

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Ernie Pallister

INTERVIEWER: Nadine Mackenzie

DATE: July 1983

NM: This is Nadine Mackenzie speaking. Today is Monday, July 4th, 1983. I am at the office of Mr. Ernie Pallister, 700 - 6th Ave. S.W. Calgary. Mr. Pallister, thank you very much for having accepted to participate in our project. Can you tell me where were you born?

EP: I was born in Edmonton.

NM: In Alberta? And you parents were Albertan too?

EP: Well, yes, although they immigrated to this country. My father came first in about 1910 as a single man and tried homesteading, then when the war broke out went back to England.

NM: So he was from England?

EP: Yes, then he married my mother in England and they came back after the First World War.

NM: Which year were you born?

EP: 1927.

NM: So was your education first in Edmonton?

EP: Yes, I spent the first 20 years of my life in Edmonton, going to local schools and the University of Alberta.

NM: What did you study at the University of Alberta?

EP: I took what then was called the Arts and Science program. My major was in physics and minor in mathematics. But under the Arts and Science program one could take some science and art subjects, which I find is not done these days, quite I think, to the disappointment of a lot of students.

NM: About your studies?

EP: Oh, I had intended to take engineering when I came out of high school in 1945. At that time the veterans were just returning and the facilities at the university were really over crowded and as a result I wasn't able to get into engineering. So I took a course which I was simply interested in and that was physics, largely because that was where I had my best marks in high school. I had no particular thought of what I would do with that education. I just assumed there would be a job. By the time I graduated I was very fortunate that Leduc oil field had been just discovered and there was a situation existing then, that was very healthy for us and that was that the recruiters were coming to the universities and essentially we had our choice of jobs. We . . .

#030 NM: So as soon as you finished your studies, then you were recruited?

EP: Yes, well, it was the final year. I had previously applied for jobs where I thought my talents could be used and of course, I got the usual letter saying that your application would be kept on file. Then as I say, suddenly the Leduc oil field was found and there was

a great need, not for physicists particularly but people with a scientific background, particularly in the geophysical area. So I took a job with the United Geophysical Company from California, who were just moving into the country. During the course of my university studies and in high school I had taken a great interest in the Navy, largely because my brother-in-law, some 5 or 6 years older than I, had joined the navy. Of course, during the war we watched the naval battles, I had been a member of the Sea Cadets Corps as a youth and was very, very enthusiastic about naval things. A little strange for a prairie boy. But I continued through the Sea Cadets and in university was a member of the University Naval Training Group and made trips out to the coast aboard ship and really fell in love with the sea. So when I was interviewed for a job and had several interviews and quite a few choices of just which one to take, I found that United Geophysical had operations in California and in the Persian Gulf, offshore geophysical work and that really appealed to me, so that's the one I chose.

NM: So that was your first job?

EP: Yes. Well, the first permanent job, I'd done all kinds of labouring kind of jobs during high school and university but this was the first one where I got a regular pay cheque. So I went to California with United and worked off the Santa Barbara coast, which of course, is a very famous area now, particularly after they had an oil spill there many, many years later. But we were doing the original geophysical work off the coast of California there. So that was a nice place to start work in Santa Barbara, California, I thought it was just great. And then from that training, I was transferred to the Persian Gulf where I lived for a couple of years doing the seismic work there, which now of course is a very famous area for its oil production.

NM: How many years did you spend in California?

EP: I was about a year in California and then 2 years in the Persian Gulf.

NM: And how did you find the Persian Gulf at the time?

EP: I loved it, I really thought it was great. It was a little warm, 140 degrees in the summer and high humidity. And of course, out in the ships there was no air conditioning or anything like that so we did a lot of swimming. You could always cool off by diving in the water. And of course, it was so salty you would just float to the surface, it was a great place to be a swimmer.

#065 NM: Did you come across a lot of geophysicists or geologists in Saudi Arabia?

EP: Oh yes. The whole staff of course, was from either America, Canada and . . . well, it was from all around the world. So it was a great experience to meet people, in the business, both in geology, geophysics, engineering and so on. It was a self contained operation within the camp actually. We all of course, got to know each other very well, professionally and socially when you're locked into a situation like that. I learned a great deal because the job was the thing, there wasn't really much else to do so we really enjoyed our work.

NM: And you learned also the Arabic language?

EP: Yes, with lots of time on your hands you look for things to do and a group of us approached a teacher in the local community and asked us if he would teach us the

language. So we started off in Grade 1, just like his other students and followed exactly the same course, with the text books and so on. We did this 3 or 4 evenings a week. I think I got up to about Grade 7 or something like that, over a period of 2 years.

NM: So you could converse?

EP: Oh yes, it was no problem at all. With a grade 6 or 7 language, you could get along very well. In the local dialect. The writing in Arabic is the same in all countries. So the reading, you can read from country to country but the pronunciation is quite different from one place to another. So it was very helpful in the local travels and so on and in the bazaar, buying things and so on.

NM: Bargaining and. . .

EP: I think we got a lot better price when we could speak the language.

NM: And after that, what did you do?

EP: I came back to Canada because that assignment was over and I was awaiting another international assignment. My job at that time was called a computer. Today we have different kind of computers, I was a 2 legged computer before the electronic age.

NM: And what did these computers do?

EP: A computer took all the seismic measurements and calculated all those things which are now done with a computer. In other words we had to do it with a slide rule. So we would do exactly the same things that are done today except that we would do it on tables and sheets, with slide rules and sharp pencils. Now of course, it's all done at tremendous speed and of course, much more sophisticated calculations are made today. But that was my job for a couple of years, as a computer. The next step up on the ladder was as a chief computer. I had observed that these chief computers were really ancient people who had been with the company for years and years. At that time I was 20, 21 years of age. They were probably in their 30's, maybe 40 but I thought there was no way I wanted to wait that period of time for a promotion. I saw an ad in the Calgary paper and it was advertising for a chief computer and I thought, why not short circuit the system and see if I could get a job as a chief computer with a company called Century Geophysical Company. I applied for the job and they looked at my experience level and I suppose, compared to experience levels of other applicants in Canada, at that time, they judged that I was very well qualified. I repeat, with 2 years experience. And they said, we also have a job as an Assistant Party Chief. Now that's really, in those days, a leap forward and I had no ambition or concept that I would be qualified for that job. But they hired me as an Assistant Party Chief, which was a tremendous leap forward. I think I was 21 at that time.

#112 NM: That was very, very young.

EP: Very young, yes. And I guess they were very desperate for people. In any case, they sent me out to the Peace River country and I joined the crew as the Assistant Party Chief but there didn't happen to be a Party Chief. The Party Chief was to come later.

NM: I was about to ask you, who was the Party Chief at the time.

EP: Well, there was none. He was I suppose, being transferred to the crew from somewhere. He never arrived and I, de facto, was the Party Chief, which was a real problem because I had never worked on a seismic crew on land. All my work was done from aboard ship.

NM: So it was a lot of responsibility for 21 years old.

EP: Yes, it was. Particularly when you don't know what you're doing. At that time I learned a very fundamental thing, being thrown into that situation and that was, that really the job gets done by the people who can do the work and leadership is a matter of communication with your people and making some decisions from time to time that need to be made. But I was really thrown in a situation where I had no experience, I had never been on a land seismic crew and I was in charge.

NM: Were people ready to help you?

EP: Yes, yes. Well, they might not have been too. If the crew had chosen not to be it would have been a disaster. But it worked out fine. I told the fellows I didn't know much about what they were doing and I wasn't ashamed to ask some dumb questions. And I guess they said, well, poor guy we'll help them out.

NM: You were honest.

EP: Yes, I guess that was it. And it worked out beautifully. Our production rate, by which you're measured was high, and we did good work and eventually we became seen as one of the best seismic crews around.

NM: Who was working with you at the time?

EP; Pete Bediz was the manager in Calgary and he was the man who made the decision, a) to hire me and b) to not put a replacement above me. And I got along very, very well with Pete who had a long experience in the U.S. and a very top notch geophysicist. I guess the competition at the time, was such that there just weren't a lot of people around and they really gave opportunity to anybody who would work hard. We worked hard, we just threw ourselves into the job. That continued for awhile and then quite fortunately, largely due to the work of others, I guess I obtained a reputation in the industry of being a good Party Manager.

#147 NM: Were there any major discoveries at the time?

EP: At that time, now we're talking 1950, this is in the era of yes, '50-'52, oil was being discussed here, there and everywhere in Alberta. All the big major fields were being discovered at that time. And there was a great deal of activity, there was a tremendous need for people and so on. So I was in there at the right time, it was a very good time to be involved. One day I had a call from a gentleman named George Longphee, George had started a new geophysical company, had just got it going. A small Canadian owned company and he was expanding from 2 seismic crews to 4 and he needed a couple of Party Chiefs. He approached me to come to work for him. I wasn't at all interested in that I was totally satisfied. . .

NM: Was it in Calgary?

EP: Yes, in Calgary yes. I forget the circumstances but we did meet in Calgary and he was so eager to find somebody he offered me 10% ownership of the company if I would undertake to run one of the seismic crews. I thought that was a good opportunity to be a capitalist so I took him, much against the advice of the people at Century who said, these kind of companies come and go and you've got a great career with us and don't leave.

NM: So it was like a gamble for you?

EP: Well, it wasn't much gamble to me, I got the same pay and a 10% interest in the company. And brand new equipment to work with so I couldn't see any reason not to do it. I went with that company to Estevan, Saskatchewan and we worked for a year or so there then I was back in the Peace River country, out in the bush during cold winters doing our thing, working for Sun Oil Company.

NM: How was life there, was it very hard living in the bush?

EP: Well, it wasn't as nice as it is today. We had pretty basic equipment, our camps and so on were very, very basic. But the food was good and the poker games were fun. We used to go in about October or November, somewhere about that time and then we'd would stay till Christmas, come out for a week at Christmas, then go back in and come out in March. There was none of this 10 on, 10 off that there is now.

NM: So you were staying a very long time.

EP: Yes, we'd stay, particularly from January to about March 15th, that was 2 ½ months solid. And of course, we made good money, we were working 7 days a week. So we had good salaries. One day we had a meeting of the shareholders and I had paid virtually no attention to the business affairs. In fact, I'm not sure I ever saw a financial report or anything. I just knew that I was a 10% owner of a company and my crew had worked solidly month after month and our production rate was good and our client was happy and I really thought I probably was very wealthy. One day we had a meeting in Calgary, it was in what we called the road ban time, when our crews were shut down and you took some time off. We had this meeting and we were informed that we were bankrupt and that the company was going to shut down and it did. So this came as a great surprise and. . .

#200 NM: That's a shock.

EP: A shock to me. Unfortunately, where my timing was great earlier, my timing was terrible this time. This came at a time, and it was the reason the company went out of business, was the economic situation was such, I believe it was the fact that so much oil had been found there was no market for it. Which is a little hard to believe today. The situation was that the seismic crews were being laid off and the company didn't have enough financial resources to carry through a tough time. So I was without a job and couldn't find another one.

NM: For how long?

