

## CAROL JACOBS

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**Place:** Pretoria Department of Home Affairs Office

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

**Respondent (A):** Carol Jacobs | Assistant Director: Environmental Impact Evaluation (Antarctica and Islands), Department of Environmental Affairs 1994

**Q:** How did you become involved here, at the Department of Environmental Affairs and Tourism, as it was known originally?

**A:** I worked for the Department of Home Affairs, which was one of the most soul-destroyingly boring jobs that you could ever do! And I thought, ooh, I need something different and I saw that they were advertising in the internal circulars for an Administrative Officer: Antarctica and Islands – the Department of Environmental Affairs and Tourism – and I thought that looks like fun, and I applied. And I got the job. That was in June 1994.

**Q:** And you were trained as ... ? What did you study?

**A:** I did a BA degree, with English and Psychology as majors, and then I did my Honours in Psychology, so ...

**Q:** So you have a Psychology background into the civil service thing?

**A:** Yes, into Home Affairs, and then on to the Directorate: Antarctica and Islands, where I started off in the science administration and liaison component. So basically I looked after the administration of all the SANAP research projects. Lots of internal submissions, taking minutes of meetings, and participation in relief voyages later on to all 3 SANAP stations, as Admin Officer and eventually DCO (Departmental Coordinating Officer) for two Gough voyages.

**Q:** Explain a bit what you do, currently, at the Department of Environmental Affairs; what's your job description?

**A:** At the moment, I am an Assistant Director in the Antarctica and Islands sub-section of the Directorate: Environmental Impact Evaluation of DEA, where I'm responsible for the compliance monitoring and auditing of SANAP's activities in Antarctica and at the Prince Edward Islands. Not on Gough, because they're a British island, so they appoint their own environmental officers.

**Q:** Who is the Director?

**A:** Of?

**Q:** You said that you were the Assistant Director. Who's the Director of your division?

- A:** Well, my Deputy Director is Danie Smit and my Director is Dumisani Mthembu.
- Q:** When you go to the islands, or Antarctica, what is your job there?
- A:** Our role is the Environmental Control Officer on SANAPvoyages, where we monitor compliance with the Madrid Protocol and its provisions in Antarctica and with the applicable South African environmental legislation at the Prince Edward Islands, as well as with any other guidelines and procedures that are in place. After each voyage, we compile an environmental audit report on SANAP's activities and performance during each takeover.
- A:** We have a secondary function as well – should there be any activities that will impact on the environment in Antarctica, we will evaluate any Initial or Comprehensive Environmental Evaluations that might be required, and then on Marion Island, if there is any activity that's listed in accordance with the National Environmental Management Acts, EIA Regulations, then either do a Basic Assessment Report or a Scoping and EIA Report will be required. My unit then reviews these applications and, if approved, will issue an Environmental Authorisation (which may contain conditions) for the activity.
- Q:** What would be an example of such an activity?
- A:** If you're putting up a mast on Marion, that would be a listed activity.
- Q:** And what about, for instance, people who go down and make documentaries?
- A:** There is a Filming Policy that needs to be adhered to, which is included in the Prince Edward Islands Management Plan. An application needs to be completed by the company that wants to make the documentary, which is then evaluated by the Prince Edward Islands Management Committee, which we serve on. This committee makes a recommendation and Henry Valentine (the Director: Antarctica and Islands) will then ultimately decide whether they can go down.
- Q:** And your day to day job when you're actually on the island or on Antarctica ... What do you do? Do you sometimes go down?
- A:** Yes, we undertake voyages. Part of the mandate of our unit is to send down an Environmental Control Officer on each SANAP voyage.
- Q:** And what does an Environmental Officer do once they're on the island or Antarctica?
- A:** As I said, basically we monitor compliance and we audit activities. This involves things like pre-voyage inspections of all SANAP storage facilities in terms of the quarantine measures they have in place, so we will visit the Directorate: Antarctica and Islands and the National Department of Public Works' Cargo and Clothing Stores, the helicopter contractor's facility, the SA Agulhas, and so on, mostly to ensure that we don't inadvertently introduce alien species to these sensitive environments. We

