

PETER SUTCLIFFE

Date: 17 May 2011

Venue: Hermanus

Interviewer (Q): Lize-Marie van der Watt | History Department | Stellenbosch University

Respondent (A): Peter Sutcliffe | Geomagnetist | SANAE 10 | 1969

Q: Where did your interest in Antarctica come from? How did it happen that you went down for a year?

A: Well I think it goes back a long time. When I was a small kid I saw a presentation by someone, I think it had been on Alaska or something like that. The thing was... Maybe on Eskimos. And I thought "wow, that looks interesting, I want to go and be on the ice." And then when I was a student, we used to periodically invite speakers to talk to us, and one of the speakers spoke about, with someone that had been...

Q: Okay.

A: Someone that has been to SANAE 1 or 2, one of the early Antarctic expeditions, and gave a talk on Antarctica, and that is when I made up my mind, I am going to go.

Q: Okay. So what did you study?

A: Most of the posts that you...

Q: Yes?

A: In Antarctica you needed to have a degree first. So I first went to university and I did my B.Sc, major in Maths and Physics and then I spoke to one of the lecturers and I think it was decided or he suggested I should complete my Masters first.

Q: Yes.

A: So I did a Master's Degree in Physics at Pretoria University, both of my degrees were at Pretoria University, that is where I had to learn to speak Afrikaans.

Q: I was wondering, you speak a very good Afrikaans without an accent.

A: So, uhm... I then, *ja*, completed my Masters, and then I applied to go to Antarctica, and there were three physics posts in the expedition. What they call the geomagnetist.

Q: Mmm.

A: Which is associated with the magnetic observatory here in Hermanus. There was one to look after the ionosonde, we called him *die beeswagter*... Because of the ionosonde was called the beast, because it would do a sounding every 15 minutes and I think the sounding lasted, I don't know, maybe 20 or 30 seconds, but it disrupted all radio communications of everything for that time it was doing the sound, it just made a horrible noise on the radio. [Laughs] And everyone called this thing the beast.

A: And I can remember one day we were listening to a rugby test. South Africa was playing New Zealand.

Q: Oh wow.

A: And told him to go switch the beast off, so he switched the beast off for the rest of the rugby game.

Anyway. That was the ionosonde. And there was someone who did cosmic ray which was associated... *Ja*, the beast, the ionosonde was associated with Rhodes University and the cosmic ray with Potchefstroom.

Q: Mmm.

A: Which is now North West University.

- Q:** Mmm.
- A:** I don't know if you have spoken to anyone up there?
- Q:** *Ja*.
- A:** Harm Moraal is still there...
- Q:** Harm Moraal and Pieter Stoker.
- A:** Ja, well Harm Moraal was... I was in SANAE 10 and he was in SANAE 11. Okay he was the team master and I...
- Q:** And you were on which physics post then?
- A:** The geomagnetism associated with Hermanus Magnetic Observatory.
- Q:** Okay.
- A:** Yes I think it was all... There is our team up there, or the team that departed, the team that spent the year at the base. There were also four chaps that spent the time up in the mountain.
- Q:** The geologists?
- A:** Ja, they spent the whole year in the mountains.
- Q:** Also during winter?
- A:** Yes. It was the first time that the geologists stayed over winter in the mountains.
- Q:** Wow, staying in the mountain, just four people for a winter?
- A:** Ja.
- Q:** It sounds a bit hectic [laugh]
- A:** It probably was yes.
- Q:** Ja, so when did you guys see them again?
- A:** At the end of the year, well, *ja*... I did a trip up the mountains when, during my year in Antarctica, but they were further south because they set up a small base or camp.
- Q:** Mmm. Was it close to, where? To Grunehogna or...?
- A:** *Ja*, to Grunehogna.
- Q:** Grunehogna, or...?
- A:** No, Huldreslottet.
- Q:** Okay. So what did they stay in, in tents?
- A:** No, they had what they call a parka [...?] hut, it was... I suppose it must have been about I don't know, about 10 m wide and 20-25 m long? It was quite a big... I think it was something that was imported from Canada.
- Q:** Okay.
- A:** And that was like their accommodation during the proper winter but as soon as the summer started coming on and the spring coming on then they would do expeditions in other mountains in tents. I visited that base, but they were all the way, collecting rocks.
- Q:** Can you repeat the name of the place they were?
- A:** H-U-L-D... I think it was... Slottet... All the names of the mountains there are all from Norwegian or Swedish because in, in the 1950's there was an expedition they called the NBS, Norwegian-British-Swedish expedition, and that part of Antarctica, Queen Maud Land it is, because that was it, Queen Maud was a Norwegian queen and it was named after her...
- Q:** Mmm.
- A:** Because of Norway claimed that part of Antarctica and that expedition they named all the mountains and mapped it and we had some maps that they drew up to use...
- Q:** Oh okay, so it is part of [...?] range?
- A:** Yes.

- Q:** Okay. And, did you perhaps... Anyone of the geologists find anything that the NV's left behind?
- A:** I know we found some sleds, we used to use sleds that they had used and they lasted far better, the new sleds we took...
- Q:** [laugh]
- A:** [laugh] I can remember when they sent some new sleds down. That didn't even last the length of the takeover.
- Q:** Oh wow.
- A:** It's because they're trying to make them too rigid. Those sleds, like a dog sled was made of very thin wood, bendable wood.
- Q:** Mmm.
- A:** And lashed together with a leather *riempie*. And so it was plied...
- V:** Applicable, *ja*.
- A:** Because of the snow.
- Q:** In the length of the sled?
- A:** *Ja*, and it just followed the shape out of the snow.
- Q:** Okay.
- A:** They didn't break.
- Q:** That's cool, and the dogs? Did you bring down any dogs or take back any dogs?
- A:** We took some back because we had, I think, 24 dogs down there. That was one of my jobs while I was there, was also to feed the dogs.
- Q:** And what did you feed them with?
- A:** Uhm, well we took whale meat from here, it was all pre-packaged, and when we arrived there, some of the people also went and shot seals as well.
- Q:** Mmm.
- A:** And the seals were just put in a pile, heap somewhere. I mean of course they all freeze.
- V:** *Ja*.
- A:** And we, we had a chain saw to cut them.
- A:** I mean it is like cutting a log of wood.
- Q:** *Ja-ja*. I can imagine if it freezes it must be hard.
- A:** We just cut slices of seal.
- Q:** And ...
- A:** And so the dogs were fed every second day a good chunk of either seal meat or whale meat.
- Q:** And uhm, the animals would just eat everything, and then look at you looking for more?
- A:** Ah well, some of them would eat their food fairly quickly and some, I remember Kero, he would sometimes two days later still have some of his food left, he would just nibble at it and eat a little bit. All the dogs were tied to, each one was tied to a pole. It was probably one of the slides... There was a MET-tower and there will be a picture taken from the MET-tower of the dog area, I think it was 3 poles by 8 poles for the 24 dogs.
- Q:** Mmm.
- A:** And they probably had a 2 m length chain. And you could see the circle around the poles how the dogs run in circles, you know as that was the limit of...
- Q:** *Ja*.
- A:** And the poles were distanced just so that the two dogs couldn't get at each other. Because they were very vicious towards each other.
- Q:** I understand, but why would that be? Just very competitive?

A: Well they, they are almost more like a wolf than a dog.

Q: Mmm.

A: I mean they're almost like, to some extent like a wild animal, yet towards humans they were very nice...

Q: Mmm.

A: Friendly.

Q: Did you have a favourite?

A: I don't know, maybe. I think I liked Kero. Who was a black Husky.

Q: Kera?

A: Kero, K-E-R-O, was his name.

Q: Kero.

A: I don't know how... He had that name when we arrived there.

Q: That's so nice, a black husky.

A: Most of them were, you know the colour of an Alsatian.

Q: Yes.

A: You know, that sort of lightish brown colour. Some are lighter and some are a little bit darker. Some had a black spot here and there.

Q: And did you have puppies?

A: *Ja*, the dogs had puppies, twice when we were there. I remember the one husky, Elsa, it was, I wonder if that was a Midwinter's Day, I think.

Q: Wow.

A: 21st of June, I think... You can look in my diary, the 21st of June, I think it was Midwinter's Day. Elsa... Normally we knew if the huskies, the dogs were expecting and we'd bring them into the base, and there was a bit called the dog tunnel, the dog lab, and the dogs could be there with their puppies. Somehow the doctor didn't know, no one knew that Elsa was expecting puppies and I went out, and as soon as you go out all the dogs jump up and get excited. You know like when you arrive home and watch your dog jumps and jumps and carries on? They all do that and Elsa stayed lying down and I thought "oh, there's something wrong with this dog." I went up to her and she was lying on her side you know with this part of the dog's leg and it had its tail and its head around like that, and I looked in there and there were 2 puppies.

Q: *Ag* sweet.

A: Anyway, I called the doctor straight away and he took her down into the base and they only just been born, but she... And then we had her down in the dog lab, another 2 puppies were born. So she had 4 puppies, but 2 were born out there and 2 down in the lab.

V: How did you get her down, did you have to carry her? Down the ladder?

A: We had a net sort of a thing that we used to lower supplies and we put her in the net.

Q: Oh okay.

A: Because it was a vertical shaft, I don't know, about 12 metres or something...

Q: *Ja* [laughs]. It's not like you could throw her down and someone could catch her.

A: But it was so amazing that she had these... The temperature must have been -30 or -40.