EP: It was about 3, 4, 5, 6 months, I don't recall now. But here again, I watched the papers and answered every ad that I saw and mostly negative replies. The situation had really changed, now we had a over supply of talented people. This was only 2 years later than that period of time when you could get any job you wanted to. I applied to the Seaboard Oil Company and got a phone call from Greg Haines, who was the Chief Geophysicist of that company in Canada saying that he had received my application and would I come in and talk to him about it. Of course, I was there as fast as my legs could carry me and Greg was. . . I don't know why he did this but it was very interesting, he essentially said, I've looked at your experience and your background and checked you out and you're not at all what we need or want, we could do better but I'm willing to give you a chance if you'll take a job. We can't pay you much but we'll give you a chance. I don't know why he put

it that way but we really started off our relationship knowing who was the boss anyhow. He offered me \$600 a month and I would have taken half that of course. And I said, thank you, I'll do the best I can. And I guess the net result was, of being on top of the world and then at the bottom and still only about 24 years of age I guess. . .

NM: It wasn't a very positive attitude, when you hire somebody to talk like that.

EP: I don't know why Greg did that. The net result was that I was so happy to have that job and wanted so badly to recover and financially recover because I had assumed I was doing well and had spent my money accordingly. So I had some bills to pay and I had a pride to restore, so I really worked hard there, harder than anybody around me because they hadn't gone through this little trauma. That was 1954 I went to Seaboard and in 1958, 4 years later, I was approached by the management of the company from Dallas to ask if I would take on the job of Assistant Chief Geophysicist for the whole international company.

#255 NM: Going back to Seaboard, what were you doing there as a job?

EP: I was. . . I believe my title was a ??? geophysicist. Within the oil companies they had different nomenclature ???. So I was asked to be Assistant Chief Geophysicist with the company in Dallas and of course, was very pleased with that because it was, well, it was kind of a leapfrog. I would be responsible to the geophysicist who was responsible for all the company, including Canada. So there was a little resentment by some of the people in Canada that I should have been asked to do this job. But that was great. So again, I was on top of the world. Well, here we go again, the next thing that happened, Seaboard was purchased by the Texaco Company. This was in 1958 now. Of course, all the plans of moving to Dallas, and I had my house up for sale, all set to go, all dissolved. So here we go again, another big disappointment, although I still had a job. And I was transferred to Regina. So instead of Dallas it was Regina. Instead of Seaboard it was Texaco. So I went through and sold the house and bought one in Regina. [Putting things]??? out of order there, I paused and thought about it and said, I don't want to go to Regina and work for Texaco. Nothing wrong with Texaco but it wasn't my style.

NM: Would it have been the same job with Texaco?

EP: No, it would have been a job similar to the one I occupied in Calgary. Or maybe even less so, in that Texaco had its organization that had gone on forever. And I was blending in at some level. And you know how mergers are, the person that's merged in has a hard time fitting in. So I made a decision to not move to Regina and I went back into the contracting business working for Accurate Exploration, a small Canadian company. very similar to the old. . . .

NM: Here in Calgary?

EP: Yes. A company very similar to George Longphee's company, Subsurface Exploration. But this one had survived the bad times and had been around, I suppose about 8 years at that stage, 8 or 9 years, and was run by Bud Coutt, who was a very sophisticated business man as well as a very competent geophysicist. So I went to work with Bud, again, on an equity basis. With Bud you don't get anything free, so I made arrangements to buy my way into it. Not that I had much money at the time but I made arrangements to borrow

money and buy stock in the company. So then I went back to the contracting business with a company called Accurate Exploration. About this time I came up with. . . it's rather a simple idea and it came about by having worked in an oil company, well having with contractors first, then an oil company, and back to the contracting business. The concept was that it was traditional for seismic crews to offer a package. In other words they would acquire the data in the field, and would do the interpretation of the data and provide the client with a total package. The problem was that the business was getting very, very competitive, everyone was cutting their prices and cutting their expenses, to the point where the easiest thing to sacrifice was the interpretive data. So rather than spend the required time on it, companies were doing the minimum and it was more or less accepted. Then the oil companies would recognize this and the go and do it all over again. I thought, that's kind of dumb, why don't we set up a situation oil companies don't have to do it all over again, but simply review the work. Well, to just upgrade out interpretive work would only have cost more money and we wouldn't have got jobs. So very simply we split the company in 2, one part of which was called A. E. Pallister Consultants Ltd., and the other was Accurate Exploration Ltd. The Pallister side of it charge fees for doing the interpretation work and Accurate charged fees only for the field work. The net result was that Accurate became very competitive by reducing its costs and the client had the option of taking the interpretation, which would be well done I would hope, or none at all. My theory was, why go through the motions of giving an interpretation when it really was meaningless.

NM: End of the tape.

Tape 1 Side 2

EP: The formation of the consulting company worked out very well, largely because I was able to hire people who professionally were frustrated working for geophysical companies, partly because they were locked into the seismic crew and travelled around the country. And I was offering employment centrally. With a lot of field trips but at least they had a home in Calgary. And also, I think they were pleased to have the opportunity to do the best work they could do as opposed to doing the fastest work they could do. It really caught on, particularly with the independent companies. These are the medium sized, to small companies who did not have their own geophysical staff or they might have had one geophysicist. As compared to the majors who would have 20 up, geophysicists who were quite capable of doing the work. So Accurate got into the situation that it was getting the work with the major companies because they didn't want the interpretation and were getting the work from the small companies because they wanted the interpretation. So it seems incredibly simple today but we just found a slot and we became very, very busy and we hired lots of people.

NM: How many employees did you have at the time?

EP: This went on for about 8 years. At the original stage our office was where the overpass is, the exchange is, when you go out Bow Trail and turn off to go to north Calgary, we were right underneath there, we had a little old building there. Our limitation was finding space

for people. We had 2 to a room and so on. But in answer to your question, we started off with about 4 people, who were the interpreters who were on the old Accurate crews. In that split we ended up with 4 or 5 geophysicists. When they put the road through there we bought a building on 11th Ave., an old Imperial Oil building and we had lots of space then and we grew, I don't remember the number but I would guess at our peak we had about 60 people in the interpretation area. We were probably the biggest geophysical consultants, possibly in the world, because nobody else was doing this. As a consulting company. The big geophysical companies probably had that many people but they were all locked into the seismic crews. So we became certainly the biggest in Canada.

#034 NM: Were you travelling a lot at the time?

EP: Not so much, other than out to the field crews. All our crews were in Alberta, a few in Saskatchewan, it was no difficulty. I wasn't travelling then like I travel today. No, it was pretty easy, because it was close. Until we started getting into the Arctic, that's another story. That's when we really got ambitious and perhaps I should go for that era. We're up to . . . my memory on my dates isn't so good. But having established that rapport with the industry in the consulting area, we started to understand really what the clientele wanted. Particularly from a geological standpoint. We were working largely with geologists, as opposed to geophysicists, in that the smaller companies would have an exploration manager who 9 times out of 10 was a geologist. And the geologists at that time were very critical of the geophysicists in that the . . .

NM: Why?

EP: Well, the geophysicists were parochial and did good seismic work and presented their data in very fundamental terms but there's a step missing in interpreting that knowledge into what it means in subsurface. Because we were working with geologists so much, we started, as geophysicists, to understand what the geologists needed and what he didn't understand about geophysics. So we started doing things like making what we called, and we coined the phrase, a seismo-geological map. What this was, was an extra step in which we took our geophysical work and said, what does it really mean in geological terms and let us make some geological maps, being influenced by the geophysics, as opposed to using it pragmatically and mathematically. And we did both. And the geologists loved it. And they started to learn geophysics and we started to learn geology and pretty soon we were making maps that everybody said, now, that makes sense, it's the first geophysical map I ever saw that makes sense. Now geophysical maps do make sense but they only make mechanical and arithmetic sense, there needed to be that one little extra step. As we worked with our geologists we started to learn about their prospects and where they thought the oil would be in the future. And we started to look north. During this whole period of time I was very frustrated at working on land because I was still. . . liked my marine experience and would like to get back at it. So we were looking at the east coast of Canada. Every time I looked at a map of Canada I would see the blue around it rather than the . . .

NM: The sea.

EP: Yes, rather than the terrestrial areas. It was pretty easy for me to visualize the future

potential of the offshore, having started out in that area. About this time, we started looking at the frontiers and I observed that there was one oil field in the Northwest Territories at Norman Wells, that had been discovered 20 years or more before, yes, almost 30 years before Leduc and had been producing all this time. One oil field in the Northwest Territories. You look at a map of Alberta, it's covered with oil fields, right up to the border and then it stops. It seemed to me that that must be a political situation rather than a geological one. I also observed that there was a river going all the way from the bottom of the Northwest Territories to the top and conceived the idea of doing a seismic profile down the Mackenzie River, from the Great Slave Lake to the Arctic Ocean. I couldn't really find anybody who wanted to do this, because of course, no oil company had properties all the way along the line. But we did get some support from Atlantic Richfield, I think at the time it was called Richfield Oil Company, now ARCO, who had some properties in the northern stretches of the river. Most of the rest of the area was not held by oil companies. But in discussions with geologists, it appeared to be very prospective. So we took some land seismic equipment, tested it out in the Bow River outside of Calgary and lost our cable, our geophones and so on, largely because we didn't realize the strength of the current. So we learned that. Then we tried it out in Edmonton because we knew the geology around Edmonton, we wanted to see if we could actually map it in the river. That wasn't too successful. We garnered enough information to keep us going on the project. Then we went up to Norman Wells and tried out a profile right across the known oil field, which is on the banks of the Mackenzie and extends out to the island. Miraculously that field showed up on the seismic in a way that we had never seen any field in Alberta show up so clearly. It was miraculous. Of course, we were thrilled, showed this data to a few oil companies, got enough backing to pay for a survey running all the way down the Mackenzie River, which we called Operation Beeline. We put all our own money into it as well. This was all financed by small private enterprise. But we got enough people to buy our data that we had enough money to start. So we started at one end of the river and went all the way down, using local boats and Indian guides and so on. Got as far as Aklavik up on the coast and then of course, we were headed for the ocean.

#101 NM: Quite the adventure.

EP: Oh yes, a lot of fun. And we started to observe an increase in the thickness of sediments as we approached the Arctic Ocean. We didn't want to stop yet we were getting into deeper water and our little river boats were not suitable. So we bought, from the Aklavik missionaries, the Anglican missionaries, a boat they used to transport students to their school. They would pick them up at the outlying communities. Well, the aircraft had replaced that and they had this boat in Aklavik. So we bought this boat and put all our instruments aboard this boat, which was still a very, very, very small boat, and went out into the Beaufort Sea. That was really a trigger because then we saw the structures which are so well known today, in the Beaufort Sea. And these are massive structures. So we didn't get very far. We went maybe, 20 or 30 miles offshore before we had to go back. In fact, I think the Mounted Police came out and told us to get back. But we saw enough and

of course, that triggered off a great deal of interest in the north. Then we followed that up by, because this was rather successful, we eventually got our money back and we thought, this is a great idea, there's just so little information in our frontiers. There had been some geological surveys but no seismic. There had been a little magnetic and gravity surveys by government. We looked at the map and thought, what a huge unexplored area, let's get out there and do it, not wait for the oil companies to hire us to do it. So we worked with a company called Visee??? Smith and Associates, George Collins was the manager.

