dennis Stephens followed me. He became the director, I think, for eight years or something. So it's a successful operation.

NP: When you were talking about how the Institute was able to help people with their on-site issues and the transfer of knowledge--. [... audio skips] Technology related to handling?

VM: Yes, yes. Yes, to some extent. Particularly in the area of IP, Identity Preserved, grain. Again, I'm reminded now of--. This was Iraq, in Iraq. They would mix Australian wheat with our wheat, you know, and they had some very, very sophisticated automatic baking machinery. Well, to do that is just crazy. I mean, you're asking for trouble. There's no quality control at the beginning. When you start off on a thing like that, you've got to know what the quality of your product is. Is it going to be the same tomorrow as it is today or the next day? The Iraqis, I don't know how many they had, a large number of what we call terminal elevators, large elevators or mill elevators. They paid no attention to what was coming in. Wheat was wheat, and that's the way it would go to the mill. Of course, then they got to the automatic baking, and then they were in trouble. So that thing we corrected.

[0:54:22]

In fact, actually, in 1980, after I retired, I was asked by the Institute to go to--. [... audio skips] and look at their elevators, their handling system, their elevators. This was during the war with the Iranians. The front was, I think, 60 miles from where--. Well, Baghdad was 60 miles from the front. It was a very sort of scary time, but there, I would go into a terminal elevator and say, "Well, okay. Now, how are you segregating this grain? Where's your inspection?" Very little in the way of proper control of the inspection. Then it wasn't really good for us because we were into protein segregation, so they were getting grain. I said, "Look.

You handle the Canadian wheat IP, Identity Preserved, as it comes in, and the way you've bought these grades with these levels of protein, don't mix them up with Australia. I'm not saying Australian wheat isn't any good. I'm just saying don't mix it up. Know what you're doing." And they're very, very different when you get Australian wheat and Canadian wheat, and you try to--. So that was kind of fun later when I didn't have a whole lot of other responsibility.

NP: The grain elevators that were in Iraq--.

VM: Yeah.

NP: Would it be just like in a grain elevator in Canada?

VM: Much the same, except they weren't operated in the way grain elevators were operated in Canada. I mean, you know, the last thing they would be concerned about is Identity Preserved because, first of all, it was a despotic regime, and the top guy would be friends of Saddam Hussein or what. So it wasn't easy for them to make changes.

NP: So pest control, the drying of grain that we were talking about previously, all of those functions, though, would be--?

VM: Pest control would be, yeah, very critical there because they're in a climate where some of the other things wouldn't matter that much. They wouldn't have much in the way of frost to worry about, you see, or things like that. The facilities were there. The expertise to some extent were there also. There were some very good people. But it was a matter of getting this together properly and working it through. And the way that our grain is, of course, we say we have the best, so try and do it the way we do it. So. [Laughs] That wasn't too hard.

NP: It was standardization, then, was not quite up to--.

VM: Yeah, quality control--.

NP: Control.

VM: Was missing.

NP: Any other items about CIGI that you want to add? You've covered a lot.

VM: Oh, I could go on. No--.

NP: Maybe the--.

VM: Yeah. We go back to 1968, '69, '70, in those years, and Otto Lang became the Minister Responsible for the Canadian Wheat Board. He was a wonderful guy. He understood things technically and made it his own knowledge. It was amazing. He never had half a dozen--. [... audio skips] He was able to handle that all himself. A remarkable man. At that time, 1970, I guess—maybe '69-'70—we had wheat that we could not market. We were oversupplied with grain. Then I don't know who developed the concept, but Otto Lang was the one that saw this thing through, and I don't know whether anybody has mentioned this to you yet, but he instituted a LIFT program. Have you heard about that?

NP: Yes. In fact, he mentioned it in his interview.