Q: Midwinter. *Ja*, I can imagine.

A: But she had the 2 puppies lying on her leg with the other leg covering them, and her tail and nose around, so that it was completely protected and kept warm.

Q: That must have been pure instinct, I mean...

A: *Ja*.

Q: ...Wow. Uh, the... Then did you give the puppies names?

A: Yes they all had names.

Q: How did you decide on that?

A: I don't know, like anyone would...

V: Okay.

A: But I remember one was, one was Charlie Brown. Oh, because maybe he was a brownish colour... Or Icon? [laugh] My memory isn't... It will all be in the diary.

Q: Why did the, you, did you decide to take care of the dogs or were you told that back in South Africa?

A: No, no... I didn't look after them but someone had to feed the dogs. Generally you'd look for a volunteer. And, uhm, Pieter König he fed them for the first 6 months and then at some stage he said no he's had enough of this, he would like to be relieved of this responsibility, so I then volunteered.

Q: Okay.

A: Look, you basically needed a volunteer to do it because I think... You didn't want someone that had been instructed and told to do this.

Q: Yes. The Geologists, how did they go into the field, did they use the vehicles?

A: Uhm, I think the team before our team was the last team to actually use dogs for doing their work. Our team only used motorised transport.

Q: Oh.

A: And that's why all the dogs were left at the base when the Geologists were in the mountains. I don't know how... A number of years after I was there the dogs were totally withdrawn from Antarctica and there's no dogs anymore.

Q: Yes.

A: Because I think it is because... Some teams liked having dogs. Because there were 2... Schalk Engelbrecht, one of the chaps in the team and myself on a Sunday, just to make Sunday feel different.

Q: Mmm.

A: We were offered like after winter to take a dog team, we would have 11 dogs, we got 5 pairs and a leading dog and fix them onto the dog sled and we would go down to the coast. Because the base was on the ice shelf.

Q: On the ice shelf, *ja*.

A: We were about 10 km from the closest edge of the ice shelf and that we used to call the coast. So we would go down to the coast for the day as a dog team and just spend some time there, take some photos and then come back and we then get into the dark room, develop our slides, no digital cameras then. [laugh] It was quite a process developing the slides because the temperatures had to be well regulated and later that evening we would have a slide show of the day's activities.

Q: Oh wonderful. And the dogs probably enjoyed getting out.

A: Oh absolutely. The dogs that got left because of snow and refusing... The one that got left behind were really upset.

Q: *Ja*.

A: And you know when you started pulling the sled out... You put... Because the way it worked, there were these chasers, there is an aluminium pole, with a hook like that and 2 short little chains and you'd have 2 dogs and another aluminium pole and then 2 dogs, and another aluminium pole and two dogs...

Q: Aha.

A: ...And then you had 1 chain coming out for the leader dog. And so when you start in staying, the dogs you put a peg in at the back of the sled and a peg into the ice at the front to help keep it all steady and you take the dog, because as soon as you put a dog on his chain, it is just jumping, it just wants to go.

- Q:** *Ja.*
- A:** And then we put them all in span and the ones that are on their poles are going absolutely mad.
- Q:** Ag shame, they must have thought all our friends can go...
- A:** It is so similar to, you have a dog, I have 2 dogs at home now and I take the one for a walk and the other one goes mad. So I can't take 2 at the same time. The other one jumps and they get excited.
- Q:** Mmm.
- A:** Those huskies were the same... This was like me going for a walk and...
- Q:** How many leader dogs did you have?
- A:** Well, we really had one that we mostly we used. One day, she was... What was her name? I forgot what her name was... Anyway, she misbehaved one day so we used a different dog as the leader dog and she was very jealous about that and we put her back as leader dog and she led really well.
- Q:** Wow (laughing). She learned her lesson... Now, I'm going to back track a bit...
- A:** *Ja*, because we were starting at the beginning.
- Q:** At the beginning yes. Oh that doesn't matter. When you applied for the job, you got your salary from the Department of Transport?
- A:** Yes.
- Q:** And did you go down specifically just to collect data or did you already have a specific PhD in mind?
- A:** No, I didn't have a PhD in mind, because I've done my Master's, the topic was sort of in Solid-state Physics.
- Q:** Mmm.
- A:** I went to Antarctica, not because I was interested in this field of science, I went... I took the job as a means to get into Antarctica.
- Q:** Into Antarctica, okay.
- A:** That was my objective.
- Q:** And team training?
- A:** Well, I came, I think I started here at the beginning of August in 1968 and then I was trained for the job I had to do, which was recording the magnetic field. We had instruments that you put a piece of photographic paper on a drum and you recorded the field for 24 hours and then every day I had to go and change that, and I had to do various observations and I had also operated the all sight camera which is a camera that during the winter when there is Aurora, photographed the whole sky. Have you seen pictures of Aurora?
- Q:** Yes.
- A:** Okay and it photographed the whole sky – I think every minute or so. And, so, those were the specific jobs. So, I came here for training. Then in about November of that year the whole team met together in Pretoria and we had team training up there. I think we had a few days of a cooking course.
- Q:** And then you see who you'll trust in a kitchen.
- A:** [Laugh] Well, we all had to take turns to cook when we were in Antarctica. I remember the one lady there, she really was finicky because... I like cooking, even now I do a lot of cooking but I just don't measure precisely and she was showing us how to bake a cake and take your teaspoon full of baking powder and you put the teaspoon in and you scrape it off.
- And that's how much baking powder... And *ja*, when I was baking a cake I just couldn't find a teaspoon so I took a dessert spoon and I put some baking powder, and that's looking about right ... And this lady said: What are you doing? And I said I'm baking a cake. That's not how you measure!!
- Q:** [Laugh] Did you bake a cake over there?

A: I used to bake the bread once I got down there.

Q: Mmm.

A: And I will never forget during the takeover period, the radio operator for the previous team always used to bake their bread, and the bread went into, down to Antarctica in you know, we had these little wooden boxes or...

Q: Koskassies, *ja*.

A: And the flour was in two of these tins, four gallon sort of paraffin tins.

Q: Mmm.

A: That's what the flour was in. Anyway, so during the takeover I decided I am going to bake my first bread. So I take the recipe that they had given us and it says 35 cups of flour, and I thought this is [...]. And the radio operator walks in and he says, "What are you doing?" And I said "I'm going to bake bread", he said "no, that's not how much flour you use." He takes the small paraffin tin over a big basin like this and turns it over and puts the whole tin into that and said that is how much flour you use.

[laugh] And now I don't know how much yeast he used, how much salt, how much of this ...

Q: *Ja*.

A: Anyway, I learnt and afterwards, that's how I baked it, I used a whole tin... I just emptied the tin of flour and a little tin...

Q: How many breads are that?

A: ...a whole tin of granular yeast and a handful of salt and a bit of fat and... Normally, I think that made about two dozen loaves of bread and then I would always make some buns and then we would have hamburgers for one of our lunches, you know I made a whole lot of nice big buns.

A: But it's amazing our oven couldn't hold all of it, I think I had to bake it in maybe about two or three batches.

Q: But it is still ...

A: *Ja* I think it would take about eight or ten.

Q: Mmm.

A: But it is amazing, when I baked bread and the bread came out of the oven I tell you that first pan was hardly out and that loaf was sliced already.

Q: Sliced already.

A: Everyone loves fresh bread hey.

Q: *Ja*, that smell!

A: *Ja*, I mean within 5 minutes and 2 loaves were finished and then after that the rest would last, I think it lasted 2 or 3 days and then it was ready again.

Q: To bake some bread again. So you must have had tins and tins and tins of flour.

A: Oh yes, you had to have.

Q: And uhm, when you arrived for the takeover, I'm just thinking about it, where did you all sleep?

A: Uhm.

Q: Did you share a cabin? Did you share a room?

A: *Ja*, because we were still in the base they called SANAE I, you know the present base, this nice big fancy building, SANAE IV. I mean it's like a 4/5 star. [Laughter] I mean we were really in a squatter camp compared to the new base. If the team members of today had to see where we lived... They wouldn't believe it. Honestly, you could think it looked like Khayelitsha or something.

Q: *Ja*.

A: Because when they built, they built wooden buildings and then they joined them with an ice passage. Then there were, house... My bedroom, we each had a little cabin. Well, there was

a bunk.

Q: Hmm.

A: There, and a top bunk and there was a little cupboard It was a... The room was the length of a bed plus the width of a cupboard. And that way next to my bed was a small desk about that size. That's all there was in the room.

Q: Wow.

A: So during the takeover I would go into the room with the Geomagnetist of the previous expedition. You see, normally there was only 1 person per room. But during the takeover I would share the room with the Geomagnetist.

Q: It must get very cramped.

A: And *ja*, so he was on the one bunk and I would sleep on the other bunk.

Q: That must be very cramped.

A: Yes. But the end of our year, the room, I decided I'm not sharing my room with anyone again, so there were 3 of us we built an igloo.

Q: [Laugh] Are you serious?

A: [laugh]And we slept in the igloo during the, outside during the takeover.

Q: Wonderful! That must have been quite adventurous as well? Was that the only igloo you built? Or did you build this ...

A: No it was only this one that we built.

Q: Oh okay.

A: Well, we... To do that, we had a big saw. It was a tenant saw, for cutting wood, and you just take it and push it into the ice and you will need fairly firm snow but it mustn't be ice because... Or too hard otherwise you can't cut it. You would like cut down, cut down, cut down. You had to dig a bit of a hole first and then you could put a spade under it and you get it out and we try and cut big bricks of...