NM: Were there a lot of oil companies here in Calgary interested?

EP: Oh yes. This was just after Prudhoe Bay had been discovered in Alaska and everybody started looking at Canada and saying, well there must be massive resources in that huge area, we just don't know anything about it. And they had no data.

NM: So you could supply them.

EP: Well, we organized what we called the Quests. And we started off with Arctic Quest and this was back into the Northwest Territories. We ran seismic lines between key geological phenomena, magnetic surveys, gravity surveys, geological surveys. We organized the entire package and huge areas. It's reconnaissance information. We would finance it, do all the preliminary work, then we would meet with all the oil companies at our office. They'd come in and have what we called a show and tell, and we'd tell them what we were going to do, we had subscriptions to it, just like you would to a financial underwriting. We had a deadline where people had to come in by a certain date or they couldn't come in. It was a lot of work organizing one of those things. Arctic Quest was successful in getting enough money to undertake it. We owned the data and had the right to sell it later. So all our profit was in later sales.

#137 NM: So you were just ??? the data to them?

EP: We owned the data and then we would sell people a copy for their own use only, we had the copyright on it. So our profit was to come from sales after and after and after. And also from the fact that we would, because we had equipment on site, if somebody wanted to do some private work he had the option to use the crew at a very attractive situation. Because the big cost of getting up there had been paid. Well, Arctic Quest was a success. . . I'm sorry, Geo-Quest was our first one. My memory escaped me there. Geo-Quest was in the Northwest Territories. Then we went into Arctic Quest . Arctic Quest was getting out into that Beaufort Sea, in that delta, that's where we started mapping those really big structures, the ones that you hear so much about today. They were easy to map because they're so big and straight forward. These were year after year, one year at a time, we had one program every year. Then we went into Polar Quest. Polar Quest was the Arctic Islands. We finally got really offshore. Well, Arctic Quest was offshore too. I was back in the navy days. So our work on Polar Quest was all the waters that we could transit in the Arctic Islands, in the Northwest Passage, downward on the coast of Baffin Island, Somerset Island and so on.

NM: Were you using planes also at the time?

EP: Just for transportation. This was all marine. . . I was back to doing Persian Gulf type work, offshore seismic work. And of course, the beauty of offshore is you gain 10 times, maybe

50 times as much data in a day as you do on land. But you just pull a streamer behind a ship where on land you've got to pick up everything and put it down again. We were successful in Polar Quest and sold that data very well. Then we went into Baffin Quest, which was over in Baffin Bay. Bay Quest which was in the Hudson Bay and this kept the operation going quite successfully for quite a number of years. About that time our activity became very obvious to everybody and we started to get quite a bit of competition and we had to really upgrade our equipment and our techniques. While we had poor boyed it at first, we had to really get into big financial areas. Although we were doing millions of dollars worth of work every year, we were plowing it right back into the next survey. So we felt a little strapped for cash because we were a private company. Midway through the Quests we got together with a drilling company, Boundary Drilling and an aircraft company, Kenting Aviation. Kenting Aviation being a public company, we did a reverse going public situation. In other words we sold our, that is Boundary and Accurate and Pallister sold their companies to Kenting Aviation. By doing so we got shares in a public company but we controlled the public company.

#182 NM: Which year was this?

EP: I suppose that was about '67, '68, somewhere in there. But the advantage of it, as a public company we could raise some money. So we sold shares and we could then finance these things. Then the next step was obvious. We then started buying companies that previously had been our suppliers. The helicopters, the fixed wings, to support the geophysical work. And also Boundary Drilling, being in the oil well drilling, acquired some, or the total company acquired, companies like well servicing companies and pipeline construction company and so on. Some I don't know, 15 companies were purchased by the new Kenting. So Kenting became a great conglomerate. There was a lot of romance in the stock and everything else. The stock went up very, very well. So with that we were able to continue our Quests, with the financial backing of Kenting.

NM: Was your company on the stock market in Vancouver or in New York?

EP: No, Toronto. I guess the whole world is a matter of ups and downs of course, and we were so successful and couldn't do anything wrong, that we were just like other business men, always keep pushing your luck until you do something wrong. So we bought an offshore, or had built an offshore drilling rig, a jack up rig. That was about the only area we hadn't tackled so we tackled that one. And quite amazingly, with all the expertise we had around, and all the diverse talents, we made a very, very bad mistake. We had a contract to use this rig in Lake Erie, what you call a back to back contract. In other words, we built a rig and we had a client there ready to use it for a period of time, enough to pay for it. We didn't look at what the lake bottom was like in the site we were going to work in Lake Erie. The jack-up rig was built, transported to the site.

#217 NM: Is it a very deep lake?

EP: No, no, very shallow. But the rig just jacked itself right down into the mud. It's a mud bottom and it wouldn't stand up. So there we were with a jack-up rig that couldn't work and a contract. But we couldn't perform the contract. Well, the obvious thing to do is to

send it somewhere else it can work so we looked around for international work. It wasn't too easy to find for that particular rig and I think it was probably built for that specific area so there was only certain areas you could use it, it wasn't a big one. Somebody found a job and it was in, just offshore Israel. The reason we found the job quite obviously is that there's an embargo in that area, and it's a little easier to find a job there because there nobody else will work there because of the embargo by the Arab nations. So it was all solved and the rig was moved to do that work. Well, a couple of things happened there, one is it hit a very bad storm, twisted and damaged the rig on its way across the Atlantic. Unfortunately it didn't sink. As long as lives weren't lost that would have been the best solution. Meantime we were financing this rig and having to pay out a great deal of money and it was really draining the company. It was taken into harbour, somewhere in Africa, I can't recall where, to be fixed so it could complete its journey and do its job in Israel. It was taken into a port on the west coast of Africa for repairs and some group decided that that rig wasn't going to get to Israel and they put some bombs under it and blew it up. Unfortunately they didn't do enough damage to sink it or totally destroy it.

#248 NM: It wasn't destroyed?

EP: No, it was just badly damaged, which simply cost us more money to get it fixed. Anyhow I don't remember all the details of that story, you tend to forget the sad times. The net result was, I don't think it ever did get to. . . I think we sold it to somebody and . . .

NM: Got rid of it.

EP: And he bought it for peanuts and took it somewhere else. And we finally got out of it. But only after a great deal of difficulty in keeping the payments going. So it just about took us under. In the meantime I think, we went back into one of those other business cycles, everything else was going poorly. The helicopters weren't helicoptering and . . .

NM: So it was bad luck all along.

EP: Well, it's not bad luck. It's the way the business world is. And those of us who are in it, all of us, well not all of us, but many, many of us just do a few things right and we think that we can't make mistakes and we prove that we can, sooner or later. You just keep playing your luck. Well, we could have been more conservative but that wasn't our nature. But we survived it all. We had problems, we had to keep raising money and it kept going.

NM: Was it easy to raise money at the time?

EP: Oh no. Well, there would be various periods. The market would be bullish and everybody got excited about resource companies and you could do anything. And all of a sudden they'd get down on them and then you couldn't raise money doing anything. We raised money privately, in fact Trimac gradually started taking a position in Kenting, it could see, Bud McKeague??? of Trimac could see its future. And he was prepared to take the ups and downs a bit. He was instrumental in providing finances at one point. Then he started to understand the business better and really saw the potential of the Kenting situation where geophysics. . . well, we did everything in the business, excluding offshore drilling by this time. But it was a really good operating entity. By this time Tony Vandenbrink??? had become the President and was running a very good show and

expanding the oil well drilling aspect of it. And we started to drop off some of the companies that hadn't performed well, sold them. And started concentrating more on the things that we could do well. Then the next stage in that was the acquisition of Kenting by Trimac. So Bud made an offer to the Kenting shareholders for Trimac to take it over. Well Trimac as you're probably aware, is a major trucking company who also was diversifying into a few other things. Bud's knowledge of Kenting obviously indicated to him that it was a good investment and he eventually got control of Kenting, made an offer which was accepted. So Kenting became a wholly owned subsidiary of Trimac.

NM: This is the end of the first interview with Ernie Pallister.

Tape 2 Side 1

NM: So you sold your two companies?

EP: Yes.

NM: And then?

EP: Yes, the company that was started in 1958 was sold to Kenting about 10 years later and subsequently has become part of the Trimac group of companies. I've continued a relationship with Kenting and Trimac through the years and still do. About the time Accurate and Pallister Consultants were sold to Kenting I had become involved with the Science Council of Canada, sitting on committees and so on and as time went on I found that very, very interesting work. Interesting people and more about Canada and our whole economy and the science policy of it all, became very intrigued and found that as the geophysical people took on their own mandate I was required less and less. So when I was approached by the Science Council to become Vice-Chairman I accepted this. It was an interesting problem in that I was required to spend half time at the Science Council. So I made arrangements with Kenting that I would be half time with the Science Council and half time with Kenting. Working half time in industry doesn't work out too well and gradually we decided that that wasn't too satisfactory either. So I went back into the consulting business in my other half time and formed Pallister Resource Management, which is now my principal activity. So for a period of time I worked half time with the Science Council and half time with Pallister Resource Management.

NM: Which year did you found Pallister Resources?

EP: It was 1974 that the Pallister Resource Management company was started. At that time I used the world resource management in the absence of any really definite idea of what I was going to do.

NM: So it was very vague.

EP: Yes. And when people ask me today what I do I still have to be pretty vague. But the word resource management of course, over the years has become a very common term. To me, or in the business I'm in, it means undertaking all those things which are necessary to see that a project gets successfully implemented. I say implemented because my work is largely just to the stage where its off the ground and running. So I work from the conceptual time to the time at which all the approvals and finances are in place and generally back out at that stage to those who are charged with running an operation. So I

get at the beginning of things and follow them through to a certain stage. One of the first opportunities was working with ARCO, Atlantic Richfield Company, who at that time, in the late 1970's, were looking at their investment in the Syncrude project where they were a partner with the others in Syncrude. The costs had escalated and escalated over time and the approval process had gotten more and more difficult. ARCO had asked me to give them opinions on where the country was going in terms of energy policy. Having spent a lot of time in Ottawa, through my work with the Science Council, I felt I had a pretty good feel for just what direction we were going. Not that I could have predicted the National Energy Program as it came out. I could see many of the elements of it taking place and I thought that the industry really wasn't acknowledging these moves very seriously. However with Fred Hildenbrand, who was President of ARCO here in Canada, and in discussion with his people in the U.S., the final decision was made that ARCO would discontinue its investment in Syncrude and in fact, discontinue all its operations in Canada. They sold the company to Petro Canada, which became formed in those same days. So that was the end of ARCO in Canada as an operating company. It was a great company we hated to see it go. So my first customer I gave him such good advice he left the country and I was without a customer anymore, so that wasn't very smart.

#059 NM: And then what happened?