VM: Lower Inventory For Tomorrow was what it was, which was good for some people, but very objectionable for others. In retrospect, I think probably the thinking was you were going to pay farmers for not growing grain. This is not unusual in some countries, but I think it was a first for Canada. [Laughs] Because of that, there were a lot of newer concepts coming out. "What can we do?" I think Otto Lang got a \$10 million program through to help in creating a marketing or investigating marketing systems and whatnot. The Canadian Wheat Board had been involved for years and years in bringing people over to Canada, showing them the industry—senior people—on a rather informal basis.

So then we got some knowledgeable and some people that maybe not were quite as knowledgeable but good people and Wheat Board commissioners and the Canadian Grain Commission, and they assigned people. Then we got to the concept that was mainly, I guess, maybe from the Canadian Wheat Board. "Maybe we should have something more structured and definite insofar as this part of promotion of grain sales is a concern." With a lot of meetings and a lot of talk, we thought that maybe we should have regular programs where we provide information on the whole part of Canada's grain industry or the grain industry at large—the handling part, transportation, the control part, inspection, and so forth, quality controls. You had all that. Then gradually, the concept of an institute. "How do we do this?"

So we got a group together. Dr. Bushuk was one of them, and a gentleman from, I think, he was from the University of Edmonton as an economist. Somebody that was neutral because the group that was leading this was from the Canadian Grain Commission and the Canadian Wheat Board and the grains department in Ottawa. They had a small grains department. Well, we'd get around and talk. "What can we do?" Bushuk, myself, and--. [... audio skips] of the Institute developed. What it really came out as is that we should have an institute that has specialists in all aspects—or a specialist in all aspects—of grain marketing, the way we do it, and

so forth. So we took on technology where we had the Grain Research Laboratory and all the information on quality testing and so forth, and then we went to the transportation part, then we got into the grain companies, how they're involved and all that, and then we went on the trading part, the marketing through the grain trade and so forth, and government-to-government contracts. So we looked at the whole aspect, and we developed how we could do this. So the concept of the institute came about.

[0:25:46]

So we would have, for the quality testing part, we would have laboratories for baking, milling, and grain testing. And the concept in this area was that all the final product and the testing had to be done the way it would be done in customer countries. In other words, we wouldn't be testing our wheat for our bread making, you know? Maybe they don't use our wheat for bread. They may use it for all kinds of other products. So that was the concept in the area of technology is get specialists here that would be able to simulate the testing of noodles and macaroni and what not, pasta goods in these countries, how they're doing it, and the bread making in these countries. That varied so much from country to country. So we tried to get a specialist in the Institute that would do that, and then the same with the transportation part and the handling and so forth. Then the other critical area would be the trade, the marketing of it where the Wheat Board would come into play and government-to-government contracts, and then the private marketing companies.

So now how do we do that? You can't possibly have a whole lot of experts in this area and get them together and have them develop because it would just be impossible to pay for that. So the concept was when we got this idea together that we would go to the trade, and we would tell the trade, "This is the concept we have for market promotion of Canadian grain. We would want you to be part of these programs on a cost-free basis. We want to help you in this area." That has been very, very successful, that concept, and we developed that concept. So we used the expertise of all the people within the grain industries—the top people in the grain companies, in the area of transportation, the railways—and it was surprising. I was--. Well, I'm getting to the part where we're operating. I should start at how we were set up or how it happened.

Well, the concept that I've told you about, we went to Otto Lang and told him, and the government had assigned \$10 million to try to find new ways of doing things. So we thought, "Well, we should get a chunk of that, you see." So we developed this concept. Dr. Bushuk was part of it and myself and Jim Leibfried from the Canadian Wheat Board and many others. Then in order to make this as neutral as possible from the grain companies, Dr. Bushuk at the time was a professor at the University of Manitoba, but he was very knowledgeable because he had been in the industry. He had worked for Ogilvie's I think it was for a number of years in Montreal, and then he had been in the Grain Research Laboratory for a number of years. So he had the technical aspects of it. Then we got, in order to keep it out of just the Canadian Wheat Board coming up with ideas, we got somebody from the University of Edmonton, I guess. Alberta. I've forgotten his name. He came, and we got three or four core people together that wrote up this

concept of what we were going to do and how we were going to do it—that took a while—and how much money it was going to cost and all that.