Q: Mmm, snow, ice ...

A: Like that. And then we put them down in a circle and then built up and we had to shape them so that, you know, it could come up and they could all meet.

Q: Okay. Wonderful.

A: In the middle.

Q: And, I wonder... Sorry this is going to be very randomly here, the Geologists, did they have a medical doctor with them?

A: Uhm, no.

Q: No. Why not, did they just receive..?

A: *Ja*, I think because the geologists were a team of four. It was two Geologists a mechanic to keep the vehicles going and a Radio Technician Operator for communication. In fact, the Radio Operator Technician wasn't a formally trained radio operator. I think he was actually an Insurance Salesman, but he was a radio ham.

Q: Okay.

A: Normally a radio hand does a better job than a professional...

Q: Than a radio operator [laugh]. That's true.

A: [Laugh] So he was their Radio Operator. So that's all he could ... But I think they were given a fairly intensive first aid course before then.

Q: Probably *ja*. And *Ja* when you went down, back to South Africa now, as a team you went to Cape Town then and got on the ship in Cape Town?

A: When we went down?

Q: *Ja*.

A: Yes. *Ja* after team training. The team training was in Pretoria.

Q: Pretoria.

A: I don't know where it is nowadays, but ours was in Pretoria and I think we had, there was 3 days of cooking and a bit of fire fighting and there was some first aid. We did some adventure stuff – abseiling, climbing up cliffs and things, I think it was for three weeks. And then I think we had a week's leave. Or something so we could go back to our families before we went to Antarctica and then we all met in Cape Town.

Q: And how did your family feel about the fact that you were going to Antarctica?

A: Oh it was just my mother and sister and my mother thought I was totally mad but...

Q: And your sister?

A: No, I don't think... I don't know, I can't really remember what she thought.

Q: Okay, so they didn't try and stop you?

A: No-no.

Q: Okay. And the... Okay, so the RSA was still under the master of McNish?

A: Yes.

Q: So he was still the master

A: *Ja*.

Q: Can you remember something about McNish?

A: Uhm, he was a fairly sort of a disciplinarian type of person and I can remember that with the evening meal he insisted that we wear a tie to dinner. And we thought rubbish, this is nonsense. I remember some of us, as a form of protest, I had a T-shirt on and this was a form of protest and I didn't change into a shirt with a collar. I just put my tie on.

Q: [laugh]

A: [laugh] And then with the T-shirt and after that we were banned from sitting at the captain's table.

Q: [Laugh] You...

A: But then, if you were not at the captain's table you didn't have to have a tie.

Q: *Ja*.

A: But the captain's table was reserved for any VIP's on the ship and the team members.

Q: Did they serve special food on the captain's table?

A: No, I think it was the same as everyone else but... *Ja*, but I don't know if I remember much else. I think he was a fairly disciplined guy.

Q: And Herr Funk?

A: *Ja*, I remember old Herr Funk, he was a funny guy. He would shout and shout at everyone and instructions, *ja*, he was a character.

Q: Did he tell you stories about the time in Germany?

A: I think... I don't remember that really.

Q: Who was your team leader?

A: Henry Fulton.

Q: Henry Fulton.

V: *Ja*. And... Okay so you did you go past Bouvet?

A: Have I seen Bouvet? No, I haven't. We must have gone, I don't know if we actually saw it. I think when we went past Bouvet the visibility was really bad.

Q: And the Ice pilot, did you have an extra ice pilot or...?

A: No, I think Herr Funk did that job.

- Q:** [laugh]. And the Belgians. Were they with you on the ship?
- A:** *Ja*.
- Q:** So did you only meet them in Cape Town?
- A:** *Ja*.
- Q:** And how did they integrate with you? Did you speak Afrikaans or English?
- A:** *Ja* well, some of them were French-speaking and some were Flemish-speaking, but mostly we spoke in English.
- Q:** *Ja*.
- A:** I can remember a couple of evenings down at the base where we had a conversation. We'd speak Afrikaans and they'd speak Flemish and then we could communicate fairly well.
- Q:** Did they bring some Belgian beer with them?
- A:** I'm sure they did. I can't remember.
- Q:** And New Year? You had New Years on the ship?
- A:** No, we actually only left after the New Year. We were supposed to leave before and they were waiting for some or other equipment. I think it was engines or muskets or something to come from overseas that hadn't arrived and so... We only actually left after New Year.
- Q:** *Ja*. And, did your mom come to the station, *ag*, to the harbour?
- A:** Not to see us off, but they... My mother was there and my cousin. This cousin was almost like a brother to me and they came down to meet me when we arrived back but there weren't family when we left.
- Q:** *Ja*, because it also sounds to me if it was a bit of a waiting game.
- A:** Well I think, yes it was. We waited over a week. I think we came down when most of the team were round about Pretoria; we all came down by train together.
- Q:** And did you then spend... What did you do on the train, just...?
- A:** Well the train was just the trip down.
- Q:** Oh okay. So you didn't bond on the train or...?
- A:** Well I suppose, we chatted to each other. *Ja*, I think we became good friends, *ja*.
- Q:** *Ja*, on the train. Okay so, when you crossed the polar circle at that time, was there any kind of ceremony like there are nowadays?
- A:** I don't know if we actually knew when we crossed the polar circle. Because we got a bit lost.
- Q:** [laugh] Okay.
- A:** [laugh] This is navigation, no GPS. I mean today we know within a metre where you are. Those days they had a sextant so they could see the sun, or the stars, they could determine the position. But I think after the first... It took about 2 weeks to get down to Antarctica and I think after a week we were in overcast weather and for the last week there was no sun or star observation to get a good position. So they do what they call dead reckoning. They know in which direction the ship's going in, and more or less what speed the ship's going and from that you try and work out where you are. And we arrived in Antarctica well, and the first thing we noticed, everyone who had been there before, so there were far more ice bergs than normal. And anyway, we were trying to find the base. Now the way they recognised that piece, the continent, was what they called the Troll Tunga...
- Q:** Oh okay.
- A:** ...Which is the Norwegian word for ice tongue. So that, instead of the coast just being, you know, straight, that is where there is a glacier from the mountain. A glacier flows out and this ice tongue was about 100 kilometres long and at the beginning it was about 40 km with an average of 20 km wide and from pointing direct to pointing 100 km long.
- Q:** Oh.
- A:** And, because they didn't know exactly where they were, they we were sailing along the coast looking for this Troll Tunga and then they would know where they are, and they

couldn't find the Troll Tunga. And then one day the sun did appear and they got a proper positioning and I think we were in the middle of where the Troll Tunga should have been and they realised this whole ice tongue, a chunk of ice...

Q: *Ja.*

A: ... of a 100 km long and more than 20 km wide had broken off the ice shelf and broken up into pieces.

Q: *Jis.*

A: And that's why there were so many icebergs. Then once they got that position they realised the ...

Q: They must have been quite surprised, you know? We're actually in the middle of Troll Tunga [laugh].

A: *Ja*, so then we, then they knew where we were and we could....

Q: So that was when, so that was what 1969?

A: *Ja.* So if you say look at an Antarctic map drawn before 1969 you would see this big ice tongue on.

Q: *Ja.*

A: And if you look at the map after 1969 the coast with the ice shelf which is straight.

Q: But that must have been exciting to know that, or did you guys not really bother, I mean...?

A: Well it was nice to see all these icebergs and but...

Q: *Ja.*

A: But it was quite interesting.

Q: And what was the riding there like? I mean, what was your first impression of Antarctica?

A: It was fantastic. I can remember when we first, we were going on the ship and we saw the first sea ice you know...

Q: Mmm.

A: ...First frozen sea, and at first it's thin and it's almost like little almost looked like lilies on a pond, bits of ice, but then as you went further south it started getting thicker and then the ship had to start breaking its way. You know they go forwards and, it wasn't a proper ice breaker I would say, and it goes up onto the ice and they hope it breaks and if it doesn't break they'd go back and try again. And sometimes they'd get stuck and then they'd have to go and try and find another way.

Q: Did they actually....

A: And also today, you know, with navigation today you can get satellite pictures and they can look for... Because there are sections that are frozen and there is bits of water, open water, and they can look for bits of satellite pictures but we didn't have any of that sort of thing, so...

Q: But what was the impression? I mean...

A: No, it was... I can remember the first time that we'd see ice we stayed up all night, a whole lot of us hanging over the bow of the ship watching this.

Q: Mmm.

A: And that was very, quite exciting.

Q: Did you have time to get off the ship once you reached the sea ice and the ship got stuck?

A: No they didn't let the team members get off but I know one day we were quite stuck and Herr Funk and a couple of assistants, or I think there was an ornithologist or something that had come down on the ship and they went off to go and hunt some seals. To take for dog food. And that is what was done the one day while we were stuck.

Q: [laugh] So did you have guns on base as well?

A: I think there were a couple of guns on the base, *ja*. I know there was a gun cupboard

because you needed to have a key.

Q: Did you have...?

A: So the disgruntled member...

Q: Did you all celebrate any national holidays while on Antarctica? Raise the flag or...?

A: I think on... I think on Republic day I think we were supposed to do something and the big... I don't know, but otherwise, I don't think we were really bothered about national holidays. Mid-winter was the biggest celebration of the year when you have an on-going party for...

Q: [laugh]

A: [laugh] Like a couple of days and then Christmas and I suppose New Year when, *ja*...