EP: Oh, it led from that to other contacts in the industry. I really wasn't seeking very much business at that time because working half time in Ottawa was a pretty difficult assignment, considering the time of travel and so on. In fact, I've often said, I worked half time in Ottawa, half time in Calgary with half time on the airplane. So for 1 ½ times. Probably the next significant thing that happened was a discussion with Jack Gallagher, who at that time was going through the discussions with Ottawa relative to getting his drilling started in the Beaufort Sea. At that time the permit holders were required to drill a well to fulfill their work obligations. On the other had the government was very concerned about an accidental oil spill or a blow out and the very difficult times there are in cleaning it up in the ice, and was insisting on there being 2 rigs in the area. In case there was an accident the second one could drill a relief well. And the government was very adamant about this. Industry on the other had was adamant that even taking one rig into this area of unknown geology and the special type of ship that would have to be constructed or modified, didn't warrant having 2 rigs. That sounds a little simple today when there's about 6 rigs working there now but of course, the geology was absolutely unknown. Jack Gallagher agreed, he was the only company that agreed that there could be 2 ships, or there would be 2 ships. That broke the log jam in getting approval for Dome going into the Beaufort Sea. But almost immediately following that, the Department of Environment became aware of the activity which was to go on and called for an environmental review of the area prior to drilling. In the meantime the ships were being modified in shipyards in Texas and being built on the west coast of Canada. So we had to put together a very rapid program of acquiring some environmental data. This was carried out in conjunction with government and industry, both parties put all their available resources to work and within a 2 years period a great deal of information was gathered. I

became involved in the sense of helping organize the environmental program, although the scientists themselves did most of that work. My involvement was mostly in terms of communicating the fact that the work was being done, both in Ottawa but primarily in the Arctic regions. So I spent a lot of time circulating around the local communities, Aklavik, Inuvik, Sacks Harbour Homen Island, Polatuk and so on, all the communities around the Beaufort Sea. Starting right from scratch of explaining what an oil well is, although not around Inuvik where they had a lot of experience, but in the outer communities. I was starting right from scratch, describing what activities take place and there was a great deal of opposition in the area. Strong fear that if something went wrong the resources which the local people depend on for their livelihood would be destroyed. So that was a tough job, it went on for several years. We visited the communities, made films, lots of slide shows.

#109 NM: So it was really to make people aware.

EP: That's right. We went into a stage there you see, where, although drilling had been approved, I guess you'd call it, in principal, it was subject to a couple of things. One was satisfying the Department of the Environment that there was enough known about the effect of the environment on the drill ships and of the petroleum operations on the environment. Now the Department of Environment had no particular veto, it wasn't a formal situation but it was ore a matter of gaining a lot of data to make sure that everybody was well equipped. So the approval process was really in place. I suppose it could have been withdrawn if the environmental data had shown something of great concern. In fact, the whole matter of oil spills was and still is, what is it almost 10 years later, still is of great concern. The other point was opposition by native people, local people against the whole project. They really hadn't been consulted at all by this time . . .

NM: Was it strongly opposing?

EP: Oh yes. In fact, the local organization, the Committee for Aboriginal People's Entitlement, got a lot of backing from southern groups, particularly environmental groups, opposing it. Of course, the only way they could oppose it was to make their feelings known to the Minister of the Department of Indian and Northern Affairs, who certainly heard their views and the views of the people in the Department of the Environment. So it was difficult times but the ships did go into the area and they did start drilling. A tremendous amount of additional work in the environmental area was done and we did a tremendous amount of work in getting the local people up to speed. And they had a long way to come in a very short time. I think the most important thing that happened in that respect resulted from a discussion Jack Gallagher and I had, while we were skiing as a matter of fact. At about the time we were really struggling with the opposition being voiced by northern residents, it became very clear to us that the obvious thing to do would be to have these people see operations elsewhere. So that their fears, their unfounded fears could certainly be accommodated. It was a little difficult to implement because the situation was very tense, to the point where people just were not speaking, people would not even meet with us. This was . . .

#146 NM: That must have been very difficult then, to deal with all that.

EP: Well it was. But we went up into the community, I was assisted greatly more and more, in fact she became very instrumental in this whole area by a lady, Mary Collins, who had a company called Mary Collins Consultants Ltd. and she worked with us in performing this work. What we did, actually Mary and I ended up in one of the communities and just stayed there until such time as people would meet with us. We were told they were out hunting and they wouldn't be back for a few weeks but we just sat there and waited. Eventually I guess they. . .

NM: Did you wait for long.

EP: Several days. Eventually I guess they thought, well at least 2??? are sincere and of course, Eskimo people are very gracious people. They were standing on their rights quite legitimately but they weren't going to go beyond a certain point in that direction. And eventually they sat down and met with us and. . .

NM: So you could negotiate then.

EP: Yes. And there wasn't too much negotiating to be done. The only position we took was that we felt there should be a committee, made up of people appointed by all the community councils in the area, we had suggested a person from each council, a committee with whom we could sit down and discuss the whole project and keep them well informed, they in turn keeping their communities informed. We'd had so many meetings in the communities, people were getting fed up with us coming back you see. So we felt there needed to be a committee we would relate to and then that committee in turn would relate to the people. Eventually it was agreed that there would be a meeting of people from each community to investigate whether they would form a committee and they insisted on sending 2 people, not 1. That was the breakthrough. We felt so confident that if people had the facts and knowledge, there just wouldn't be a problem, we could work together. Because industry and public work together really well. An important point there was the government was running parallel to all this and they wanted to be on the committee too. We made a very wise decision that that would not be the case, they could sit in and monitor and everything else but they would not be a part of the committee. And that all the funds would be provided by the oil company and that the committee would administer its funds and spend it as they saw fit, subject to a budget being put in once a year. Well, we brought all the committee down to Victoria, where one of the ships was being, or several of the ships were being built, the work boats.

#184 NM: How many ships did you have?

EP: There was 2 drill ships and a very large carrier that carried all the supplies because there was no base then, they brought all the supplies in in an old tanker that was used just to store material. Then there was about 3 or 4 supply boats. So the people from the communities came down to Victoria and we met aboard one of the ships and they had a chance to see them and it was explained to them how the all functioned and so on. This was one of the big things that happened and they saw the size of these ships and how well they were built and they weren't the ships of the type that many people had seen and expected them to be. They were really impressed with the hardware that was being brought on. Anyhow I was the temporary chairman of this committee, which we called

the Beaufort Sea Community Advisory Committee. And we met for hours after hours, just the local people and myself and eventually they wrote out a list of things that they said, yes, if these things were met they would in fact, form a committee.

NM: You must be quite a diplomat, no?

EP: Well, it's not hard if you're at it a long time and you talk it over and you're honest. I had the advantage of not being an oil company person. I guess an intermediary has that advantage, we see that in life a lot where a third party can get things done whereas the direct relationships get a little too tense. So I would on occasion, go back to Gordon Harrison, who was the President of Canmar, Dome's drilling subsidiary, and talk to him about how we were doing and what the people wanted and he would indicate those areas where he could say yes those where he couldn't. And it gradually went back and forth and we adjourned for the night and then the next morning, I remember a Sunday morning, everybody was up bright and early and we continued to work and finally made a deal by noon Sunday morning. And the agreement was signed right there on the spot and everybody went home. And that was the beginning of the Beaufort Sea Community Advisory Committee, which is still in existence and very, very successful. So there was another thing that came along. In the meantime I think I had. . . well, I'm sure, my work with the Science Council had come to an end, it's a term appointment. And I became full time in my resource management business. The work with Dome went on for, I guess, I can't remember the years now but it was probably 5 or 6 years that we were involved in doing that. In the meantime of course, Dome hired people gradually to fulfill all these tasks and now they probably have 10's and 10's of people doing this same work but of course, they're also on a much bigger scale. In the start the only employees of Canmar were Gordon Harrison and 3 or 4 others.

#231 NM: And now?

EP: And now, I haven't counted lately but it's very large.

NM: And after the Beaufort Sea, what happened, what did you do?

EP: I found myself in a situation where companies were discovering these new environmental requirements and the communication with northern people requirements and I got very involved with the Arctic Petroleum Operators Association in putting out a publication for them called the APOA Review and that's been going on now I guess, for 7 or 8 years. We're still doing that. The idea there was that a lot of people were opposed to oil development in the Arctic.

NM: Why?

EP: On the basis of . . . basically inability for the oil companies to operate safely in these tough conditions. I'm referring mostly to the offshore but partly to the onshore.

NM: So it was just a question of safety?

EP: It all gets back to safety. The worry of the environmentalists, the conservationists, or the native person, is that the environment is going to be damaged. It's very important to a native person whose livelihood comes off the land. While he can go to the store and buy canned goods, maybe a few fresh ones, a) it's very, very expensive and b) it's not particularly what he liked to have. Well, parallel to that is people living in the north do

not have mineral rights as people in Alberta do. So it's a one way street for them, they are taking all the risk, they can have their environment fouled up and on the other hand, if oil is discovered, so what. There's some jobs available but then they're not really trained and educated to take good jobs. Really, the net result is that there's really not much incentive for a person to be agreeable to oil development when it's all downside and not much upside. So it all gets back to safety, that if you can operate safely well then there's not a problem.

NM: What are the difficulties there for operating safely?

EP: Ice, cold, darkness, deep water in some places. You're so far away from transportation systems, everything has to be planned so well. But the major one in a blow out, accidental high pressure situation on an oil well that ends up with the oil blowing to the surface, out of control. And this has happened, it's happened many places. And people know it's happened. If it were to occur in the Arctic, it's not only bad, it's really bad because you have so much difficulty doing anything about it. And the conditions are such that you are more likely to have an accident than elsewhere because you're working under such tough situations. Most accidents are human failure and in cold and dark and of course, with the ice causing some additional difficulties, the possibility of an accident in the north is high, and there have been quite a few of them. Virtually no oil blow outs but there have been gas blow outs. So the general attitude of the public and when I say public I mean, government people, academia, there's all kinds of committees and bodies that take on the mandate of looking after the north, people in the south serving in that role, and then there's the native people themselves, the native organizations, all, unanimously, felt, this is mid 1970's when the whole attention to environmental affairs was just really growing quickly. Not too much even thought about it really, prior to that. In any case, we in industry know that we generally carry out our work in a very safe manner, if for no other reason than if you don't you suffer the consequences yourself, as well as others around you. We knew all the research that had been done, particularly say by the Arctic Petroleum Operators, who had joined together to do the research, one time jointly financed to avoid the extra cost. We knew that data lay on the shelves and I don't know how it started exactly but I suspect I approached the Arctic Petroleum Operators on the basis that they should release this information. Not only release the reports but have the reports reviewed and abstracted and written in lay terms and published and distributed. Not waiting for people to come to the. . .

#322 NM: So people could read and know about it.

EP: That's right. And they agreed to do this. They wanted to keep some of the information what we call tight, or confidential for a period of time for one very good reason, and that is that if you automatically say everything is going to be released, when you go to undertake a job everybody says, let somebody else pay for it, you know, when it's released. Because you get nothing done. So the compromise was, and this was in conjunction with some discussions with the government, was that the data would be kept confidential for 5 years, and then when it was 5 years old, would be put into the public domain.

NM: End of the tape.

