

Peter Schaerer

Summary of interview with Michael Morris at Peter's home in North Vancouver, April 21, 2006.

Peter was born in 1927 in Switzerland and was educated as an engineer. He came to Canada in the early 1950s to work for the National Research Council based in Ottawa and was soon assigned to design the avalanche defences for the new highway through Rogers Pass. He speaks of his experience in getting the project underway and of the other persons involved. He also relates his experiences skiing and mountaineering in Glacier National Park.

M: It's April 21st, we're in Vancouver, it's a beautiful warm sunny day and I'm here with Peter Schaerer. And Peter, I understand you came from Switzerland, you were trained there as an Engineer. You were doing some international work in Korea and somehow you ended up in Canada.

P: Ah, the reason is because my brother was already in Canada and he heard by chance, by meeting another Swiss, who we worked with at the National Research Council that they're looking for someone doing, that they're looking for staff in the snow and ice section and because I had snow research and did snow work and snow removal work in Switzerland I jumped at the opportunity and simply applied for it.

M: What year was that?

P: That was in 1956. But you see I was in Korea at that time with the International Troops Commission and we travelled from the United States all the way from Switzerland to Korea and from Korea back and I stopped in San Francisco and came to Canada, for a tour of the West and then I stopped in the East and went to Ottawa for an interview with the National Research Council. So that's how I got in.

M: Wow! And they wanted, was the problem Rogers Pass?

P: Well that was a part of the problems but they were simply looking for staff for working in snow and ice research. There were several projects offered to me. Some one was the bearing strengths of ice on lakes. So for trucks, modern trucks could drive over, Ottawa was doing a general snow survey in Canada and one project they were asked to assist the Department of Public Works with the development of the avalanche control at the Rogers Pass for the highway.

M: Yeah so I bet.

P: And I said, that's what I would be interested in, I'm not interested in the other job. But if I can get that I will come. (laughs)

M: Yes, well I bet as someone coming from Switzerland the mountains probably felt more what you were interested in?

P: Yes that's true and it had to do with Engineering work, I was trained in Engineering work I preferred Engineering rather than just plain research.

M: So what was your impression when you first got to Rogers Pass or did you have an impression before you got to Rogers Pass about what it was going to be like?

P: Not exactly. It was just a mountain area with highways and what's the unique part was the travel by the railways you know. Hardly any people living in the mountains. No roads.

M: It must have been very exciting to come upon a new path to put a big project like this, cause this was part of you know, this was part of a national project to create a Trans Canada highway and this part, had been the hardest part perhaps of the whole Canadian Pacific Railroad to build.

P: Yes it was interesting.

M: Especially with the avalanches part.

P: Yes it was interesting, yes. But I looked at it as a job, I had to do that and fine.

M: So you, were you the one who laid out where the avalanche sheds are?

P: Uh yes, uh we had an autographer (autographer) three previous winters and he had surveyed all the avalanches and identified the avalanche paths, and my job was simply to do the engineering work and decide for each avalanche path what type of control would be most feasible.

M: Right. So there's about 160 avalanche paths.

P: That's right.

M: Yeah

P: Yeah. I didn't realize there were that many, yeah. So I went through all of them and decided for each one of them what was the best control.

M: Some would be, what was the different choices, artillery?

P: Oh, that was part of it but it was, first of all see whether the highway could be moved to a different location. The highway line was more or less already staked out and I checked it and seen whether any changes could be made, for example moving the

highway further out of the valley away from the avalanches and uh improving the highway location.

M: Right. I'm just going to move this microphone up a bit.

P: That's the first choice.

M: So you laid out where the snow sheds are and there were some of course avalanche paths with mounds.

P: There were some we could build mounds, and see, we had a lot of mounds because the contractor building the road, the grading contractor was anxious to do some additional work, he had some machines there and obtain some additional payment for his machines cause they had bid on the unit price for the highway grading and this was additional work which they could always get well paid for their machines.

M: Right. And there were some, there must have been a few dykes, diversion dykes, I know there's one in the Beaver Valley.

P: Ah yes, well if you, that one in the Beaver Valley was around much later, it was much later when the highway was already in place. And das is, we didn't, I cannot think of any other dykes that was built at that time.

M: Yeah, well there's a little one by Tupper, but that could have been later. So

P: No, the big dykes are above the snow sheds, sort of channelling and keeping the avalanches in the narrow channel.

M: Right, that must have been quite a job.