Q: And, uhm...

A: Then we had a special meal or something.

Q: And your birthdays? Did you bring gifts down?

A: Some people did, I took a gift down, and I had ash trays with SANAE 10 engraved on them before I went down. I met with a team member of a previous team and he sort of recommended to take a birthday present and that. Some of the other guys didn't but most of them had birthday gifts.

Q: So all of them at least had an ash tray. [laugh]

A: [laugh] *Ja*.

Q: And did you bring extra whiskey or brandy on the ship or did you have to make do with...

A: I think we ...

Q: With your rations?

A: ... Largely made do with what we were given. There were tons of awful brandy which no-one was interested in drinking and we had beer. I mean most of the guys were beer drinkers. And I think there was champagne, a couple of bottles of champagne for each birthday.

Q: And wine?

A: Wine? What did you say?

Q: Did you have wine?

A: I don't think there was any wine.

Q: Why not?

A: No idea [laughs]. No, we didn't get looked after.

Q: [laugh]

A: Anyway, the one chap, Peter Kirnich. He found a recipe for Advocaat. He decided he was going to do something with this awful brandy.

Q: *Ja*.

A: And the Advocaat required egg yolks, so he took... he made first a little bit and then a lot of it. And he took all these egg yolks and the brandy and he made this Advocaat and then he had to find out what to do with the egg whites. Anyway, someone said there was a recipe for meringue so he would make that...

Q: [laugh]

A: ...With the egg whites. Our food selection was very little variety because someone in the Department of Transport had the responsibility to extend the food supply but... Oh the food that was our supply food had been down there a year already.

Q: Mmm.

A: The food that went with us was the SANAE XI's food. The idea of doing that is that you could have a 2-year food supply so if the sea were to freeze up, that bad that the ship couldn't get there to pick you up, you won't be able to starve, [laugh]. Giving the each guy a slow death.

- Q:** [laugh]
- A:** And, uh, our team leader did the food selection for the team coming after us. And for example when it comes to jam, we had peach jam that was it.
- Q:** Peach jam?
- A:** The only jam was peach jam whereas our leader for the team after us must have selected 10 or 12 different jams, you know, apricot, raspberry this and that.
- Q:** *Ja, ja.*
- A:** I mean, how many different kinds of jam can you get?
- Q:** Peach jam!
- A:** Vegetables in tins. Well, we had diced potatoes in tiny tins. There were tinned tomatoes, although we didn't use that as a vegetable, and there was Brussels sprouts.
- Q:** [Laugh].
- A:** When I came back from Antarctica I did not ever want to see a Brussels sprout again. Because as I say, whoever did the purchasing for us it was just so easy, you need, I know you need a thousand tins of vegetables so ours was a thousand tins of Brussels sprouts.
- Q:** Oh that's unimaginable!
- A:** Instead of, you know, 50 of this, 50 of that, 50 of that, 50 of that. At one stage our doctor who was a certified quartermaster went to open some of the food for the following team and he said, I think this was in about November towards the end of the year, that now we really need some variety, this was rubbish.
- Q:** So when the ship left, and you were left behind, did you get to see the ship off?
- A:** Uhm, yes. Most of our team went down to the coast to see the ship off. That was the happiest day of the year, to see all these guys leave.
- Q:** *Ja.*
- A:** No because, up until, you know, the take... Because that base was really small. It was cramped, and as I was saying we were sharing a room.
- Q:** *Ja.*
- A:** Then there is all the other what we called them tourists [laugh].
- Q:** Yes, the people that go down for the...
- A:** People that are there for some or other reason some and some had very little to do others had more to do, and like there's the Public works Department guy who had come down to repair the buildings and that sort of thing and I suppose they had a... They mostly worked pretty hard, they had a job to do.
- Q:** Mmm.
- A:** But the place was full of people. And during that takeover per.... I mean our team was a total of 16 members which were 4 in the mountains say after.
- Q:** Mmm.
- A:** And once they left, that only left 12 of us in the base. But I think during the takeover we must have been about 40 or 50 people at the base.
- Q:** Wow.
- A:** But there was an army chef that was there during the takeover so the army chef cooked. I think his cooking wasn't that great either.
- Q:** [laugh]
- A:** So, [laugh], so once all the tourists left, and the army chef left we could start enjoying ourselves. It was a great thing, I think one or two of our team members stayed at the base and the radio operator had to be there but the rest of us went down to see the ship off and that was a great sight.
- Q:** What routine did you follow? I mean did you do a 8 – 5 work day?

- A:** It varied from team member to team member. At the guy that had to work most regular was the radio operator because he had radio schedules...
- Q:** *Ja.*
- A:** ... at set times, so he had to do that. I tried to work a fairly regular work day, you know every morning do my observations... *Ja*, there were certain tasks that have to be done every day more or less at the same time so I would try and have a fairly regular work time. When the winter came with the All Sky Camera I had to often work through the night if it was clear and there was an Aurora and then I would do a bit of sleeping during the day.
- Q:** Okay, and did you... Can you remember the first aurora that you got?
- A:** Well, the first ones weren't dramatic, it was just a faint thing on the horizon but I can remember one, we had one massive disturbance.
- Q:** Mmm.
- A:** The Aurora was right overhead hey, really dramatic.
- Q:** Did you call everyone up?
- A:** *Ja*, absolutely. Everyone had cameras and tried to take photos and that was really an experience. It was... If you've not seen an aurora, you really have to go to a country to see that. It's really a sight to see, it's really hard to describe it, it is like these really ban's activity, shooting down, they are all like big curtains and things. Because the bottom edge of the aurora is about 100 km above the earth's surface and it starts at about 1 000 km. You may not have that sort of a scale of size but it looks just like you know if you have a curtain or something like that, you know you've got that sort of motion right along these vertical rays.
- Q:** Wow. And the All Sky Camera, I suppose that was outside the base?
- A:** Yes, in a separate hut outside the base.
- Q:** Was that hut heated or did you just have to put on a warm coat?
- A:** It was heated a little bit but not really, no, you couldn't really heat the place.
- Q:** Did you sometime have to sleep there? In the winter?
- A:** There was a bunk the previous expedition that we had to sleep in but it was too cold, I would rather go back into the base and come out and...
- Q:** So how did you know down in the base that there is an Aurora happening up there? Or did you have an ionosphere metre or something?
- A:** Well you could look at the magnetic record if there is magnetic activity then there is also going to be an Aurora. The met people, the metkassies we called them, there were 3 of them and they had to go out.
- Q:** So you already spoke about metkassies? In 1969?
- A:** *Ja.* And they would go out I think once an hour to take the measurements and if there was an Aurora they would come and tell me.
- Q:** Okay, and perhaps wake you up and they tell you there is an Aurora?
- A:** *Ja. Ja.*
- Q:** The doctor, what did he do?
- A:** The doctor probably had the least sort of formal duties to do but he was the quartermaster so, because for our cooking... How we worked, we each had a four day cooking turn.
- Q:** Mmm.
- A:** Breakfast, the cook never prepared, everyone did their own breakfast. Lunch it varied, but mostly the cook would prepare lunch but that was a small thing like that like that is when I baked the bread we always made buns and I would make hamburgers for lunch.
- Q:** For lunch.
- A:** And then the evening meal was the main meal of the day. And the cook was supposed to prepare at least a 3 course meal so there had to be some starter like soup then a main course of meat and vegetables and a sweet.

- Q:** Mmm.
- A:** And, at the beginning of each 4 day turn, Alphonse, he was our doctor he would put out the food supply into the pantry.
- Q:** The Brussels sprouts.
- A:** What's that?
- Q:** He would put out the Brussels sprouts for your 4 day cooking turn.
- A:** Well certain things, if you run short, if you run short of Brussels sprouts you were short but you won't be short of Brussels sprouts, but you could go [laughs]. But no, like the meat that he wanted you to use because he wanted to ensure that, uhm, for example everyone didn't cook like I remember Schalk, he made mince or he made bobotie one day and he used fillet steak to make bobotie and even though it was fillet steak. Wow we all shouted at him.
- Q:** [laugh]
- A:** [laugh], but he would for example put the meat out so that we would try and make sure that the different kinds of meat you know, lamb, or fillet steak or whatever would be, they all last through the year so that you didn't use one kind of meat first. Although we also asked people what they would like, you know? Different people are good at making different things. Look, by the middle of the year if you, you could sit down and have your meal, if you didn't know who was cooking and you've got your plate of food put in front of you, you knew who was the cook.
- Q:** Besides your bread, what was your speciality?
- A:** My word, I used to like making curry. Ah well, I think Barry was our main curry man.
- Q:** Mmm.
- A:** And I had a few recipes that my mother gave me and I took them down.
- Q:** Okay.
- A:** There was a lemon pudding that I liked very much that I used to make
- Q:** Was there someone on your team who could not cook at all?
- A:** Yes, a couple.
- Q:** Okay.
- A:** Oh, Phil, Phil Steyn, he would just take his piece of meat and either put it in a pot of boiling water and let it boil until it was soft or cooked or he would take a chunk of roast and shove it in the oven and it was burnt on the outside.
- Q:** [laugh]
- A:** And absolutely dried out, not bothering to give it any flavour or not.
- Q:** Is it...
- A:** Although he could make nice *sousboontjies*.
- Q:** Oh, nice *sousboontjies*.
- A:** [laugh]
- Q:** What language did you mostly speak to one another?
- A:** Uhm, well I spoke Afrikaans to the team members who were Afrikaans speaking and English to the ones who were English speaking.
- Q:** English speaking... Fair enough.
- A:** We had probably 50/50 or maybe a bit more Afrikaans speaking than English speaking.
- Q:** And how were you made aware that there was going to be a moon landing? When we spoke earlier. Okay sorry, when we spoke earlier you said...
- A:** Okay, well we kept up with the news. We had the daily newspaper and we would sometimes listen to news bulletins on the radio you know, either the evening news on the voice of America or the BBC, so... No, I think sometimes a week or so might go by that you didn't keep quite up to date with the news but I think we kept reasonably up to date. But I

think the moon landing was such a big thing.