Tape 2 Side 2

EP: Well, the next step in that was the approval of the Arctic Petroleum Operators to do something with the data. The real reason was to get the public up to speed with what really has been done in industry. The public simply didn't know. It again, has been immensely successful and it's about that stage that my son came in the act. He'd graduated with a degree in philosophy from the university which really equipped him to think and read and write. But as we know the opportunities for a philosopher are going on into the PhD level and teaching in the university or becoming a man of the cloth I suppose. Jeff wanted to get into the business so he undertook to go back to university and get a science degree but in the meantime he would continue to work, or he would come to work with me and help me with what I was doing. So he did just that and just a month ago he completed his bachelor's requirements. I think it took him I guess, about 6 years to do that. So he's been with me about 6 years and studying for a degree in geography which fits so well in with what we're doing. In any case he undertook the matter of reading all the old reports, some of them are 5, 6, 7, 8 years old and abstracting them and preparing this Arctic Petroleum Operators Review. I think we're in our 5th or 6th year of publication of that, it comes out 3 times a year. It's sent out to something like 8,000 people worldwide now. In conjunction with the review of the information, the publishing of readable stories in this Review, is the dissemination of the data itself. And he's made arrangements to have all the data microfiched and in something like 10 universities around the country.

NM: A huge task.

EP: Oh yes. And then he puts out brochures that it is available, the data are available and these are distributed to all the people who use that kind of data and he has orders now coming in from all around the world for this data. So I think the Arctic Petroleum Operators are also happy in that their data is getting out and being used. And of course, the whole attitude towards industry has changed when people see the volume and quality of this work. They say, oh I didn't know you did that, you certainly have looked at the subject thoroughly haven't you.

#032 NM: Then they realize how much work was put into it.

EP: That's right. So the old story, there's not enough information, you just don't hear that anymore. Furthermore you don't hear the accusation, the industry has all this secret information and they don't tell us. We don't hear those things anymore. In fact, people say, would you stop sending me information so it's going the other way. Information overkill. Just to add to that, what has happened after getting started on the Arctic Petroleum Operators doing that thing, we're now doing the same for any number of associations, the Canadian Oil Spill Association, the East Coast Petroleum Operators, and several of the joint ventures. We have all the data for instance, from the Canadian Arctic Gas Study, on the pipeline. After they'd gone through all their hearings they gave us all

their data and we now make that available to the public. So we've become a little corner where people all over North America and other parts of the world know that if there's something they need in the area of Arctic information specifically or on oil spills they give us a call and say, what do you have on this subject. And we generally have to go and find some more for them. So we operate a little data service as well. Probably the best library of information in Canada. We had to buy a warehouse incidentally, to store all this material. Well, those are a couple of the projects we have been doing and along the way, because . . . I think because I was doing these. . . which at that time seemed strange things to be doing, rather intangible. . . the secret of our business was the fact that we were doing things that were coming along that were new. Industry wasn't geared up to do them. So they didn't have the people inside to do this kind of work so all our work was really could be defined as things that needed to be done which companies weren't set up to do. So there was a lot of pressure on also, because whenever they did decide to do something time had been running out. So we were always under a lot of pressure to get it done quickly. And I guess that's the nature of a consulting business. But as time's evolved over the last 10 years, being in this type of business, we've seen what, where we were first looking at environmental things as being something new that needed to be addressed, then it became relationship with native people, that became the next one. And that was followed by what is now called Canadian industrial benefits, the whole procurement process. Now I see a new one coming along and that would be operational safety as opposed to the environmental type of safety. I'm now talking about human safety. As a matter of fact, I'm now working as a consultant to the Royal Commission on the Ocean Ranger disaster. I can see from this work and other work, that the next big wave of requirement is going to be for documentation on human safety. We've spent I think, we calculated one day, \$100 million in the Arctic on environmental studies between industry and government in the last 10 years.

#072 NM: What are the main problems for safety, human safety there?

EP: Well, particularly for the offshore. Working in Canada's offshore is not like working in the Gulf of Mexico. I think we all recognize that but I don't think we recognize how difficult, how hard, how different it is. Everything is compounded, the difficulties. Transportation lines, the weather, the atmosphere. Of course, the disaster that occurred off Newfoundland a year ago, where 84 people lost their lives, is an illustration. Now that could have been a haphazard, one time, accidental, accident that may not occur again. But as we look into the conditions that surround operating, and those are southern waters, operating in those southern waters, it's a very difficult area. Canada is rather new in the offshore, although we have had wells drilling for some 10 years or so, a low number of wells compared to other areas. And also they've been done at times of opportunity, meaning that a ship is available and it's summertime and a well is drilled and the ship goes off somewhere else later. We're now getting into the serious game where the ships are staying around, particularly the Canadian content requirements. Ships are becoming dedicated to use in Canada. Which means they are working in the wintertime and they're working time that they didn't work before. And we've got such an immense area and

we're realizing that, some of our work in the past, we've been lucky. We've been lucky in that they were good years and there are bad years. This year for instance off the east coast is a particularly tough year for ice. And the ships have been off location a large portion of this past couple of months. So in the whole area of safety, we've spent hundreds of millions of dollars on worrying about the safety of the seal and the walrus and the whale and the porpoise and the . . .

NM: And they don't spend this money on humans.

EP: So far we haven't spent it on humans. And I'm just simply saying now that this is going to be the next thrust. There will always be some challenge in front of us. So we've gone through the environment and the native people and the local purchasing, Canadian content and the big next one is going to be safety. So that's what we're getting into today. We're not doing that much environmental work now because there's all kind of experts and everybody's all set up to do it, so they don't need us. So we move on to another challenge.

#103 NM: You are associated with the Devonian Group of Charitable Foundations, can you tell me a bit more about it?

EP: Yes. Although I'd known Don Harvie for many years in the oil business, it was rather by chance that I ran into him, sitting in a airplane in 1974. In fact, I was coming back from a Science Council meeting and I was describing some of the great possibilities we have in this country and probably expressing my frustration that we really can't get anything off the ground in this country. Everything is so complicated and difficult to get funding for good ideas.

NM: Did you know him before you met on the plane?

EP: Yes. Not well, not closely. I must have just talked to him at the right time. By the time we got off the airplane from Toronto to Calgary he said, let's get together and see whether the Devonian Foundation can act as a catalyst in getting these things done. What I didn't know is, that at that time the foundation had about \$80 million and had made the decision, that unlike other foundations, that they would spend the \$80 million. They gave themselves I think it was a 15 year time frame to do it. They would spend the capital and all the income, rather than let it go on in perpetuity. Don invited me to serve as an associate of the group. The foundation has several people who they've asked to be associates to help with that task. And beyond that he asked me to bring some proposals to him, some scientific programs. Up to that time the Devonian Foundation had, under Don's father, Eric Harvie, had devoted their activities mainly to museum type of things, the foundation of the Glenbow [from that foundation was spawned]??? and had a fantastic collection that Mr. Harvie Sr. had acquired. Don and the family felt they'd like to do some scientific ventures as well, so they asked me to do that. That was a great deal of fun. I then went back to the Science Council people and said, give me a list of your best projects that need funding and that we can put together. And we set certain criteria, mainly that they be really top notch, that they be unique in Canada, they serve Canadian unique needs and they be world scale. Devonian was prepared to put big money in it, I'm not talking about little donations. They were prepared to not only put the front end money

in it but also to provide my services to help . . .

NM: So human resources too.

EP: Yes, yes. Well, we got quite a number of proposals organized and of course, they had been well massaged already because everybody knew this is what needed to be done in this country. We chose 2 of them out of a longer list. One was in veterinary medicine and one was in ice engineering. Our basic feeling was that the real smarts and the advanced people of this country particularly, where we have so little industrial research going on, existed in the universities. But we wanted to marry that knowledge and skill with the industrial sector who had the need and would tend to keep these people very pragmatic. And we felt that the governments should be involved, both provincial and federal in that the beneficiary of all this research is the people of Canada. So we had a formula of bringing the 3 parties together. Well, 4 parties, our money and their talent. So we started under Angus Bruneau??? who was then Dean at the Memorial University in St. John's, a centre called C-CORE, Centre for Cold Ocean Resource Engineering. And we started Veterinary Infectious Disease Organization, called VIDO, at the University of Saskatchewan under Dr. Chris Bigland. The choice of the projects was also involved in leadership. We were very, very shrewd I guess, in choosing not only those ventures but those people. Bruneau and Bigland really made those things happen. We formed Boards of Advisors, of which I was the Chairman, to help them during their first 3 years of getting established. As it turned out I ended up being on those Boards 6 years. That was simply an underestimation of how difficult it was going to be to get it established. It's amazing how much resistance there is in the academic and business world, of anything new.

#169 NM: Why is that do you think?

EP: Well, it came as a surprise to me but basically I think that people like the status quo and anything new is at the expense of something that exists. Or at least people feel it is. Now particularly that's the case in government. Government takes the attitude, we only have so much money, it's now being well used, if we support you we have to take it away from something that is a good place for that money to reside. So what we found was that it was very, very difficult to raise the money from governments particularly. The industrial sector also was hard, in the beginning. Industry takes the attitude, get it going, get it operating and I'll support it.

NM: Then we can get involved.

EP: Yes, but don't come to me with these wild ideas. So industry came in slowly, although there were some real exceptions. There were some companies that just really believed in it and put their money in and it drew in other people. What also was so good about it was the people in industry who often would say, look I don't have any money but I've got my time and my energy and I'll help you. We had, just dozens of people who did that. Nobody ever said no when asked to help. And they brought such sophisticated knowledge to the people in university who had such sophisticated knowledge that the marriage of the two. . they were miles apart in attitude but as they came together it was very successful. One of the interesting things was, in starting the veterinary research institute in

Saskatoon, Saskatchewan, the principal contributor, other than the Devonian Foundation, was the Government of Alberta. Now if that wasn't a breakthrough. The Government of Alberta put more into it than the Government of Saskatchewan, although the Saskatchewan government has been going on. Yes, we got a grant of \$1.85 million from the government of Alberta. And that was before all the big royalties were. . . it was before Heritage Fund and so on. The Devonian in short, put in about \$3.5 million in each of these, in other words \$7 million were put into those operating start up costs, which were 100% of the operating costs in the first few years. Or not 100%, very close to it. 6 years later, the Devonian had made its contribution and had backed out, I shouldn't say backed out, had discontinued its involvement, as had been planned. And the 2 institutions are self sufficient now and operating independently and getting all their money now from the industry and from government. They were both running at about a \$2.5 million a year budget right now. And they're doing extremely good work. In the case of VIDO for instance, in our early meetings we asked these people, now what is it that you really think can be done. Of course, they filled the blackboard and screens with all the diseases of animals that needed to be, there needed to be attention paid. We just kept working at it and gradually got it down to one. We said no, if you're going to make a breakthrough you've got to spend all your money on one disease.

#217 NM: So were you eliminating all the illnesses one by one?