P: And these were quite deep, yeah.

M: Yeah. In our bearing research we found a grizzly bear that was denning right at the very top of the Single Bench dyke.

P: Oh yes.

M: Right at tree line, yeah. Did you, did you have any problems with bears in the summer time when you were there.?

P: Oh yeah, many (laughs) many bears yeah. We had on the summit about where's the uh, oh what is there, gosh, behind uh, camp. Oh the sand shed, and salt shed is there now right, that you used to be the place of our snow observation plot and we had a precipitation gauge in about twice, I think even three times I made, we got the precipitation gauge there, and the schleiss sheet, there.

M: There still is, there still is a study plot there.

P: No, no study plot, the study plot is on the other side of the camp now. It's sort of on the west side of the camp buildings, west side of the bunkhouse. That's where our study plot used to be.

M: Okay. Yes, and there was some controversy....

P: We had, we use, we were out in Glacier, with them and we went up there to make our snow observation every day.

M: Glacier Station, yeah Glacier Station area.

P: Yeah, Glacier Station, there were some houses.

M: There were some houses, yeah, there were some houses down there.

P: Yeah, there were some houses of staff that operated the fan for the tunnel.

M: Uhem

P: And the old school house used to be the, we had the kitchen in the schoolhouse.

M: Wasn't there a park warden living there?

P: A park warden was also, he was closer to the station there, yes.

M: Uhem, do you remember who that was?

P: Uhmm, Thomas, Orville Thomas was there, he was the four park warden there.

M: His last name was Thomas or his first name?

P: Yeah, his last name was Thomas. Orville was his first name.

M: Oh, Orville Thomas.

P: Orville Thomas, yeah.

M: I've never heard that name before.

P: He uh, he was no park warden there, he had an encounter with a grizzly bear once earlier and it was just about over, he had a scar there and he was sort of slow in speech after this and uh, adventure with the grizzly bear.

M: Was that in the park too?

P: I don't know where it was.

M: Oh, well I've never heard of this.

P: Ah, and then he worked down, then later he worked down in Revelstoke in the uh, compound, and he was also trained as a blacksmith he uh, he assistend there as a blacksmith. In the maintenance compound at Revelstoke, Park's maintenance compound at Revelstoke

M: Yes. Right. I worked there a number of years too.

P: Yeah, probably. (laughs) Probably he retired before you.

M: Oh, Oh, yes. Oh for sure.

P: It could be, yeah.

M: Yeah, no, he certainly wasn't there. But I uh, I know the place I used to have an office there.

P: And then this park warden was right where the highway was. The park warden's cabin had to be moved because the highway went right through that location. But it's a little above the railway station.

M: Yeah. We have a map because we did an interview with Norman Brewster who was working for the railroad there. We have a map showing all the different uh areas down there.

P: Oh yeah.

M: Uhhh the, I remember the hotel, you know, what we call Glacier Park Lodge today is up at the summit of Rogers Pass.

P: Yeah, the hotel ground, yeah.

M: Now we've, my, it was my understanding that the hotel was, was built because there was the thought that there would be the potential for entrapment, that people might get caught, might get locked into Rogers Pass and that there would be a need to stay there. Is that correct, is that why, is that the rationale?

P: Now which hotel are you talking about?

M: Glacier Park Lodge.

P: Oh, oh yeah.

M: That's what we used to call the Northlander.

P: Oh yeah. That's what used to be called the Northlander. Yeah, that was part of the idea, that's why they wanted a hotel. With the highway being closed that the guests could stay in a place yeah.

M: Yeah. Was that something you agreed, did you think that that was justified or was it just....

P: Oh yes it was, we thought the avalanche problem would be actually worse, than it is now, the highway would be closed more frequently than it turned out to be.

M: Okay. Did you have sort of a, like Engineers like having numbers, sort of a design saying we expect this highway to be closed a certain number of days per year. Did you sort of have a number?

P: I could but I could have to look it up in an old report.

M: I don't know where I remember this, perhaps something that Fred Schleiss might have told me but I thought it was my impression that the original design called for the highway possibly being closed ten days a year some winters.

P: Something like that, yeah.

M: Obviously if winters...

P: I can get my old report if you want to stop, interrupt our interview.