[0:30:49]

So the final part of that story is that Jim Leibfried and I, when they got all this together, how it was going to go, now, "How do we go to the government with this?" So we wrote a proposal. We looked at the Canada Grain Act—the new one—and the Wheat Board Act, and we just simply said, "Under the provisions of the Canadian Wheat Board Act and the Canada Grain Act, we propose this institute." It was very short. We had it really condensed, and how much it would cost. Otto Lang, we were pretty cagey with him because we had some proposals that we knew wouldn't work, [laughing] and the one that we wanted to try, but he was very good. And he said, "Okay. I'll take that to the Governor in Council." I guess that's the federal government, the Cabinet. They can do that, you know. I didn't realize it. It's not an act of parliament. This was a Governor in Council, and we simply had a two- or three-page thing there with cost and what we were going to do. And he got it through, through the Council. Of course, he was a very--. He and Trudeau were--. Trudeau liked him because he was so smart. I don't know whether he was that good politically. [Laughs] But he sure was a fine guy.

NP: So what percentage of the \$10 million did you end up getting, do you remember?

VM: Well, we got it on a--. I'll tell you about how that came about or what part because it's a matter of time, not just that \$10 million. It was a matter of time. But we took that document to Ottawa, and then it went through the Governor in Council. Otto Lang got it through, came back, said, "Okay. You've got--." I think we had a five-year plan, and we wanted to start off with about \$400,000 for equipment and so forth. We got all that. So then it was a matter of who is going to do all of this? You've got money now. You've got all kinds of fancy stuff that we wrote in there in order to--. [Laughs] Then it was a matter of getting a director for the operation to start off with, and I had never considered anything, but Gerry Vogel sometime came to me and said, "You know, there's only two guys I think could start that. One is J. Anderson, and one is yourself." And I just said, "Gerry, I don't have a PhD. You want me?" He says, "You know the grain industry. You've been in it a long time." It took me a while. I didn't do it overnight, and I didn't do it in a month's time, but eventually, I did take it. So then I had the \$3 or 400,000, and now we needed space and everything else. That would be the very important ones. Now, well, I told you that I doubt that you'll get a hold of Larry Kristjanson, but you can try. But Jim Leibfried, you might get a hold of him.

[1:00:14]

NP: Yes, I have his name.

VM: You have his name?

NP: Mmhmm.

VM: Because he's aware of much of the operation of the Institute and the contribution or the primary contribution the Canadian Wheat Board made.

NP: And he's in Winnipeg?

VM: He's at St. Andrew's, I guess, in the flood--.

NP: Okay. That's close enough because it's not a name like Martens where there's a few of them,

VM: No, no. I know he's around, and I'm sure that he'd talk to you.

NP: We've talked a lot about the relationships between the Research Lab and the various actors, especially in the scientific field. We haven't talked very much of the relationship of both the Grain Research Lab and CIGI with the producers, other than the official connection with the Canadian Wheat Board. So the producer at the ground level, what--?

VM: Well, that's one thing we did very early in our program. We had one program every year. What did we call it now? Anyway, it was for the producers, the Canadian grain producers. The people who were paying 40 percent of our operation. We would have a program at the Institute for them. Generally, they were somewhat shorter—maybe a week or two weeks at the most—and we'd go to the grain companies and the producer organizations, just whatever, then they would select people, and they would come to the Institute, and we'd give them a program on the whole thing. They know how to deliver grain to a country elevator and how to produce it and all that, but how much do they know about terminal elevator operations, vessel chartering, and what happens to a vessel? When you're going two weeks or so in high humidity areas delivering grain to China, and all of a sudden, you get a complaint that there's mites in the grain and whatnot. It's been out in the ocean there at 90 degrees for two weeks, so there's all kinds of stuff like that that we provided information. They were always very, very interested, the farmers. Well, today of course, they have computers all of them, but that was not so at that time, so it was a little more person-to-person.