EP: Yes, it just kept getting narrower and narrower. And lots of consultation with farmers and ranchers and it just kept going on and on until they decided on one disease. Now all the money wasn't spent on one, there were two other projects that a little money was spent on. But the idea was that if you spend a few bucks on a lot of things, you're just going to advance the science a little bit, just like everybody else had. The one that was chosen was neo-natal diarrhea in calves. Very simple thing, a lot of calves die just after they're born and it's a great loss. Nobody had been, in Canada, doing much on this. Everybody had been doing a little. I should explain that the government of Canada tends to not look at these common things, but look at the more exotic ones, particularly related to the transport, import and export of animals. So they went after sort of the common cold of the cattle industry and within 3 years, had come up with a vaccine, which, after all the trials and so on, reduced the occurrence in very large proportions. And essentially to the point where, with some good farm management, there is no need that anyone should worry about calf ???, it's called now.

NM: Where was the research done for that?

EP: In Saskatoon, right on the campus of the University of Saskatchewan. They have a building there, that's where the \$1.8 million from the Alberta government was used, to build a building. But that's just an example of what they did. To just complete that story, they licensed that vaccine out to a pharmaceutical company who in turn, sold it all around the world, and they received royalties for it and essentially got all the money back that was spent on the research. So it's a very, very successful story. Now not totally successful in the sense that it wasn't long, almost a matter of months, maybe a year, before the remainder of the industry discovered exactly what it was. It's not exactly patentable. And

anyhow people can accomplish about the same thing, and they did and they cut the prices and the royalty income now is virtually gone because everybody caught up really quickly. But that doesn't make the people at the university very unhappy. In fact, they're very happy because their real motivation is to make sure those animals lives are saved. And they're happy.

#256 NM: So for that it was a success.

EP: Yes, for that it was a success. And financially, they got their money back. Over at C-CORE the emphasis has been finding ways to operate in our ice infested waters, which I'd referred to earlier about this whole safety matter. It's only now, that organization has been going for 7 years, it's only now that people are really finding the value of the research that's being done at C-CORE. So they're off and running, well supported by industry. And then the National Research Council of Canada is building a huge laboratory right beside them, within a stone's throw of the C-CORE building in St. John's. That building incidentally, was donated by the province of Newfoundland, on the campus. Now with a big National Research Council laboratory right beside it, doing complimentary work, this really will be the centre of excellence worldwide in ice covered waters. So we're happy with that one too.

NM: In '79 you were a member of the Board of Directors, with Nova, an Alberta corporation.

EP: Yes.

NM: How did you come to be a member?

EP: I don't really know how that came about, other than Bob Blair called one day and asked if we could have lunch which we did. And incidentally, in the typical style of Bob Blair, it was in a very modest restaurant and a very informal meeting. I had followed his career, of course, as everybody had, through the pipeline, the Northern Pipeline, Berger hearings and so on. I guess it had come to his attention, some of the work I'd been doing, I guess, the government work and in the Arctic and so on. In any case, he never told me why, he wondered if I would serve on the Board of Nova. There's a very complicate formula on the Nova Board, some are appointed by the Premier, others by the shareholders and others by the oil industry. I'd been serving as a representative of the oil industry. I shouldn't say representative, the gas producers have the right to nominate 1/3 of the Board. And each year they make that nomination. In any case, I went on his Board and that led to some very interesting other things. In addition to continuing to sit on that Board, I'm on the Board of Husky, which you recall, Nova purchased the control of Husky. Then I went on that Board. Nova's doing so many things in so many industries and I'm on 3 other Nova controlled Boards. One is Noval Technologies and this is a group that looks at new technologies, sort of an in house venture fund. Nova puts up the money to get a few things started and they spin them off into new industries. I'm on the Board of Novacorp Engineering, which is international engineering consultants in the pipeline area. Their work spans all the way from Sweden to Malaysia. The concept there is using the talents that exist in Canada to work in other countries. In 1980, late in 1979, Nova purchased the Lockheed Petroleum Services Ltd. Company in Vancouver. This was a company that had been formed by Lockheed, the aircraft. Offset trade they called it, when Canada bought

the 1011's for Air Canada they required Lockheed to spend some money on research in Canada.

NM: End of the tape.

Tape 3 Side 1

EP: So Lockheed Petroleum Services, over a period of about, close to 10 years, had been doing research in Canada, they had chosen to get into the high technology, offshore research relative to the petroleum development. The unique technology they came up with was what they called the one atmosphere system and this consists of men working on the sea floor, on manifolds and well heads, in a one atmosphere condition as compared to doing it wet as a diver would. So it consists of a capsule which is lowered for a service boat to the sea floor where it locks on to equipment which is made by Lockheed that performs the production of offshore oil without need of a standing platform. Very, very advanced technology and the major user is Brazil in its offshore, where the system is producing about 20% of the total oil of Brazil or 40-50% of all their offshore oil, from one system. So Lockheed had never made any money at this, having plowed all its resources back into research. And I think Lockheed, well, we all recall it was going through some financial trauma about that time and had made a decision that it had fulfilled its requirement to do the R & D in Canada and had had enough and wanted to get back to building airplanes. So they had put the company up for sale and it had been around for quite awhile. Not too many people are venturesome enough to carry it on. However discussion in Nova led to the conclusion that this was something that existed in Canada, very skilled people. It would be a real shame to see it dissolve beyond that there was an obvious need for it in Canada, although no immediately. It will be awhile before we get into production systems but the system is ideal to Canadian needs because it can be operated under the ice rather than try to fight the ice. So it makes sense in that respect. Whereas you know, there's no production from our offshore yet, there are no standing structures out there. Our prediction is there won't be, that people will use subsea systems on the sea floor and with a floater or a ship on the surface, which can come and go at the dictate of ice. And to build the kind of standing structure you see in the North Sea is not something we want to do in this country. In any case that is the rationale, so the company was purchased from Lockheed and renamed CanOcean Resources. And I became the Chairman of the Board of that company. The President and Chairman had stayed with Lockheed, they had not come with the company, so I served as Chairman and President for a short time, long enough to find a President. I hired Bill Tally from Houston, who is a world expert in the offshore business. So Bill came up to Vancouver and he operates the company as President, I continue as Chairman of the Board. Gradually over the years we've expanded from that one operation really, in Brazil, to offices in the UK and a manufacturing plant in Vancouver and an engineering company here in Calgary and another in Halifax. So the company has gone on but the old story of being in a high

technology and researching is very costly and it still doesn't make any money. Everything we make in Brazil is plowed back into R & D.

#047 NM: You must like music too, to be a member of the Board of Directors of the Calgary Philharmonic Society.

EP: I'm not sure there's any prequalification of even knowing the scale in order to be a Director of the Calgary Philharmonic. But yes, I do love music. I sort of play the piano, a lovely Steinway that I tinkle on. So I don't do much there other than help with the decision making process. Certainly I have nothing to do with the decisions relative to the music.

NM: What about being a founding member and Director of the Scientists and Engineers for Energy and Environmental Security?

EP; That's a complicated name but it's a group of scientists and engineers, largely academic people, who feel that the whole approach to energy has not been handled well in the past. And the relationship between energy development and environmental concerns they feel is quite a conflict. So they feel as independent individuals, they can provide the advice, to those who will listen, of how we can develop energy and do it in a manner that it gives us both energy and environmental security. Anyhow, the organization was formed and I'm a founding member and a Director. We haven't got to the stage yet that it's having much impact other than papers being written and so on. But the whole idea is to have an independent group of people who have no vested interest, where the public or the government can come to make decisions on nuclear safety and offshore oil production, those type of things. Is it responsible to do some of these things.

NM: Do they meet regularly?

EP; All there is really is a Board, everybody that belongs is on the Board. So it's kind of a closed club. I don't know if they're all on the Board but the membership I could count on my hands and feet. So it's just people who get together and talk about these things.

NM: From '70-'71 you were the President of the Canadian Society of Petroleum Geologists.

EP: That was an interesting event. I'm not a geologist but I think I had referred earlier to the fact that in my consulting work I had been working very closely with geologists and I started going out to their meetings and even writing some papers for their journals, mainly on the integration of geophysics and geology. And lo and behold, somebody nominated me as President. I guess it had been preceded by my serving as, I think I was Secretary one year or Treasurer and then Vice-President. In any case, I was nominated to be President of the Society. It was the first time that a geophysicist or any non-geologist had been asked to do that.

#085 NM: So it's an historical event?

EP: Well, it's the only time it's ever happened. And I was elected. I was probably elected because I was a minority group, everybody thought it was so strange to have a geophysicist. They don't always get along that well you know, geophysicists and geologists. In any case, it was a little like an architect becoming the President of the engineers association or something like that. Anyway I did it and really enjoyed it, I really

enjoyed working with that group. It's such a dynamic society. I have many, many fond memories of it.

NM: In the same year you became oil man of the year.

EP: I guess it was. A lot of things were happening about 1970. This was just after the completion of all our Quest work and I think all this recognition at that time was related to the fact that we had done something pretty imaginative and it had caught on and everybody thought it was a great idea and when they look around for somebody to honour I guess that's how they do it. I haven't had any since, I guess I haven't had any bright ideas since then.

NM: And in '73 you were General Chairman for the First National Canadian Society of Exploration Geophysicists Convention.

EP: Yes, that was an interesting idea. Up until that time, although we had a strong geophysical society here, the Society of Exploration Geophysicists or the Canadian Society, it had always been what they call a branch, a branch society of the real Society of Exploration Geophysicists, which is headed in Tulsa, Oklahoma. Canada was not any different than the Casper, Wyoming branch of the Dallas branch. And it continues to be that way. But I felt that it was time that we did our own thing in Canada rather than being just a branch. So in that year we organized the first national convention. Which meant that we brought together a lot of people who would never have gone to the national convention of the parent organization.

NM: Where was this convention?

EP: In Calgary. It was held in Calgary and we got local speakers, local government speakers or Canadian government speakers. It was very, very Canadian, it was entirely Canadian. And we got involved with the geophysicists in the mining industry and geophysicists in the universities in eastern Canada and so for the first time we brought all geophysicists in Canada together.

NM: How many delegates came?

EP: Oh, I couldn't recall, but 4 or 5 hundred. And it's gone on every year since.

NM: Always in Calgary?

EP: It's always been in Calgary, yes. So every year the Society has a convention in Calgary so I was glad to have had the opportunity to just think of a new idea of having our own convention. As well as participating in the international one.

#126 NM: Was it because of this convention you got a special award from the Association of Professional Engineers, Geologists and Geophysicists of Alberta?

EP: I wouldn't think so. The APEGGA, as we call it, Association of Professional Engineers, I can't recall why they would have given me a special award. But I was working hard with that association. When I was in my consulting work I had been on a lot of committees of the Professional Engineers, which was called the Association of Professional Engineers at that time.

NM: So no geologists and no geophysicists then?

EP: They technically were required to register, in order to practice as a consultant. You had to be registered. The law, or the act stated that the professional engineers would regulate the

geologists and geophysicists as well. And I was involved in those days, in the whole association but particularly the relationship with geophysicists and geologists. By that time I had been pretty close to the geologists as well. So eventually the name of the organization was changed to include the names, geophysicists and geologists, so it is now the one regulatory agency of all the engineers and earth scientists. And I presume that the award they bestowed on me at that time was something to do with my contributions up to that point. I had been very, very active in the association. It's coming back a little better now, I had worked very strenuously in building up the credentials and quality and standards of geophysicists, consulting geophysicists. That came about, in the early days, anyone with a scientific background, whether it be agriculture or whatever, found employment in the geophysical business. A lot of the work is very straight forward, particularly when you're looking for oil. People became known as geophysicists who happened to be practicing geophysics but had no real training for it. Yet the act specifics that if you're going to call yourself a professional geophysicist. . .