Q: Big thing... *Ja*.

A: You couldn't not help knowing about it.

Q: Was it then special being in Antarctica? Well I suppose Antarctica is closer to the moon than it is to the rest of South Africa in some ways.

A: [laugh]

Q: [Laugh], and what else did you do for entertainment?

A: Uhm, what did we do for entertainment? Well I did a lot of photography. Schalk, and myself, we did, as I say, I took about in my year about 2000 slides and a lot of black and white photos and so I would often be in the dark room because you had to develop everything. And to develop a colour film I think the process itself took about an hour or so. Uhm, and the temperature had to be absolutely correct and I think there were 9 different chemicals that the film had to go through to get a better result. And then in the dark room we could also develop black and white films which was much easier. Then we had an enlarger so that we could make colour prints. And I know, one thing we had a, every team in those days attempted to have a mid-winter magazine and once again to produce this was quite a major thing. And, uhm, we had, we made it mostly photographically.

Q: Oh, okay.

A: So, we had to make a copy for each team member, so each page you know, like if there is text and some of the photos would be photographed and then enlarged in 12, no 16, I think we made copies for the guys in the mountains as well although we couldn't give it to them then.

Q: And so, mid-winter...

A: So on a mid-winter's day I know Schalk and I were involved in producing the mid-winter magazine, so we knew most of what was in it. Something that we did, we took a picture of every person in the team and made something of... like I can remember the 2 mechanics.

Q: Mmm.

A: We would assemble, like we took a picture of the diesel generator in the diesel shack and then out of an encyclopaedia we had their photograph, took a photograph of some monkeys, and then we took photos of the team members heads and we would have these two monkeys sitting on the diesel generator with each of the mechanic's face and the bottom said the grease monkey.

Q: [Laugh], that's so funny. You could be creative.

A: And the same we did with the metkassies. We took a, a met, one of these koskassies and then a picture of each, the face of each of the metkassies and like, Koos we called him, Johan van der Merwe, we called him Koos, he always had a big knife [?] on him, and so we had a picture of this knife around one koskassie with a belt. And Barry, ja a big hefty guy we called him Barry Brood because he could eat a lot of bread. [Laugh], you know and something like that. And so, that... And then people wrote other articles which we would put together in the magazine.

Q: Wonderful. Do you still have a copy of the magazine?

A: Oh that's what I didn't bring with me. I must have a copy somewhere at home.

Q: That would be wonderful to see.

A: I must have it somewhere. I will have to look for it.

Q: And, did you get messages from the other bases and from dignitaries.

A: I don't know if we got much from dignitaries, I suppose there was a message from the State President and his infantries [laugh]. And we got some messages from the other Antarctic bases.

Q: Did you ever get a message from Novo or from Novolazarevskaya?

A: Yes, I think we used to talk to... I think we had a daily radio interview scheduled with Novolazarevskaya to exchange weather information with them.

Q: Oh. Did you play chess with any of these?

A: Yes. I know we had a chess game against Halley, Halley Bay, the British base.

Q: Can you remember who won?

A: Oh I don't know if any of the games were ever finished.

Q: [laugh]

A: [Laugh]No, I think we won once. I can never remember it. No, we won the one game against the Halley, because the bet was for 10 cases of beer or something like that.

Q: Oh.

A: And we won the one game. So we said right, when are we getting our 10 cases of beer? Of course we didn't expect to get the beer.

Q: [laugh]

A: There was no ways we were getting that beer.

Q: *Ja*. No, no feeder slides or things like that.

A: *Ja*.

Q: What are the specific challenges of doing science or scientific work in Antarctica?

A: Wow, I think the challenges then are probably quite different to now. I can remember the cold temperatures of some of the equipment. I had some equipment from, built by Stellenbosch University's physics Department and these guys, they just didn't have an appreciation of how cold it gets in Antarctica. And *ja*, the equipment couldn't handle the temperatures and so you had it set up in an outside hut like the All Sky Camera as well, and would be too cold to operate properly.

Q: *Ja*.

A: I had one magnetometer there, a piece of old electronics with valves and things in it and it was very temperature sensitive. I did try and keep it in the hut. What I did eventually, I had 4 light bulbs and I switched it on and put it underneath this to act as a sort of a heater and if it got, when the temperature went up, I would unscrew the 1 light bulb so it would go off and on and this thing acted as a better thermostat than a thermometer. You see it went up and down because of the temperature and not because of the magnetic field and stuff.

Q: [laugh]

A: And I remember also seeing an Aurora and I'm in a blizzard and that drift snow *jagsneeu*, it will get through any little crack.

Q: *Ja-ja*.

A: I can remember after one of the worst blizzards we ever had, I went to the hut and I opened it and I just saw white. The whole hut was just full of drift snow and then you got to take this out and then all the electronics has got some ice...

Q: *Ja*.

A: ...and snow into it and it melts and it's all wet and... you have to dry...

Q: Yes and electronics don't like the weather...

A: And so really the weather conditions, those cold temperatures and the drift snow and the wind.

Q: Would you say that the fact that you spent a year and over wintered in Antarctica influenced the way you later managed science? In Antarctica when you started working in a different kind of position here?

A: I wonder. I think it maybe taught you, taught you you have to plan well for the sorts of things that can go wrong and... Then eventually I just had a good motto, I cannot win, Antarctica always wins. And once you realise that you stop getting frustrated.

Q: Mmm, I can imagine.

A: [Laugh]. It was... Otherwise, in the beginning I would get so cross when things did go wrong and it is so cold and then you say no, Antarctica always wins.

Q: *Ja.*

A: You calm down, and go along and this now has to be done and you just...

Q: *Ja.*

A: ... Do it.

Q: But at some stage, it says that they started to send down engineers, more than scientists?

A: *Ja*, yes, in our team all 3 of the physicists were physicists, whereas afterwards... Well, it started off, I think they started sending in electronics technician or an engineer to provide services for them and then eventually, because, I mean I did very little physics there, it was really maintaining, keeping the equipment running, trying to repair, electronic repairs, I wasn't a good electronics technician. I didn't know too much. you did a little bit of electronics but not really and I did very little physics, really. I mean okay I could and I read up in a text book and read up about it and I could, whereas an engineer might not understand the physics of the observations they're making. I think I had a better appreciation of what we were doing observations for and I did a lot of reading. And that's why, when I came back I was offered a permanent job here and I wanted to stay on and I did my PhD in a field of...

Q: Also in Pretoria or where did you do your PhD?

A: Well I worked here and it was through Potchefstroom University because Professor Stoker was actually my supervisor and Deon Kuhn, did he mention Deon Kuhn? He was my, he was, he had the observatory in charge of the Antarctic geomagnetic program...

Q: Hmm.

A: ...And he was my co-supervisor. But actually I chose a topic neither of them knew anything about.

Q: It often happens.

A: Oh my, I had very little advice and it was a really lonely environment.

Q: Was it related to the work you did in Antarctica?

A: Well, to some extent yes, *ja*. We had, uhm, you've got the magnetic storms we called there were called the magnetospheric sub-storms, and they occurred in the sea and my research was to do with what we call pi-2-pulsations which is a type of pulsation that indicates a sub-storm that started.

Q: Okay.

A: And I did research on that. So it was related to the Antarctic and I used data, magnetometer data from Antarctica and from Hermanus.

Q: Uhm, did some of the data you used come after you worked down there for the year? Or the persons that follow it up?

A: I can't remember what year's data because I think some of my studies were more of a statistical nature, so... *Ja*, but I think it was probably data from after I was there.

Q: We spoke about the weather. And what is a misperception or what do you call it... If people afterwards heard you were in Antarctica, what is the major question they ask you?

A: Well one big misconception was that we were at the South pole. People have no idea of the size of Antarctica.

Q: Mmm.

A: Until I got some statistics and I said, well Southern Africa, you take South Africa and Namibia together Antarctica is 7 times that size.

Q: [Laugh]. That's a good one. I think people can imagine that.

A: And our base was 2 000 km from the South pole.

Q: Wow, that's far.

A: Well.

Q: Polokwane is almost...