Yeah. So that was for Canadians. So we had programs for Canadians too. Oh, the other thing that we did in all the international programs, we would also give one or two spots to the industry so that, let's say, United Grain Growers wanted to send their chief

inspectors or whatever it is, and he would be part of, say, an international group that we'd have from various countries. So that was very well accepted. They really liked that because generally one program per year would be composed of multi countries. You would have ten countries represented in one group, and that was very interesting. You'd have them together for three weeks or for a month. And then, of course, the Canadians that were a part of this too. So that's how it worked.

NP: And that raises another question—and I think I read this in one of the speeches you provided me to read—that there were interpretation facilities at the--?

[1:04:47]

VM: Oh, yes. I hadn't touched on that. That was very important, but we had anticipated that right from the beginning. In the Institute, we had facilities for simultaneous interpretation. That's different than just straight interpretations. Simultaneous interpretation, I don't know whether you know that, but what happens is apparently some people have a brain or brain structure where if they're smart enough and knowledgeable enough, they can speak in another language while you are speaking. Just simultaneously, at the same time. There's a school in Brazil—this is not my time, way back when—where people were selected and trained if you wanted to, and they would tell you whether you would be capable of learning or knowing how to do simultaneous interpretation. We had a few of those people that were accessible to us from the Department of Foreign Affairs in Ottawa. We'd just call them and tell them we wanted Chinese simultaneous interpreters. It worked. It worked back then, and often we would take them also along to foreign countries whenever we'd go because we needed interpreters. So we had that too.

NP: That must have been appreciated, I would think.

VM: Yes. It certainly was. Particularly I remember the Japanese, not the Chinese. We sort of said that it would be nice when we asked them to name a person that they have some basic knowledge of English, you see. I think it was our first program too, we had two from Japan, and one was a technical expert, and the other one was with the Food Agency from Japan, and they both were there. Gerry Vogel, who had given the first lecture about the operation of the Canadian Wheat Board, and these guys could speak a little. And Gerry said, "This Yamazaki, he doesn't know. He can't understand anything." You know that Yamazaki, that man he learned English. He can speak. He can write. I'm still corresponding with him. He has been a friend to Canada like you wouldn't--. I don't know whether he was head of the Food Agency in Japan, but he was in a high position in Japan. He's come to Canada on his own a few times. Wonderful man.

And he was in the decision-making area of whether to purchase or not to purchase. You can have people, specialists, within those countries, and they say, "Gee, you know, we like this grain." It may not be direct to us, but they're saying to their top people or the people that are making the--. [... audio skips] Also people that influence the decision-making part. That was the idea.

NP: You followed your own marketing advice then.

VM: Yeah. Well, we had a lot--. I had so many good people working with me, you know?

NP: Did other countries take up the model of CIGI?

VM: The Australians might have to some extent, but I think it would be more in the form of, say, the Grain Research Laboratory rather than the directness. The Americans, of course, we were always in battles with them. They just hated the Wheat Board. They still do. They'll be so happy when they get our government of the day wanting to get rid of the Wheat Board. [Laughs]

NP: And why the--.

[... audio skips]

VM: Multinationals, and the multinationals don't want that kind of competition. The reason is that the Canadian Wheat Board could make government-to-government agreements for you name the years. They can do that. Whereas the multinational can't do that. They don't have the volumes in the way that we would have them and so forth, but now, of course, they own pretty well everything that we have in our own country today. United Grain Growers are gone, Agro's gone, so that they're here and they've become pretty massive here. But anyway, they're not too friendly with the Canadian Wheat Board.

[1:10:44]

NP: Do you think that change in the industry—which is pretty major and comes up in almost every conversation that we have—would that have any impact on CIGI or the Grain Research Lab?