NM: You must have a diploma.

EP: That you must have qualifications, either in training or write an exam. It wasn't enforced in the oil companies for instance, because they were not practicing in the sense of offering this ??? to the public. But in the consulting world, and you'll recall I related the story of starting off in the area of a definite practice of professional geophysics, I participated a lot in the whole area of registration. Not that I mean to say that we just lowered the boom and said, you must be registered. We made a lot of effort to make sure that people practicing geophysics were either qualified to do so or took such steps to become qualified to do so. That probably has a lot to do with that award.

#171 NM: And then you gave lectures for the Society of Exploration Geophysicists?

EP: Yes, that was a lot of fun, a lot of work. This was what they called a Distinguished Lecture. Each year the Society of Exploration Geophysicists asks a person to visit every branch of their organization and give a lecture on a topic of his choice. That sounds pretty easy till you realize. . well, I don't remember the number of places I went but I think it was in the 30's. But I do know this that I travelled 6 weeks solid and then took a break and then put in another 6 weeks solid.

NM: Was it giving the same lecture?

EP: I got pretty bored with it but yes. Well, I had the same slides. It was the same slides but I changed the format from time to time. It was interesting, the name of it was The Canadian Arctic, a Sleeping Giant. And of course, everybody expected me to come in and tell them about the massive reserves that lay there for the taking. The tenor of the thing I did talk about was how very, very difficult it was going to be to explore and develop and exploit and produce in our Arctic. My bottom line at the end was that the giant is going to continue to slumber for a long, long time. And I went into such things, we discussed earlier about, what year was that, that I was doing. . .

NM: '74.

EP: '74, yes. I had just become involved in this jigsaw puzzle of pleasing environmentalists and native people and getting the right technology for ice and satisfying all the

government departments and hearings and reviews. I guess when I was asked to speak on the subject I thought, there's just no way we're every going to get this country developed and I'm going to go out and talk about it. Little did I know I was so right. I'm sure if I had to do it over again I would just say it with even more strength. But it was a lot of fun because I talked about a lot of the problems that we had to face as a new place, and I was talking geophysics mainly.

NM: Were people asking you a lot of questions?

EP: Oh yes, they were very interested, I had good crowds everywhere I went. The reason it takes so long is they make a big thing of it. You have to go in the day before and they have a dinner for you, that is with their executive and the next day you meet everybody and then you give your speech and then the next day you fly out.

NM: It would be very tiring then.

EP: I sure ate a lot of mashed potatoes on that. . . you know, it started off in Houston and then Dallas and Los Angeles. There was every little whistle stop all through Texas and Oklahoma, there's little divisions everywhere. And one in New York City, that was fun.

#215 NM: How did you become involved with the Canada West Foundation?

EP: The Foundation was involved in an energy study about the time, well, we'd gone through the Arab embargo and well, all the problems of price and shortages and government involvement, that whole story in the mid 70's. The petroleum industry felt that its message wasn't getting across to the public, that it was being unfairly treated by government and it was about this time that. . .oh, the precursors to the National Energy Program were starting to be formulated in government. I don't know exactly how this all started but it ended up with the Canada West Foundation, which is an independent organization, incidentally it has nothing to do with secession. But others have called themselves similar things, it sometimes gets confused. But the Canada West Foundation, which is a very independent group and funded by provincial and federal government, industry. . .

NM: And private people too.

EP: Yes. And I think in discussion with people in the oil industry, not as an association or as companies but just people, it was concluded that the Canada West Foundation should do an independent study of the non-renewable resource subject in Canada, mainly oil and gas of course. An independent task force was put together, of which I was a member and we were given the mandate of calling it the way we saw it. All very independent people and we prepared our information on the basis of our personal input and we had the finest tax man, Bob Brown on the committee from Price Waterhouse and the finest engineers, we had all the best of information. And we were given a total mandate to call it the way we saw it. We were wrote a report on this subject and presented it to government. It was when Alistair Gillespie was the Minister and we eventually presented our task force report to the government. So what it was, was really, the Canada West Foundation serving as a banker. Canada West undertook to raise the money, we don't even know where the money came from, they raised it wherever they could, largely from industry I would think. And then they used some of the Canada West funds as well, and they

provided all the secretarial work and so on and we prepared a report. Which stands up quite well today, the principals and problems we were talking about, about supply and demand and where we were going to get our oil and what the economic problems are and what are the tax problems. It still stands as a pretty good report. But it was very important at that time. Unfortunately I don't really think too much of the information we presented to government was accepted. Some of it was. Some very important parts of it was.

#273 NM: What about the rest?

EP: Well, in the whole area of taxation, it was not accepted. In fact, it went the other direction, industry became more taxed. Our view was that the taxation that was coming along, including royalties, was depriving Canadians from having resources when they needed them. That the money would be better plowed into the ground than go into government coffers. Now what's happened is the government has gone another way, they have taxed more heavily, much more heavily and then turn around and give grants. Now we were opposed to that system, we felt that it should be done on the basis of taxation and those who didn't explore were taxed heavier. Those who did, did their own business. But that wasn't accepted. But other aspects, a lot of other aspects were accepted. Such as the importance of the frontiers, this report pointed out very much that we have very little oil left in the provinces and a great deal in the frontiers and there needed to be some stimulation of the frontiers. We had indicated tax relief for those who explored in the frontiers, they turned out giving incentive grants which were conditional on the nationality of your company, whether it was Canadian or otherwise. Well, we never, ever suggested that the nationality of the owner had anything to do with the problem. So the solution today in the NEP is much different than what we had recommended.

NM: And you stayed 2 years with the Canada West Foundation.

EP: Well, as a member of the task force, yes, it took us well over 2 years to put all this information together.

NM: Are you still working with them?

EP: No, when that was over that job was done. Although I did undertake another project, joint with Devonian and Canada West in looking at western Canada's water resources. Devonian's feeling there is that, we are really going into a very similar situation with water as we went in with petroleum. It's just not quite so obvious but a few years from now, maybe a decade or more, we're going to get in a real crunch on water. And we're not prepared to face up to the administrative responsibilities. And we're going to have federal, provincial conflict. And the people are going to be confused and there's going to be a big scrap for 10 years about who owns what and who should manage what and in fact it's worse than in oil. So we're saying, let's get started on sorting out some of that stuff now. So the first step we did was to grant to the Canada West Foundation, several hundred thousand dollars to put together a study of the facts. No recommendations or conclusions even. It's a matter of getting the facts straight, who owns what, why, what's the history on it, where do the waters flow.

NM: There's so much water in Canada, so many lakes.

EP: Well, water, water everywhere but not a drop to drink if we're not careful. Water is only

good if you can use it.

NM: And not pollute it.

EP: Not pollute it and it's there at the right time. We've also had some big droughts in Canada too. And they could come back. In any case the problem here is that there are 7 jurisdictions looking after water.

NM: That's a lot. End of the tape.

Tape 3 Side 2

NM: You have a diploma from the Banff School of Advanced Management and you got it in '62 and then you became the Vice-Chairman in '78.

EP: Yes, that's quite a gap in there. The story is I attended the Banff School of Advanced Management in 1961 - '62.

NM: Why? Was it a special ???

EP: Well, yes. It's an interesting school in that it recognizes that many of us in business never have any training, that is in management we don't have any training. We tend to. . .

NM: Train yourself.

EP: Yes, we tend to be engineers or physicists or whatever and we get in the business world and we learn from our peers, partly by mistakes and we try to understand balance sheets and how accountants do things but we really don't know. We often appear to but. . . the whole point is that we don't get much training in advanced management. Donald Cameron had worked towards this, of having a good advanced management school in Canada. And incidentally he had started one in Europe as well. But he recognized that if Canada was going to really compete in the world that we'd better be good managers as well as everything else. And that we were lacking in that. So he got a school going up at Banff and my friend Bud Coutt had attended one of the early sessions. In fact, he might have been in the first session. And I always admired the way Bud could handle everything. So this was just when I was working with him in Accurate Exploration and Pallister Consultants. Anyhow we decided I would go, which is quite a decision because you're away from the office 6 weeks and it's quite expensive. In any case I went and. . . .

NM: It's a very intensive course.

EP: Yes it is. You work long days and long weeks.

NM: Did you have to take exams?

EP: No, there are no exams. And when it says a diploma, actually you just get a piece. . . everybody passes. It just acknowledges you went there but the thing you really learn there is from the other students, so called students. They're people from every business and government and . . .

NM: So everybody can exchange ideas and. . .

EP: That's right. And what you really learn is that you're all facing the same basic problems. Whether you're making beer or peanuts or trying to find oil, it's all the same.

NM: ???

EP: Yes. And handling people and government relations and labour contracts and accounting,

it's all the same thing. The big thing that happened to me, in '62, how old would I be then, 35 I guess, that it gave me such a great confidence. I was one of the younger members of the class and I was thrown together with these people that I really thought they were really super performers and by the time 6 weeks was over I found that they didn't know anything particularly magic. They may . . . I gained a lot of confidence. Incidentally my son Jeff is going up to the class next spring, so he'll follow in my footsteps there. It's a great course. It was years later that I was. . .it has a Board of course, and it was years later I was approached to serve on that Board, which I did and eventually became the Vice-Chairman. I guess I'm the kind of person who throws himself into things. Every time I get on to a Board of some kind, first thing you know, I'm the Vice-Chairman or the Chairman. Because I throw myself in it. Always with the intention of doing it and getting it over with and going to do something else.

#045 NM: And then people ask you to do more?

EP: I guess so.

NM: And what is the Banff School of the Environment because you were Chairman of the Board of Advisors.

EP: Yes, this is another of the Devonian ventures. On a smaller scale than the VIDO and C-CORE. David Layton and Ted Nelles, who are at the Banff School, which is the Banff Centre itself whereas the Banff School of Advanced Management is a separate organization that is owned and run by 4 western universities, the Department of Commerce of 4 western universities and happens to have its course at the Banff Centre. It's not a part of the Banff Centre. Whereas the Banff Centre itself had this idea of having a school of the environment to add to the several schools they have there. We tossed around all kinds of different ideas about how that should be performed but it was an ideal location to talk about environment of course. The Devonian Foundation provided funds there to start this school. The idea was to bring together all the people who were responsible for the management of resources, so they can understand each other better and avoid the confrontation aspect and the legal, everybody suing everybody else. But to bring these people together in planning environmental management and learning about the hearing processes and how you make decisions and how do you pass data around. So it was formed at a time when environmentalists were decrying what industry was doing and industry felt the environmentalists were a lot of kooks. And government was in the middle making regulations and hiring people to look at everything twice and three times. So we tried to get everybody together so we could avoid conflicts and manage environmental things more responsibly. So it went on for quite a number of years and eventually folded into, the Centre doesn't call it that now but it's in their management school and they put on seminars on environmental management. So it's still going and quite successful.