- A:** *Ja...* Yes. People just have, or you know *Ons was by die eiland by die Suidpool*. And that's, those were the words I heard when I came back.
- Q:** *Eiland by die Suidpool*. [laugh]
- A:** Oh, often. They thought of it as being a little island. I mean, I, I went to Marion island a couple of times and I didn't spend a year there, just to install some instruments, and that's just a small little island. I mean I don't even know what size Marion is but...
- Q:** It's very small, *ja*.
- A:** People had that idea, that's what Antarctica is.
- Q:** Hmm, *ja ja ja*.
- A:** And it's not. That was the biggest misconception when I came back, that people think that Antarctica is an island but not a massive big continent.
- Q:** During your year you lost a team member, how did that influence your team dynamics?
- A:** Uhm, I think... It is difficult to say. It, it, it quite shock me, because I was the last person with the chap that was killed. We were, there were 3 of us going down to the geologist's base because one of their muskegs, the engine blew up or burnt out so we were taking, you know we had a whole spare engine, you don't try and fix it, you put a new engine in. So we were taking the spare engine to the base, but I did some magnetic observations on route. So every now and again we would stop and do some observations and I was doing an observation on this mountain sledge field, and at that time it was cold and, Henry, he was our leader, he have been, it was his third time in Antarctica, the previous two times he was a mechanic, and now leader, but he was a qualified mechanic. I think he was in charge of transferring supplies and Gordon came down. Because when I was doing the observation I needed someone to write down...
- ... for me and Gordon wrote the stuff down and then when we were finished I said, right, I'll pack this up, and he said I'm just going to go and investigate and look around and I packed up the stuff and put it away and went looking for him and called him and I couldn't find him. And eventually there was... Next to all the mountains was a massive wind scoop...
- Q:** Mmm.
- A:** ...So if you look at it from a distance, that is the level of the ice, you know the flat contour, it seems a little bit like ice, rock that sticks out of the mountain. But then on the windward side there was this massive wind scoop. Deep, probably 2 or 3 times deeper than the height of the mountain sticking up out of it. Because the wind blows and...
- Q:** Mmm.
- A:** The same thing, we put a koskassie down and the blizzard came. Initially snow would start building up on the... If the wind is coming from this side because of the turbulence, no snow would fall this side and stayed clear. And you'll get a long piece of ice on the far side and only once the ice formed around it, the snow had built up level with it and then suddenly the wind scoop started filling up. And anyway, what Gordon had done, he'd gone looking down and there was just what we call blue ice, and just saw... He must have slipped and down and I looked down and then I saw a red strip off something large and I looked and realised that was Gordon lying at the bottom.
- Q:** Mmm.
- A:** And I suppose the distance was about 300 metres or something that he had fallen.
- Q:** Sjoe.
- A:** Anyway, I then went and called Henry and I said Gordon's fallen off the mountain and we went to the other side of the wind scoop and we then had ropes with us and I then drove the muskeg and Henry went over the edge with the rope and went down. Anyway, I could see his reaction when he got to Gordon that Gordon was dead. Anyway, uhm...
- Q:** What was his reaction?
- A:** No, I don't know, I just saw the way he just ... I don't know.
- Q:** *Ja*.
- A:** I don't know, this was something like that. I realised... But anyway, we took his body back to

the base and the doctor did an autopsy and he said when he fell, he broke his neck.

Q: Mmm.

A: So he went down and his arms were all broken, because he said he obviously he tried to put his arms out to break his fall.

Q: Mmm.

A: But anyway, his arms were broken, his neck was broken, he was killed instantly.

Q: *Ja*. Instantly.

A: And so we brought his body up and then we were on the way into the mountains, to the...

Q: Mmm.

A: ... base. And so we put his body in his sleeping bag and because Henry said if we don't cover it up the skua's would get hold of it.

Q: Mmm.

A: And so we covered it up and put some rocks and snow over his body and left him there and went on into the mountains and... *Ja*, it was a shock but you have to go on.

Q: *Ja, ja, ja*.

A: I mean it sounds ...

Q: You can't phone home and ask someone to come fetch you...

A: As I say, one just has to go on but it made one felt a little bit subdued by the whole of this.

Q: Hmm. How did you let the Department of Transport know?

A: Well Henry as leader of the expedition had to let them know. I remember we had a radio schedule with the base and we told them then and whoever then, well I think the radio operator then let them know.

Q: Did you go pick up the body afterwards?

A: On the way back, because we were on our way into the mountains. Also we had then, Henry put the new engine into the muskeg that they needed and we got rid of the old engine and on our way back to the base we picked the body up and took it back to the main base and then the doctor did the autopsy.

Q: Autopsy. What did you do with the body then?

A: It was kept in the, I think it was the dog lab. You know there was a number of rooms there that, uhm, they could, it was just like a deep freeze and the ambient temperature in the dog lab was like -12 or something like that. Because it was below the ice surface it does not vary in the extent of the outside temperatures, but it stays cold. Like all our year's meat supply was also just thrown at the end of one of these ice passages on top of the ice and just lay there and got frosted. Whereas now in the base they have a heated building with deep freezes.

Q: [Laugh]But okay so, well how long was his body then kept there?

A: His body was kept there until the ship came to pick us up.

Q: But that was quite a number of months afterwards then?

A: *Ja*, and so his body was kept in...

Q: So did you have like a debriefing meeting or was it something you didn't talk about?

A: I don't know, but I don't think we spoke about it too much.

Q: Was he a well-loved team member?

A: *Ja*, no, he was a very good...

Q: What did he do?

A: He was with, well he was also a mechanic.

Q: Okay.

- A:** Quite a wild guy, actually, and he got in, he actually I think he actually got engaged while we were down in Antarctica. His girlfriend's name was Athene and he called, Gordon, because he called one of his new muskegs Athene, after her.
- Q:** Okay, his girlfriend. And, well I suppose the Department of Transport then let his mom know.
- A:** I wrote, well I knew Athene, I mean, so I wrote her quite a long telex you know. I wrote it and gave it to the radio operator to be sent, but I wrote her quite a long letter saying, because I was the last person with Gordon...
- Q:** Mmm.
- A:** Because I wanted to give her the story.
- Q:** And, uhm...
- A:** Maybe something more or less what I've told you now, something like that.
- Q:** And the Department [...] later sent her a more than 200 words letter. They made an exception.
- A:** *Ja*, probably. I can't remember how long it was.
- Q:** Okay.
- A:** And then I know they used the same telex to send to his parents.
- Q:** Oh.
- A:** He was actually Scottish and his parents were in Scotland and then they came, to walk at the end of the year because his funeral was, he lived in East London. His girlfriend was in East London. I also went to the funeral.
- Q:** *Ja*.
- A:** When we arrived back and the body was taken to East London and I met with Athene and his mother I think, died, was it a day or 2 either before or after the funeral.
- Q:** Hmmm.
- A:** She was not well and I think it was also a massive shock.
- Q:** *Ja*, I can imagine. And...
- A:** So I didn't ever meet his mother but I met his father. You know, with just Henry and I alone there in the mountains, well I can't say what the atmosphere was back at the base but I mean there was I think the realisation that something is missing but we, we had to go on with life.
- Q:** *Ja, ja, ja*.
- A:** We went on with life. And I can remember earlier that year 2 chaps were killed and died on Gough island. They went out and they tried to walk around.
- Q:** Oh. Is it the guys who died of exposure?
- A:** Who died of exposure, *ja*. And I can remember saying to someone in our team, oh, it must be awful to have that happen in your team and...
- Q:** *Ja*.
- A:** And then it did actually happen and maybe, it is hard to say, maybe it's bad or nasty to say but in the end it probably wasn't quite as bad as one thought but I think one realised that life's got to go on. You know?
- Q:** Mmm.
- A:** But it is a sad occasion, it was a very sad occasion and so, we went on as a team and I, *ja*.
- Q:** Was it before or after mid-winter?
- A:** It was after mid-winter. Yes I think it was, October / November. It must have been that period we went in the mountain but it was towards the end of the year.
- Q:** Having Henry there though, did it help that he already spent 2 years in Antarctica?

A: No, he used get me down more often than not.

Q: Okay.

A: Because he would keep on telling us how we have to do things.

Q: Well *ja*, that happens.

A: And, he, in the end, I know when I was looking for those bits about the dogs and I agreed it was in my diary. Therefore I was... James asked me to and I just took my diary and scanned quickly...

Q: *Ja*.

A: ... Looking for pieces about the dogs and then I'd start reading things and I read things I had forgotten about that happened. Because I never really sat and read that diary. Occasionally I picked it up and read a bit... And I saw things that I had said about Henry and I thought "wow, did I really feel that way about Henry?"

Q: [laugh]

A: [laugh] But actually, the 3 problem guys in the team were the three guys who were married.

Q: Oh.

A: And that's, I think, because all of them had marital problems and went to Antarctica, Antarctica to get away from them. And all they did was bring their problems with them.

Q: Mmm. And probably be confronted with them.

A: And that to me, and, I mean I, and that's one thing that Antarctica teach, taught me, certainly, is how to get on with people. You have to get on with people. And you realise if you do something and it irritated someone else, you've got to realise this irritates that person on the spot really. Well I didn't.

Q: Yes.

A: And also if someone else did something that irritated you then just try and not to get cross with them. Then there comes sometimes when one almost felt like you couldn't control yourself.

Q: *Ja*, I can imagine that, especially in winter, you know, what do you do if you're 12 men...?

A: Well I can remember one day when I really...

Q: ... And the tension is running high.

A: I did lose my temper with Rob Johnston, he was one of these married guys, the, the laziest guy in the team, and he was without a doubt the laziest person there.

Q: And laziness must be very irksome, in Antarctica?

A: *Ja*. Because, as I say we had a 4 day cooking turn.

Q: Hmm.

A: ... And a 1 day skivvy turn. And the skivvy's main job was to shovel snow into the snow mountain. Now, this modern base they've got, they take a bulldozer, and pile tons of snow and there's enough water for everyone to shower I think twice a day. We had a little drum this size where the exhaust of the diesel generator went around in the wall and there was a shaft up to the top and you took a shovel and shovel the snow into this thing and that heat would melt that water and the reward for being skivvy is you could have a shower. So you were a skivvy every 12 days, so once every 12 days you could have a shower. Or a bath, we didn't have a shower. We had a bath.