VM: Not that directly because you have a certain degree of professionalism that is there and that can be maintained. I was—I wouldn't say often—but on several occasions, I was invited to the, I guess, North Dakota Grain whatever, Grain Council or whatever, to speak to them about what we were doing and so forth. So that was all right. They're great friends ultimately, but it's a competitive area of work.

NP: You mention North Dakota. It made me think the border's only a very thin line--. [... audio skips] That Canadians have developed? I mean, I'm always thinking of it coming in the other direction but--. Do you know?

VM: That's a good question. I can't even--. I would think they can, but not under our grading system. You see, their grading system is--. Yeah, the federal government is involved. They're involved, and they would call the grades and so forth, especially international trade.

NP: So it would be like ours where you just can't start growing anything. So if they were planning to grow something that had been accepted in Canada--.

VM: Oh, no. No, no, no. They have a high degree of control in that.

NP: Yeah. But they might adopt--.

VM: I don't know about the provincial. Like, you mentioned North Dakota, but they certainly have a very high degree of control at the government levels.

NP: We're going to shift gears here.

VM: Okay.

NP: Because we're--. [... audio skips] Had talked about the grain elevator explosion in Thunder Bay.

VM: Yeah.

NP: And you had said that you had worked with some of the people who were there at the time.

VM: Yeah, yeah.

NP: Do you recall any of their stories?

VM: No, no. I don't. Except the one that I think I told you as far as a happening, which this is in the '50s. [Laughs] Of the one story, I don't know whether I met that person, but that was up at the top, and he came down alive. He was alive. Apparently, there was whatever forces that were in this direction set him down. That's the only real profound story. But as far as the--. I'm not that surprised because I've been in those elevators up at the top levels, and I don't think you'd have that today. But at that time--. The Board of Grain Commissioners does have authority in regulations in regard to operating, and they were always after them to clean up and threatening them and whatnot. Yeah, it's a lot of dust. I'm sure that it's much less and cleaner than what it used to be, but from a--. See, Thunder Bay, as you probably know and maybe I indicated that to you, certificate final for all of grain out of Thunder Bay ends at Thunder Bay, not anywhere else. All those are transfer elevators, and all they do is they take their certificate final, and they match that with their volumes and their papers in the bank. You may put \$1 in the bank, but if you can't take that out, it's not the dollar that you put in.

[1:15:26]

NP: It isn't? [Laughing]

VM: No. But that's the same thing with the certificate final. It happens that way. You've got 1 million bushels of that certificate over there, and it may or may not be with the other. As long as they match the total. But Thunder Bay would be the final. Everything else would be a check. Of course, Vancouver would be the western export area, and then Prince Rupert is pretty important too. And Churchill, which is not too far away, but it's of some significance for Manitoba.

NP: When you think back over all the--.[Note: Likely the question was, "What are you most proud of? Editor]

[... audio skips]

VM: Well, I would have to say the Canadian International Grains Institute because I was part of developing the concept and seeing it develop into a successful operation, which I think was meaningful for the country and for the producers and that. I'm sure it certainly helped the Canadian Wheat Board in their marketing system. And the other one that I might say that I was going to mention to you—I haven't mentioned it at all—but the Canadian International Grains Institute took on or was able to have the sixth International Cereal and Bread Congress in Winnipeg. We were entirely responsible for the administration of that, and it took approximately three years of our time to organize it. Mind you, we had wonderful help and so forth. That was approximately 1,000 scientists from 50 different countries, and it was held in Winnipeg, and I happened to be the chairman of the organizing committee. So that's another thing that--.

NP: You had lots to choose from, to pick.

VM: That's the program.

NP: Oh, this is the program. My goodness!