NM: What is the Centre of Biotechnology at the university?

EP: This is something that didn't happen. The idea was that biotechnology would be a coming thing in Canada and that the University of Calgary had a number of people that had expertise in this area and that a centre could be formed at Calgary to focus those efforts. It

never got off the ground.

#079 NM: What was the reason for that?

EP: I'm not really certain. The whole area of biotechnology is more romantic than it is practical. And it's such a wide field. There have been a lot of companies developed in the U.S. and Europe gotten into this area. Canada really hasn't been able to come to grips with it. It just never got to the point where there was a leader who said, I'll take it from here and promote it. But we got all the basic information in place and it still remains to be done. One day somebody will pick it up. . .

NM: Is it just postponed or is it. . .?

EP: It just came to an end as far as we're concerned. The task force had the responsibility of laying out what the opportunities were, where the talents were in Canada, what the market was, what the different sciences of biotechnology are. And came to the end point of saying that there should be a centre started and the University of Calgary would be a sensible place to do it. Now we only go so far. This was funded by the Devonian also. We go so far and then we put the flag up on the mast and see if anybody salutes it. It's still fluttering up there but nobody's doing anything about it.

NM: In 1980 you got the title of Doctor of Science from Memorial University of Newfoundland.

EP: Yes, that was quite a thrill. I attended convocation, gave the convocation address and received the honorary degree, which I'm very proud to have been honoured in that way. My relationships with the university in Newfoundland have been very good and close and I presume the reason they conferred it on me was because of the work I had done in the ice engineering.

NM: Can you tell me a bit more about your publications?

EP: I guess you're referring to the many speeches and lectures and things I've given over the years. I guess I could only say this, that you get called upon to give speeches quite often, I guess I give a dozen or 2 dozen a year, I don't know how many there are but they're always around, there's always people looking for lecturers. Maybe one of the reasons I've been invited was I was very active in the Toastmasters Club years ago and worked my way up through the ranks from a member to the area of governor, district governor, regional governor and all that, to a Member of the Board of Governors of Toastmasters International. And gave a tremendous number of speeches in those days. This was in the late 50's and early 60's. I guess got to the point where I can get up in front of an audience without any notes particularly and get my point across. As a result, speakers are in great demand, every organization is looking for them. So I've given a fairly large number of talks and I publish them. I take the trouble of putting it on paper before or after and they become published, so there's quite a list these days. They're a lot of work, it takes an awful lot of effort. And I'm still always very nervous when I go on after, I suppose I've given 20 speeches a year for 10 years, that's probably a couple of hundred speeches there. So I'm called on to do that and I publish them. I write a lot of articles for journals, you get requests to do that. Sometimes you even get paid, not very often.

#128 NM: Most of the time you don't.

EP: Most often you don't.

NM: What was the most exciting experience in the oil patch for you?

EP: If by exciting you mean something that really got you excited in the sense of something that happened all of a sudden. . . I mean, the whole experience was exciting and a lot of the things you get achieved are exciting but they take place over such a long time. But if you're talking about a thing that happened that was very exciting at the time, I would think back to the days we were doing Operation Beeline, the seismic survey along the Mackenzie River. We were in Aklavik. . . I'm trying to think of where it was, yes, it would have been Aklavik and our boats were all tied up on the river bank. I think we were loading fuel and I was wandering around the community visiting people. All our crew was down on the ship, I call it a ship, it was a boat. In any case, we were using dynamite in those days, it was before the new technologies where you don't need it and the barge was loaded with dynamite and we were fuelling up. All of a sudden there was the most loud explosion and a flash of fire in the air and huge plumes of smoke, it looked like a mini atomic bomb to me and I can still feel the felling just running right from the top of my head to my feet of. . .

NM: What happened?

EP: . . . absolute cold, I mean I just was frozen. A terrible feeling. Because I looked over to the site and it was precisely where we were fuelling up. Now I couldn't see the boats and so on for buildings in the area but I just knew that. . . you know I had 10 men working out there, that our dynamite had gone up. I get chills even talking about it. It turned out, I hasten to give you the answer, that one of the fuel storage tanks blew up or went on fire and exploded, in a little tank farm of Imperial's there at Aklavik. I'm not sure I said Aklavik before, it was Aklavik not Inuvik. And it was on fire. I of course, raced over there and our boats were all right beside it but were fine. We just got them out of there in a great rush.

NM: So nobody was hurt?

EP: Nobody was hurt. I'm not exactly sure, in the tank farm, I don't think anybody was hurt there but what a fire. And of course, the fire fighting equipment and apparatus in Aklavik in 1959 was nothing to be screamed at. I noticed incidentally today on the radio, that today's the 25th anniversary of the founding of Inuvik. And this would have been precisely 25 years ago, just as Inuvik was being started. We were over at Aklavik because Inuvik wasn't going at that time. But that I guess is the most exciting. . .

#171 NM: And frightening too.

EP: And frightening yes, I don't know if exciting is the right word. It's a thing that I still remember very clearly.

NM: So who were the most influential persons in your career?

EP: It's pretty hard to name one but I've sure been influenced all the way along by various people. I can identify I think along the way. . . the first person I would identify would be Mr. McGuire. Mr. McGuire was my chemistry teacher in grade 11 and 12 and the influence he had on me was to throw me out of his class because I was not paying too much attention and talking and smarting off and he threw me out. Not only out of the

classroom but out of his class and said. . .

NM: For good then?

EP: For the remainder of that term. In which case I would have of course, lost my chemistry and my whole curriculum would have just gone down the drain. It would cost me another year at high school. I approached him later and tried to reason with him and he said, no, if you're not interested stay out, I'm too busy to put up with you. The reason I say he was influential because up till that time I really didn't care or give a damn where I was going. I put in the time and I got the marks, I could pass any exams that he gave me and I just learned enough to do that. Suddenly I realized that this guy meant business. I eventually talked him into coming into class and the thing that really changed was I said to myself, I'll show him. I had an 85 or a 90 in that class. Which is the only mark I ever got in that range. But I just wanted to show him who he was dealing with. And it ended up as a great friendship when it was all over and he resented giving me that mark but he had to. There's one big influence. And of course, that turned me into the area of science altogether and it was then that I decided, gee, if I can do that what else can I do. And so it turned me in the direction of a career, which is pretty lucky because a lot of young people today, I guess they don't have a Mr. McGuire to make them make a decision.

#204 NM: Maybe we need some Mr. McGuire's.

EP: Yes, I think we need more Mr. McGuire's. But I guess I'd still like to dwell at high school level because this is where it all happened as far as I was concerned. Another person is Irene Anderson, I'm not sure if her first name is Irene, Miss Anderson, Ethel, Ethel Anderson. And I was depressed just the other day to receive a note that she had just died. She was the first female graduate of the University of Alberta in Edmonton, had come up from Minnesota or North Dakota. In any case, I can remember here, almost on a daily basis, for the simple reason that I do a lot of report writing. I'm editing and writing reports all the time, ad nauseam. I find so many errors in so many people's work and I sit there and correct them and I often ask myself, how come I know how to correct it. And the answer is, Miss Anderson, and I think I goofed off in her class too and she brought me right up to the front, and I remember sitting right at the front and she's standing right beside me and just would never relax on me, she was just after me all the time. And the net result is that I remember words like lugubrious prognostication that came out of some of her work and how I had to explain what it meant. She was on my back all the time. And the whole mechanical method of writing, she just drummed into us and I guess myself particularly to the point where never a day or a week goes by that I don't thank Miss Anderson for taking that attitude. So those are two things that really got me going and I suppose one in the arts and one in the science when you think about it. But within my career the person who stands out is Bud Coutt. It was at that age of 30, I was age 30 or 31 when I went to work with Bud. I'd been through some hard knocks and disappointments but I was willing to try again, get out into the free enterprise system. Bud's a real free enterpriser. But I learned so much from him. Daily, hourly, particularly in the financial area. He had a great influence on me, not only in giving me thoughts and ideas and helping me think things out, I tended to just take the first answer that came to

my mind and Bud is not that way. Bud takes the last thought that comes to his mind and at times, in fact we used to call them Coutteramas, or Couttathons, these were when you would sit down with Bud and talk a problem out. Bud was never satisfied with a solution and went on, at that time we thought much, much too long trying to find a solution. But he taught me to think and analyze and not make snap decisions. But above all, he changed my work habits, although I was and always have been, a hard worker, he really brought out everything you've got and a little bit more. He was so demanding about what could be done. But in a way that you brought it out and handed it right to him in the sense you were handing it to yourself.

#260 NM: What do you consider your highest achievements?

EP: I think surviving as an independent. That's kind of a general attitude but to be able to run your own business and survive, bring in enough money to pay all the bills and not take the comfort of working for somebody else. It's so much more lucrative and easy on you to work for somebody else really.

NM: Your freedom was very important.

EP: So yes. I traded off pension plans and security and prestige to be working for myself. And it's cost me, the day I quit working my income is zero. But if I'd stayed with some of my previous employers I could retire at 70% of my income for the rest of my life, that type of things. That's worth hundreds and hundreds of thousands of dollars. So it's kind of dumb thing to work for yourself unless you make a lot of money in the meantime.

NM: But you are your own master.

EP: Yes. Although I'd never worked for myself, I drive myself too hard. So I guess that's the biggest achievement but that's awful general. I think to be more specific the real achievement is to see my family coming along with those same views. My son is now independent and he had the opportunity to go and work for somebody else but he works for himself. Works twice as hard as he would if he worked for an oil company, doesn't make any more money, has no security. But he's got that same outlook that he can look after himself and not depend on somebody else. And I can see my daughter coming exactly the same way, she's graduating this year and wants to start her own business. I keep saying, get out and work for somebody else and she says, why, I can work for myself. So I give her all the reasons and she thinks like her dad I guess.

NM: You are a good example for them then. Looking back at your career, is there something that you would do differently?

EP: Yes, I guess there's quite a few things I would do differently although I guess you get the same answer elsewhere. I wouldn't want it to be done differently but I would have done it differently. In other words we value all the things that did actually happen. What would I have done differently. I wished I had gotten closer to the whole financial area earlier. I was too involved in the scientific aspects. For instance in the work that I did in the Arctic, I was motivated by doing some good geophysical work and finding out what the subsurface geology was about and all that. If I'd have thought about it a little bit more or had had more of a financial background at that time I wouldn't have been so interested in all those geophones and recording instruments, I would have been interested in the value

of the resources. And I would have done what many of my friends did right behind me, saw what I was doing and then filed on the lands and made a great deal of money. Some in particular, I can document who used our information, turned around and made tens and tens of millions of dollars. While we were happy to get a few thousand dollars for our services. So I guess that's what I should have done, not that I'm that hungry for money but it's nice to have it around in case you need it sometime, like when you retire. So I think that would be the major thing would have been to get closer to the financial aspects and the ownership aspects of the petroleum itself. I've never done that, in spite of all the involvements I've had, I've never had an equity in the petroleum itself.

NM: Thank you very much for this interview Dr. Pallister.