Q: Wonderful.

A: And anyway, Schalk and myself, we had an arrangement, I got on very well with Schalk. And he was skivvy about 6 days from me so we decided we would each just work a little bit harder to make enough water and I had a bath on his a skivvy turn and he had a bath on my skivvy turn. So I could have a bath every 6 days instead of every 12, [laugh]. And the other thing we swapped, we found cooking food for four days, well your work attempted together... But you know, because we started putting a lot of effort into making good meals...

- Q:** Mmm.
- A:** And we found our work would get a bit behind. We would swop our third cooking days with each other. So on my third cooking day, Schalk would cook.
- Q:** Oh *ja*.
- A:** And on his third cooking day I would cook and this made a break. But anyway, I was telling you about Rob Johnston and he was too lazy to go and shovel snow, and I, my skivvy turn was after his, and I realised that and... The thing with the snow melter is, you have to make sure there is something to that side, when you shovel snow there was something to [indiscernible] so that it could absorb the heat. If it was empty and you shovelled snow in it, it took a real long time for the heat to get through. And I knew this so at the end of Rob's skivvy turn day I would go to the snow melter, he's gone to bed – absolutely empty. So I went out and filled it up with snow and the next morning there will now be some water. And the snow melter was in the diesel shack and the bathroom was also in the diesel shack...
- Q:** Hmm.
- A:** Because it was the warmest place. Dirtiest place in the base but it was warm.
- Q:** [laugh] But warm.
- A:** And as I walked into the bathroom, there was Rob in the bath, having a bath with the water I just put in, shovelled the night. I was mighty angry.
- Q:** I can imagine. I would have been as well.
- A:** But anyway, otherwise one had to learn to control oneself.
- Q:** Uhm, what is something that you particularly enjoyed about Antarctica?
- A:** I think just the beauty of it. Like, well Aurora, we did fantastic sort of sunset, sun pillars. I remember going out one morning and there had been a fine mist, and you get what we called wall frost, where, like if there is a cable on the radio aerial.
- Q:** Hmm.
- A:** The cable... There's ice crystals this big all along it. And the whole met town and there was some mesh wire in our cage where, hok, where we used to keep the puppies and we took them outside for the first time, all of that had these fine...
- Q:** Wow.
- A:** ... Crystals on it. It was just so beautiful. But I enjoyed the beauty of Antarctica. And it is different, *ja*. Maybe people that grew up in the northern hemisphere particularly in Norway in summer, that will probably be their everyday experience. It will not be different to what they are accustomed to, but yes, when you grow up in South Africa and you're an adult and you've never even touched snow before.
- Q:** Mmm.
- A:** And, *ja*, which is unusual for someone from Europe.
- Q:** *Ja*.
- A:** *Ja*, and in summer, we'd also get some of the formations in the sun. you get what you call a perihelia and also when there is certain types of ice crystals in the sky, there is the sun, and there's a big halo round it.
- Q:** Hmm.
- A:** And it always points, there's a mock sun and if you looked in the opposite direction, there is also a mock sun there.
- Q:** Wow.
- A:** Sites like that.
- Q:** *Ja*, it's not something that you can see anywhere else.
- A:** *Ja*, so it was those unusual beautiful sites.
- Q:** Uhm, and then, when you came back, what was the first thing you saw in South Africa?

What, what was that like? Being back.

A: The noise and the motion. I remember my cousin came down to the Cape to pick me up and I got into the car with him and whoa! The motion, it was terrifying!

Q: Mmm.

A: That almost, because we, we had muskegs and you're driving at few kilometres per hour. And it was just a white desert.

Q: *Ja, ja.*

A: There was just nothing. And there is no feeling of movement and motion and I got back and I found, that was the most... Wow... I don't know... The feeling that got me the most was this sudden motion and being in a car and the activity.

Q: *Ja, ja*, I can imagine. And then, I just want to talk a bit about your career after that. So you came back, and you did a PhD immediately through Potch after they wanted to give you the job here?

A: *Ja*, well... Part of my contract still with the Department of Transport was... The contract in those days was a 2 year appointment. So you had the training period and then the expedition and then you came back and you had to work up all the data.

Q: Hmm.

A: So there was a lot of data, data processing to be done, and scaling and meta-grams and things. So I had to do that and once that was over, then my contract was finished and then I was off at the permanent post.

Q: Hmm.

A: At the magnetic observatory. At that time, that's when I started research and then I registered for the PhD.

Q: I see. Uhm, with who did you work at the Department of Transport? Who was in charge of the Antarctic programme at the time?

A: What was the guy's name? There were a few people, there was 1 chap, Frikkie Loots, Van Rensburg, Van Rensburg [indiscernible] I don't know what his first name was.

Q: I think it starts with an H?

A: Van Rensburg was head of that whole Antarctic expedition. But really, in those days, I got the impression that the people there didn't care very much about the welfare of the expedition members.

Q: Mmm.

A: I don't know, but that was the sort of a job well, certainly to them, science was a minor detail.

Q: *Ja.*

A: Schalk and one of our team members, we called us the SANAE Kaffers.

Q: [laugh] Well, *ja*. That makes sense.

A: Because we were the labourers and that was the term they used for us.

Q: *Ja*, it was just a general term for them.

A: That was in the Apartheid era. And we were just seen as the labourers and that's what we worked for the Department of Transport. So you were... The scientists were there as the labourers for the logistics programme.

Q: *Ja.*

A: Uhm, I mean we spent a lot of... You know like all our koskassies was just stored outside. The diesel went down in 44 gallon drums and when the ship was off-loaded they were dumped down there on the ice. And through the year we had to go down and now they were buried by this much of snow, so you have to dig them out and...

Q: So you had to know a shovel really well?

A: Absolutely. We had also, because they were down there we had some chains with hooks on,

so you had to dig down to get a drum, and you'd hook the hooks on and hook it and reverse with the muskeg to pull the drum out and load it onto the sled. Then the next drum and load it onto the sled. And then the next drum ...

Q: That must have taken ages!

A: Absolutely. Whereas now, I think it is all been done by machines and the fuel goes down in big rubber tanks or something.

Q: Ja, they store it in big rubber tanks. And they outsource the driving to somebody else.

A: And then we would dump the drums at the base and then down in the ice passage there were a set of drums for fuel. The mechanics would take fuel from there. And when those set of drums were empty, then we had to go and get a sled full of drums at the top and cypher the fuel down into the tanks at the bottom. To fill them up.

Q: And your gear? Was that sufficient? You're cold weather gear?

A: You know what, it was okay. I don't know, yes we had... The kit we had was okay, it was fine. I don't know how it compares to what you get today, but I'm sure technology has changed in clothing and things... But no, it worked, it kept us warm and that was fine.

Q: So you didn't get the idea that there was a big SANAP programme at the time?

A: No, I think... There was, well... The Department of Transport was responsible for the logistics. There was a section in the CSIR, I think which was the sort of, eventually became the NRF. What did they call it then? I don't know. But in Antarctica, the science in that section, that was from that section of the CSIR and I think they worried about the science.

Q: Mmm.

A: But for the Department of Transport, the science was a minor detail.

Q: And you didn't get in....

A: And I... It was just a big logistics exercise to them.

Q: Ja.

A: I don't think they worried much about why we were down in the Antarctic.

Q: [laugh] Ja. I was wanting to ask about that. Did you get any briefing at all? That you are there to present South Africa? Or...?

A: Well, I am sure during our team training someone gave us a talk

Q: Ja.

A: I think we must have been. I know we had a few talks. Certainly a few from a previous expedition member and I'm sure even the Director General or maybe someone from Foreign Affairs came and he spoke to us.

Q: But nothing specific about the mandate?

A: No I don't believe, but I think at that time you know, we were probably also not concerned about those sorts of things.

Q: [Laugh]. I believe that [laugh].

A: For me it was the start of an adventure, and as I was saying, I didn't go down for the science at that time. I mean I, I changed when I was there and I became interested in science down there. My objective for going down was for the adventure and it was a fantastic adventure. Just the adventure of, just living in that environment and experiencing the dogs and going out with the dogs and doing things like that and going into the mountains, it's just all that...

Q: Wonderful.

A: I like mountains, well not mountain climbing but I like hiking, I'm not a climber, I'm a hiker.

Q: Ja, ja.

A: And I like the outdoor life.

Q: This is a pretty nice environment for that, Hermanus?

A: Ja, I just enjoyed that.