VM: Yeah. It was in four languages, and we had--. That's another interesting little story. I wanted Trudeau to come and welcome the guests and so forth, get the Prime Minister to all of a sudden come. And Otto Lang was the minister. Finally agreed, I think, it was only within about two or three weeks that we had the advance notice that he was going to come. And somebody said, "Well, he hasn't even got space. You've got all this space covered." Which we did have all the hotels booked right in the city, but I don't think the Prime Minister wouldn't have any--. [Laughs] I think they were just trying to be funny or something. So those two things, I think, in my personal career as far as satisfaction goes. And all the work that I was able to undertake while I was in the Grain Research Laboratory when Dr. Anderson was the director. He and I became very good friends. Fun career. You can imagine a lot of political problems too.

NP: That's our lead into my next question, and that is what would you describe as your biggest challenge?

[1:20:05]

VM: Well, okay. For me personally, my biggest challenge would be that I do not even have a university degree. Personally. So you then have the--. I had so many opportunities in the Grain Research Laboratory to learn the total grain trade because of what responsibilities the Grain Research Laboratory actually had in the inspection system, which required going to the lab and to be selected, you might say, to do much of that work where I traveled. But as I got at the higher levels and higher levels, and we'd get these people from all over the world, and of course, they'd say, "Dr. Martens, Dr. Martens." What was I going to do? Say, "No, no. I've got a grade school education." [Laughs] So that was something personal, but I learned to negotiate that pretty well. So that all the PhDs in the world, they're still human, and I was very fortunate in having my early years to work with them very closely.

As I told you, like Dr.--. [... audio skips] He was a physicist, nuclear physicist in my final analysis, but then he said to me on one occasion—and I was a lab technician—he says," You want to--." We talked mathematics and so forth. He says, "I'll teach you maths. You come to me twice a week or whatever it is at home." And he got the calculus and stuff out and statistics, which I required for my work in the moisture meters. I was selected to test all the moisture meters that were made that came into being to see which ones would be suitable, which took about, I think, three or four years to do all that before we got one that was selected to

be the official meter, which took precedence now over the Brown-Duval. That was thrown out. Or any other method. So that's what I did. So that was a good, challenging project to get into. Yeah. I had lots of fun. Lots of work.

NP: A good learner, I would say.

VM: Well, I guess maybe in certain instances maybe I pushed it a little too much. [Laughing]

NP: You were talking about personal challenges. You might not be able to do this in one go, so let's take it one at a time. The Grain Research Lab work that you did--. [... audio skips] Administrative one. Was there a particular technical challenge? Were there other issues?

VM: Well, I think one of the challenges of the early years--. See, I started there April 1940, and the war had already started. At that time, we had maybe four or five PhDs. The others were technicians and whatnot. Then what happened, I guess, mid-'40s anyway, then they started--. The government Department of Defense looked around, you know, who were these specialists in our country that we could get to work in these areas, and one was Dr. Cunningham who went to Chalk River in the nuclear facilities there, and the other one was--. Not Leibfried, I've forgotten his name. It's so long ago. But he was made the head of the oilseeds because that was a critical factor.

[1:25:15]

Do you remember at that time rapeseed came in? It was only used as a lubricant, you know. It was not used as an oilseed when that was first developed, and I remember Saskatoon was the first elevator, government elevator in Saskatoon--. No. Yeah, it was Saskatoon where there was, particularly in the north, they grew quite a bit of rapeseed and used it for that purpose. Then we had to see, "Now how are we going to store this stuff? What are we going to do with it?" And so forth. Leib-something. It wasn't Leibfried. Wasn't Jim Leibfried. Anyways, he was made the head in Ottawa of the whole oilseeds area because of the war requirements and so forth. At that time, it was very difficult for retaining or even getting new PhDs to come because they were used for the war, especially, like, the nuclear physics was one of them that was very important. Yeah. And then later on after the war, then there was a number of them that got their PhDs doing their thesis work in the Grain Research Laboratory.

NP: And a number of the people that might have been scientists were off fighting the war, so.

VM: Yeah, yeah.

NP: That would make the pool even smaller.