M: Sure

P: So I have my report on the avalanche defence for the Trans Canada Highway, the Rogers Pass which I wrote after I left, finished the work. And was published by the National Research Council 1962. And I thought, made three stages of defence. One is uh, a sort of a building, snow shed, and uh two is supplementary artillery and the second stage is when we got more serious, we might build more defences, earth, and erect more snow sheds and so I take for the first stage of defence, we have some uh, structures, snow sheds and too with artillery fire, and this was essentially what has been done and is still probably the type of defence that is still in place now. We never got into an aesthetics, well once early, when we built the initial snow sheds.

M: That's the single bench shed.

P: That's the single bench shed, yeah. That was the only one that was built later but uh, one could go further than that in mind, if the really demand increases that we build more snow sheds but the artillery fire proved to be really successful with the eliminating of more structural defences. And so I have estimated at that time the highway would be

closed 6 or 8 times for a total of 12 days in an average year. And the duration of one closure might vary between 4 hours and 6 days. So the longest I've been closed was for about 7 days, in 1972, January '72.

P: That was a big winter, yeah.

M: Big winter, yeah. We've had big winters in the '90s that had almost as much snow actually.

P: The '99 winter now that had more snow.

M: Yeah.

P: That one in 50 years

M: But it came kind of regular. It didn't come in big storms it just kept snowing a little bit and stop, snowing a little bit and stop, so it was manageable, it wasn't quite the spectacular year that '72 was.

P: So that was '76, '67 was also one of those winters. It snowed just continually, it was also a record for the one in thirty years maximum winters. And then the '72 again.

M: Right. Of course now we're living in an age of climate change.

P: Yes

M: And so we know that snow fall amounts vary a lot in Rogers Pass anyways, so now it's a bit of a you know, no one knows what, what climate change will bring to us in Rogers Pass, but what we do know is the traffic has grown, an average of 2% per year since the highway opened.

P: Hmm

M:And that's a lot. So just inside of 30 years the traffic has doubled. And it shows no sign of slowing down. Plus the makeup of the traffic now is much more **big** trucks.

P: It is.

M: So, it's, it, they, you know if you talk to people like Bruce McMahon who now is leading the Avalanche Control in Rogers Pass, you know, his big headache is dealing with the traffic more than dealing with the avalanches.

P: It seems to be a traffic problem more than an avalanche problem.

M: Well the avalanche is still 50 but the traffic has made it big. You know, when it's time to release the traffic there's an *awful lot of* traffic to deal with. So, and I think, down the road, I don't know if we'll ever see that highway twinned, but we're going to see perhaps sections of it twinned or....you know something's going to happen to that highway eventually in terms of expanding it's capacity.

So that will sort of open up this avalanche design problem one more time.

P: Yes, it will continue.

M: Yeah. But it certainly has, you know, your design has proven extremely successful.

P: Yeah

M: You know, given that it was uh implemented in the early 1960s and it's now over **40 years** later. It's still basically the same program that was launched at the beginning.

P: Yeah it is.

M: Yeah. So I expect when we get around to our 50th Anniversary there will be lots of to do about it. Certainly, I think the park will, will....

P: When is the 50th of, oh when the highway was opened.

M: Well I'm not sure exactly, what exactly date we'll choose because maybe we'll choose the date the highway was officially opened...

P: Yeah

M:50 years later, so that would be probably sometime in 1962

P: '62 or '63. I think in '63 it was opened.

M: Michael, I think it was opened, I'm not sure, we'll have to check on that but uh, anyways that 50th Anniversary is coming up, but uh, the avalanche work started before that.

P: It started, yeah. '55 huh? Roughly huh.

M: Right, so we've already sort of past that date.

P: '54. Fifty-three, fifty-four was also really big snow and avalanche winters they were lucky just so they could observe and record all those avalanches.

M: But what about during the construction, was avalanche control work going on in the late '50s early '60s.

P: No. No I, all construction work stopped in the winter.

M: Stopped in the winter.

P: Yes

M: Okay

P: They couldn't handle the snow pressures, snow that fell on the grade. You would have to plough. You cannot build highway grade with the snow.

M: No, I didn't think that was....Right, yeah, it's still something to see some days. Well that, I think that was a very exciting uh chapter. Did you do any, when you were in Rogers Pass in those years, were you always working or did you have time to go skiing or Mountaineering.

P: Oh, I did a lot of skiing, yes.

M: Yeah. Where did you like to go skiing?

P: Well we had exciting skiing, uh, only up Avalanche Crest was fantastic, cause you climbed up right at the front and skied down the front down the glacier.

M: Right down the glacier.