- Q:** So when you returned you followed up with the, you followed Deon Kuhn with the Antarctic programme. You became, after him, the manager of the HMO side of things?
- A:** *Ja.*
- Q:** Did you have to liaise then with Potch and Natal and Grahamstown?
- A:** Well there was a period of years... Yes, but there was a period of years that HMO was not involved in Antarctica. In the 19... 19 ... 1986 / 87, we were on the CSIR level. Now the CSIR was commercialised.
- Q:** Hmm.
- A:** And we were told that if we continued with Antarctic research, we have to charge for our services. The CSIR went totally overboard with ...
- Q:** Charge your services. Charge who? The Department of Transport?
- A:** The Department, well it was then Environment Affairs. And if they wanted us to participate in... Okay, the expedition each member's salaries, they paid. But they wanted us to manage the programme that any time that a staff member spent administrating the programme, the time that the electronics technician spent building a piece of equipment, those hours had to be booked to SANAP and SANAP would have to pay us. For those hours. And the way the CSIR worked then, you worked out the person's salary and then there was about an overhead. Which virtually double the hourly rate. And that's what happened. When we told them this, they said you can forget it. Anyway very quickly we were not involved in Antarctic research anymore.
- Q:** Mmm, mmm, mmm.
- A:** And then at the end of the CSIR era, the CSIR decided... We did a lot of defence related development here for a magnetometers and things and I was one of the anomalies that had been a scientist. And when Apartheid disappeared, and sanctions went away, there was no need for all this type of work.
- Q:** *Ja.*
- A:** And all the engineers, one after the other, were made redundant and left HMO and then the CSIR decided well, we don't need HMO anymore and they made the decision to close us down and that's when Deon... Deon was nearing retirement and he just opted out and I was left, sort of acting manager and what are we going to do? So I decided we were going to save this place and I wrote a letter to the President and CEO of the NRF and to the Director General of Science and technology. It was Rob Adam at that time and Kosi Mogeli was CEO of the NRF and suggested that HMO should be transferred to the NRF and made a national facility.
- Q:** Yes.
- A:** And there was a chap, Friedel Schwelzheim, he was a professor an emeritus professor at Wits, but he'd died since then, and he had to, was a sort of doing a sort of investigation and eventually came up with a report and recommendation and he recommended we be transferred to the NRF and became a national facility. And then once we were a national facility, we got involved in Antarctic research again.
- Q:** And I suppose they also gave more funding for science?
- A:** Yes.
- Q:** The NRF?
- A:** Yes.
- Q:** Well, science specific funds, as opposed to commercial...
- A:** *Ja*, absolutely.
- Q:** Commercially viable applied science.
- A:** *Ja*, and then we had to build this up into a scientific organisation.
- Q:** And now it's a space agency! [laugh]
- A:** No.

- Q:** [laugh]
- A:** It is fantastic to see...
- Q:** *Ja.*
- A:** ...What it is today, when I think we were virtually on the brink of being closed down.
- Q:** So now, today, as part of the space science, because as I understood apparently the engineers or members working in this field are called space weather engineers down in Antarctica? Some of them?
- A:** *Ja*, I suppose they are because, well because we're sort of worldwide. Governments that fund science that want to know why we are doing this? What is the benefit to the public or the man in the street or to the government? Why, what is the benefit of this type of research? *Ja*, whatever research you do. And so, in space science, space weather has become the big thing.
- Q:** Okay, *ja*.
- A:** Because space weather affects all sorts of technology and the more technology develops, the more important understanding and being able to forecast for space weather becomes. Certainly for satellites, for ESKOM it is important because the magnetic storms induce currents of power and there was one massive magnetic storm in October of 2007.
- Q:** Mmm.
- A:** And I think 6, as a result of that 6 of ESKOM's transformers were damaged and the replacement value of those transformers is R30 million each.
- Q:** Phew! So they can, if they know there is a storm coming, they can switch them off?
- A:** So in one night 80, a R180 million worth of damage was done by a magnetic storm. And also radio communication, like the army still uses radio communication and so I think that is one of the most regular services that people next door here provide.
- Q:** But the people you send down to Antarctica, because I saw on your website that Antarctica features quite prominently on the website, which is understandable because it looks exciting, but will you continue now with that role? Sending down people to look at the radars in Antarctica.
- A:** Yes, that research will continue. I am very little involved in it in the last number of years, because I'm actually formerly retired.
- Q:** *Ja*, I know.
- A:** But I am employed on a sort of contract basis. Because I like doing research and I come here a couple of days of the week and sit here and do some research. I'm preparing now, I was working on a presentation that I'm going to give when I'm at a conference in Australia in July.
- Q:** Speaking about conferences, did the fact that you were involved in Antarctic science in the 1970's make a difference to the amount of overseas conferences you could go to, the visas you could get?
- A:** I don't think it did. Not really, I don't think so.
- Q:** Was there ever in South Africa, do you think, a sort of elitism, no not elitism, was a prestige, call it prestige, attached to Antarctic sciences as opposed to other sciences?
- A:** I don't know. I can remember in the Apartheid era that a lot of... I remember going to a conference in Prague, in what was then Czechoslovakia and it's now split into the Czech Republic and Slovakia, in Czechoslovakia South Africans were a no-no. But there is a, the conference was INAGA International Association of Geo-magnetism and uronomy and that international association has as a policy that most, I think anything that comes under ICSU, the International Council of Scientific Unions is that bona fide scientists...
- Q:** Hmm.
- A:** ...Will participate in that field of science no matter from what country, must be admitted to the conference. I can remember there was a conference in, a INAGA conference was going to be held in I think it was Norway.

- Q:** Mmm.
- A:** And the organisers wanted the Norwegian government to give guarantees that visas would be issued to all participants but they refused to guarantee that South Africans would be issued with visas. That conference was moved you know the planning stage, it was a year ahead in the planning stage, and instead of having it in Norway, it was moved to England.
- Q:** Ah, okay.
- A:** And with Czechoslovakia they had to, and I think we were about six of us from South Africa that went to the conference and we were arriving at different times. And I was, I just happened to be the first one to arrive. I gave... And we had to go, or we left London for that, I remember going to a conference in Canada we had to go to London and spend a week in London to get our visas from the Canadian Consulate in London. They made, I mean the countries made it difficult.
- Q:** *Ja, ja.*
- A:** And the, you got the visa, I think I had to go to London as well to get that visa. Anyway, I landed in the airport in Prague, and I stood in the queue and when I got my passport chopped, the guy looked and he gets up and goes out of the office to somewhere else, and the guy that had been sitting next to me on the plane was a Czechoslovakian and he has been out of the country for a number of years and he was just coming back to visit family, he was in the queue and I asked what's wrong and he said, no, there is something wrong with your visa. Anyway, the guy comes back, and he says come, and I was told to go and sit there in an office there and wait and I think I sat there for about I don't know three quarters of an hour before someone else came and I think they asked me a few questions, and disappeared again. And then maybe another 15 minutes later the guy said right, I can now go.
- Q:** Wow.
- A:** And I, because whoever was the official knew, South Africans cannot get visas, and I actually had a South African passport.
- Q:** [laugh]
- A:** [laugh] Anyway, eventually I spoke to Dave Walker who was one of the people, and I said: "Dave, did you have problems?" and he says "No, I think I was the sixth one, they got used to passports from South Africa..."
- Q:** [laugh] Did you ever sit on any SCAR delegation?
- A:** Oh well...
- Q:** Or attended SCAR meetings?
- A:** No, I don't think I ever went to... I attended meetings to do that SCAR was involved with, like in INAGA there is often bits and pieces but I don't know? Did I ever go to a SCAR meeting? I seem to think once maybe I did.
- Q:** And...
- A:** But I was never a person for getting involved in administration management.
- Q:** And then, so you weren't involved in SASCAR either?
- A:** I was involved with that at one stage, *ja*.
- Q:** You don't know perhaps when SASCAR...
- A:** No I don't, it existed, but it existed. Lots of committees came and went...
- Q:** *Ja*, it seems to me to happen sometimes, that some of those committees come and go.
- A:** But I know, I did serve on the South African committee at one stage to do with Antarctic research, but if I could avoid meetings like that..!
- Q:** [laugh] And just one last question. Did you ever go back to Antarctica? Did you get the chance to get back?
- A:** No, I've never been back and I often think "hell, I would love to go down and see the five star hotel they've got." [laugh]

- Q:** [laugh]
- A:** Just to experience and to see what it is like. But I know James Hayes, you have spoken with James, he was one guy and he said to me, he said he thinks, he doesn't think they experience Antarctica the way we experienced Antarctica.
- Q:** No.
- A:** Probably not, but maybe I'd still like to go down there.
- Q:** And Marion island, you went for a few takeovers?
- A:** Ja, yes. I went to do a survey and restore some instruments and then I went the following year to actually install the instruments.
- Q:** And which years was that?
- A:** Oh. Andrew Collier was there that year, he was writing an article for Quest magazine about Marion, Antarctic science, it must have been in the 1970's sometime.
- Q:** So it wasn't on the Agulhas it was still on the RSA?
- A:** Ja. I've never been on a trip on the Agulhas.
- Q:** Okay wow. And now the Agulhas is going out.
- A:** All my trips were on the RSA. It was like a flat bottomed bath tub and hell, it could roll!
- Q:** Did you ever get seasick?
- A:** A little bit. Well luckily I didn't get seasick too badly. I was never actually seasick. I was one of the lucky ones. I can remember on the one trip to Marion and we hit the Roaring Forties and we hit some really bad storms. And there was this pendulum so you could see how far the ship's rolling and it rolled about 30 degrees one way and just past 45 degrees to the other way. No it was 45 degrees but it makes no difference whether you walk on the walls or the floor!
- Q:** [Both laughing]
- A:** There was a Dutch guy, a biologist. I can't remember if he was a geologist or a biologist. There's quite a few scientists that came down for the takeover period. And he came down and this poor guy was so seasick and just the last few days before we got to Marion, he started getting comfortable and then when we got on the ground, he was seasick all over again...
- Q:** Okay ja can think...
- A:** Because you know one's system is so used to the motion and then there is no motion and your system is telling you there is motion and...
- Q:** Okay. And, a Dutchman? One would think that they at least are used to the sea. [Laugh] Okay. Thank you so much.