VM: Yeah. But Anderson was--. He had, oh, what's his name now? He had a very close friend from Winnipeg who worked for Richardson's and then became, I think, a deputy minister.

NP: Stanfield?

VM: No, not Stanfield. No. But you'd know him. It's a very--.

NP: Oh, right.

VM: Eh?

NP: Sharp?

VM: Sharp. Mitchell Sharp.

NP: Mitchell Sharp, right.

VM: Mitchell Sharp was a very, very close friend developed here. I remember Anderson in the fall would---. We had a survey called "The Harvest Survey" of the grades of grains we were expecting and the protein content of the whole country because we did that for the whole country. Then he would make a presentation to the top guys in Richardson, and Mitchell Sharp would be there. That's how I know him because I used to make slides for projection, for a projector for him, and I became just that part of it. [Laughs] Not the top part, but I made the slides for it and so forth. So I knew. And he became deputy minister, and then he got into some difficulty with some government level, and then, of course, he was made minister of several portfolios he had for a long time. So Anderson, when he was here, could still go to Mitchell Sharp and get favours in Ottawa at the political level. Yeah.

NP: Are there any questions that you think I should have asked that I haven't asked?

VM: I haven't paid that much attention probably. [Laughing] No, I think in my way first of all, I never organized anything, which is, I would say, out of character. Normally, I would have had, "This is my agenda. One, two, three, four, five." [Laughs] You know?

NP: I think we covered--.

VM: I never did that.

[1:30:00]

NP: I think we covered everything anyway.

VM: Because I've been away from it for so long, my mind isn't as sharp as it used to be, you know, so. But you can--. Are you going to check with Walter again?

MC: Yes, I'll be talking to him this week.

VM: You will, eh? Well, he's very knowledgeable about this part of it because--. I was very, very pleased—aside he's a very good friend—and I was very pleased when he agreed to come to the Institute as director of technology because he made a very major contribution to the success of the Institute. Walter is a low-key person. He doesn't blow his own whistle so to speak.

NP: Marion had done his first interview, and she had a second one planned with him soon.

VM: Yeah.

NP: Are you aware of any memorabilia including pictures that should be preserved to commemorate the history of Canada's grain trade and the Grain Research Lab or CIGI's part in it?

VM: Well, the memorabilia, we had tons of the stuff from all the participant countries that we--. I don't know what they've done with it all. We contained a lot of it in the boardroom but didn't take it along when that was--. Whether they still have a whole lot of that stuff--.

NP: What kinds of material would that be?

VM: Anything. We got horns and--.

NP: Commemorative cups.

VM: This is Canadian. "In appreciation from the 7th Canadian Millers Course." [Laughs] I said to Betty, "Let's put that to hold our serviettes." We were going to throw it out. But no, there's some very fancy stuff too that they would bring from these countries. Something out of their own culture and whatnot. I don't know what they've done with it.

NP: Well, if we know that it existed at one time, we can try to track it down.

VM: Oh, yeah. During my time, we had everything there. And I don't know, I guess by that time we would have had probably 100, maybe more than that, programs.

NP: When did you retire from the--?

VM: '82.

NP: From '82. Started in 1940 and left in '82.

VM: In '82. And then I did consulting work but not for very long because, you know, in the--. And I suppose it was because of my position too that when you're doing consulting work, in my case, you're by yourself. You don't have a, "Do this, and do that, and do that."

NP: You don't have your administrative staff.

VM: No.

NP: Right.

VM: And the computer was just starting to come in, and I'm still not really computer literate. It's my own fault.

NP: The last thing then that I'd like--. Well, I guess there's one other thing. This oral history is part of a project that we are hoping to establish in Thunder Bay. Whether it ever happens or not is--.

VM: Yeah, I understand.

NP: Yeah. We wanted to commemorate the role of the grain industry—especially the international grain trade—in the development of Canada, and in particular, Thunder Bay's part in it, because initially it was a much more major part.

VM: Yeah. It was. Very much so. Yeah.