P: Yeah, down the glacier that big snowfield, when later on you couldn't because that was one of the artillery targets (laughs)

M: Uhhuh

P: But uh

M: So that was, there was a little glacier at the base of the mountain?

P: No there was no glacier.

M: Well there was a snowfield in the big bowl.

P: That's just snow. Behind there's a big bowl, yeah...but uh...

M: Yeah

P:for in front it's just....

M: Oh, just that face you see from the highway.

P: Just the face you see from the highway, yes.

M: Right

P: That was where they had that big avalanche in 1952 was it. Big avalanche came down and stopped right behind the buildings up at the, the uh, what is it, the tunnel portal.

M: Oh, wow!

P: The tunnel got sealed. The trees knocked down and uh...

M: Well I'm not surprised, that's a big slope, yeah.

P: Oh yeah, that's a big slope, a big avalanche slope yeah.

M: It doesn't come big like that any more cause it gets controlled.

P: No it's controlled. It's an easy one to control. You can predict easily when it will build up from snowfall and the wind, and the targets are all obvious. Line-in sight for that gun.

M: Yeah, that's good. So anywhere else that you skied?

P: And then we go up to the Illecillewaet glacier. I went up to Mount Rogers; I did the first ski climb on Mount Rogers (laughs).

M: The first ski ascent.

P: The first ski ascent (laughs) yeah. My brother was in Vancouver at that time, but they came up for the Easter weekend and for us, we did a lot of ski touring together before and so we looked at the toe. Oh, we were on Mount Abbot though once. Mount Abbott was of course the observatory so it had to be visited once a week so....

M: A week.

P: A week, and that was *great* skiing down, down the gully.

M: Yeah, I used to do that.

P: Yeah. So we climbed to Mt. Abbott the first day and we looked across the valley at Mount Rogers and said that looks great, we go there.

M: Yeah. So where did you start out from? Were you living at Glacier Station so you had to walk up there from Grizzly Station?

P: Oh, we had to walk up there from Glacier Station.

M: That's a fairly long way.

P: Oh that's not too far and then up to the Grizzly Avalanche Path to the pass, yeah.

M: It's farther than people have to go today?

P: Yeah, it's a bit closer, yes.

M: Yes, yeah. Yeah, Mount Rogers, I've been up there it's a great view from up there.

P: Great, yeah

M: That's a good one. Any mountaineering in the summer time?

P: Oh, the closest ones uh Mount Sir Donald, and Eagle Peak and whatever it is, it's the same more or less, all the climbs around the pass huh?

M: Mhem Were there many other people climbing in those summers?

P: No. No. There were people of the Alpine Club Hut was there and so people visited the Alpine Club hut...

M: The Wheeler Hut, yeah the Wheeler Hut.

D: And in the spring Hans Moser used to come with a party into the Alpine Club for ski touring. So only for one week and that probably were all the skiers that came in the winter.

M: That was it.

P: Yeah, we sort of had the whole terrain and all the snow for ourselves, yeah.

M: (laughs) Well it must have been a great adventure.

P: Yeah.

M: Well, any ways it's been a very successful operation and uh, thank you for telling me about it.

P: It was interesting, it was the sort of opportunity that one could wish to have, and lucky we could do it.

M: That's what I was going to say, those sorts of opportunities don't sort of just come by all the time.

P: No, no. It was a time, sort of the 1950s the country was developing, uh, so many of these jobs, engineering were available. And in fact, we didn't even have to look for a job, jobs were offered.

M: That's what Rolf was telling me, saying there was, you know, the country was booming and there wasn't really enough people to do the work and anyone was just being you know, grabbed (laughs) and you could get whoever you could get. Yeah, well it was a very exciting time.

P: Also here in the province, that's when they built all these highways, with uh "Wacky" Bennett being the uh Premier.

M: Uhhem

P: And Phil Galardi was the Highway Minister and they built all these, not only the Trans Canada Highway.

M: Yeah, they built a lot of roads.

P:but uh, everywhere.

M: Right. And basically we're still driving on those sort of 1950 era roads.

P: Yes

M: And which are being sort of upgraded you know piece meal.

P: But uh.

M: The Coquihalla being one of the rare exceptions to that.

P: Probably much later eh.

M: Yeah, that one was built in the '80s.

P: And the Hope/Princeton Highway that was built in 1950 huh.

P: Would you like a coffee or tea or

M: Oh, a tea would be nice.