NP: And our consultants who helped us do a feasibility study had suggested that we try to combine the history part of it with a science part because they felt that that would be a more marketable centre. So I think this really sort of fits in with your background, this science nature of it. So what kinds of things? Let's start talking about the historical part of it. What kinds of things perhaps from the historical part, the stories, the more important stories that should be told, do you think? This would be for the general public who tend not to know much outside of, well, probably even Winnipeg, about--.

[1:35:11]

VM: Well, I think the one significant thing to me is that I don't think the average people, even the farmers of Western Canada--. [Audio pauses] Coming through anyway.

NP: Okay. I think, go ahead.

VM: Okay. The one thing that I got to appreciate very much, you see, the Board of Grain Commissioners had six divisions. They had an inspection division, the economics division, and the had the government elevators for a while, and they had the GRL—the Grain Research Laboratory—and then, of course, the board itself. So what I got, personally, to appreciate very much, and that is in the early years, as you've already mentioned, Thunder Bay was **the** grain place. Vancouver was very little heard about. We shipped out of Vancouver, but nothing like Thunder Bay. So everything went out of Thunder Bay. And to me, the grain inspection was the real big thing. The grain inspectors, they were it. They were so well trained, and they were, I shouldn't say, controlled, but they were in order to get uniformity throughout the system.

The chief inspector was always in Winnipeg, and there is some, oh, some real story—not anything to you at this time—but the one was Delory. I don't know whether you've heard that name, but he was a very, very powerful--. "You do it this way, and that's it. You've got to do it, and you've got to do that many." The inspectors, I really got to appreciate their knowledge and their work, and their integrity was incredible. That's the biggest thing out of the Board of Grain Commissioners and the Canadian Grain Commission that I think--. They get very little credit when you think of the total Canadian export grain industry. Well, not only export, domestic, is dependent on approximately men and women, I hope—I don't know how many women there are, probably not very many, but at that time, there were none—that sign a certificate final, which is for basically millions of bushels. One signature.

That's it. There's no grain that moves without this certificate final outside of the country, and none within to any large mills or that sort of thing. Maybe a few farmers trading grain, but that would be about it. That system worked, and it worked visually, and they had a few tests that they could make themselves, but that was it. I respect those inspectors and that system.

NP: I did read a story—now, it may have been in Dr. Anderson's book—by chewing the grain--.

VM: Yeah, yeah. Oh, yeah.

NP: So that was before the scientific moisture testing.

VM: Oh, yeah. Oh, yeah. You could get--.

NP: And they put him up against the moisture tester--.

VM: He'd be pretty successful.

NP: He was very successful! [Laughs]

VM: Yeah. I'm not surprised at that. Yeah. I'm not surprised at that. I agree. Because you have really no idea. I was fortunate enough to some extent because I worked together with Charlie Owen who was, I think, an assistant chief inspector on a program of barley, varietal description of barley by visual. I built a little camera called a macro-camera, and we put kernels on, barley kernels, and you'd be amazed. You look at these and what they see in there. They see the crease. There's little creases in one variety, not in the other. The depth of the germ is different in one variety over the other. They see all this with their--. They just see that that variety is so-and-so. It's incredible what those inspectors at that time--.

[1:40:51]

And this was, of course, before protein grading. There wasn't anything like that. They most they would do is a moisture test by the old Brown-Duval method, which was very cumbersome. But the identification of the grain by these grain inspectors, they could tell you that this sample has 50 percent of [No.] 1 variety of Red Spring Wheat, and they could just tell that. It was amazing. Yeah, I think that story deserves to be told is the grain inspection system in Canada by itself.

NP: Marion, could we just pause for a moment again? [Audio pauses] Finish this, and then we'll change the--. Well, that ends the questions that I have, other than to just say that I've really appreciated the time that you've given us for this project. There's not many people that we've interviewed who have had your length of career and successful career and variety, so thanks very much.

VM: Thank you.

End of interview.