also coordinate the Boot Washing Ceremony en route, give environmental presentations to the overwintering teams going down before they depart, as well as en route to all participants on board. In Antarctica, for example, if they were fuel pumping, we would then go with them to the ice shelf and assist (we don't just stand there and just watch), as well as monitor that no fuel spills occur - things like that will be included in our report. We'll take photographs of all the different activities that we have to audit, there are numerous aspects that we need to look at, and this will all be included when we compile our final report. All refuelling operations are also monitored, often we have aircraft coming into SANAE, and we would then go down to the airstrip and watch the refuelling operations and make sure that there are no spills – this is all in accordance with the protocol. On Marion, if any Environmental Authorisations were issued, we would check that the parties involved are complying with the authorisation and any conditions. We also monitor fuel pumping operations there, and were extensively involved in monitoring the construction of the new base and installation of the new field huts (and removal of the old ones). Again, in Antarctica, if Public Works is doing maintenance, say they put in a new water pipeline, we will go after the project's been completed and see that they've rehabilitated the area and cleaned up afterwards.

**Q:** And in the case of Antarctica, who do you report to? Which committee of the Antarctic Treaty System?

**A:** In respect of Antarctica, Danie and I serve on the Committee for Environmental Protection at the annual Antarctic Treaty Consultative Meetings. This is an international meeting, where our annual environmental audits are available for scrutiny within the Antarctic Treaty System. Also, our Initial Environmental Evaluations undertaken are listed. Should a Comprehensive Environmental Evaluation be required, this is submitted to the Committee for Environmental Protection for consideration and recommendations to the ATCM.

**Q:** And the highest authority in South Africa you have to report to?

**A:** Basically, we submit our report to Henry as the manager of SANAP and to the Director-General of DEA.

**Q:** Now you've been there yourself ... What's your first impressions of Marion? When did you first go?

**A:** Wow ... It was in the '90s somewhere. I think '98,'99. I did two back-to-back trips to Marion as the Admin(istration) Officer. I first went to Gough, funnily enough, in 1995. And that was, for me, very beautiful. So Gough has always had a special place in my heart. Don't know if you want to put that on record, but it does. Marion kind of grows on you, I think. I did two round-islands - I was lucky enough to do that,

because as the Environmental Control Officer on Marion, for example, we have to look at the old huts site scars, and things like that. So instead of flying – you know, I don't mind walking – so we would look at the new huts as well and include any pertinent environmental matters in our report. But, aside from that, Marion is beautiful. And it's still a privilege to be able to visit such a special place.

**Q:** Who did you do your round-islands with?

**A:** With John Cooper.

**Q:** Both of them?

**A:** No, not both. The first one was with two of the mice research guys.

**Q:** And Antarctica? Have you been there?

**A:** Yes. Antarctica was in 2001 to 2002. And that's also life-changing. Each base has its own specialness about it. It's not that you can actually compare Gough with Marion or Marion with Antarctica – they're all so unique in their own ways. Antarctica is ... I was amazed at the size of it. It's huge; it's an enormous continent. I was like 'Wow, this is amazing!' And then the quiet. When you're sitting somewhere on your own and it's almost deafening, it's so quiet. Vast expanses ... Where we are at SANAE, there's not much wildlife. There are lichens on the rocks in the vicinity of our base, and you'll see the occasional snow petrel or skua, but SANAE is located inland, about 170 kms from the ice shelf. And then I was amazed at the operations: the aircraft that fly to the runway at SANAE for refuelling and then they're off again; and they're from Britain, or from Germany and ... we have a fuel depot at SANAE, so ... The size of the operations was, for me, quite amazing, yes.

**Q:** What are the different management strategies from the environmental point of view for the islands and Antarctica?

**A:** The fundamental difference is that Antarctica falls under the Antarctic Treaty and the Protocol on Environmental Protection to the Antarctica Treaty. So all the provisions of those, we need to implement in Antarctica. At Marion and Prince Edward, national legislation applies, for example, the the National Environmental Management Act, obviously the Biodiversity Act and the Protected Areas Act, and so on. So that's the fundamental difference. And there are different prescriptions for your activities there, so for Antarctica, like I said, you do the initial or comprehensive environmental evaluations – which are similar to the Basic Assessment or Scoping and EIA Reports under NEMA (South African National Environmental Management Act). So they're kind of the same, but not.

**Q:** Do they draw on one another? Well, not *vice versa*, but ... Not at all?

- A:** Well, if I'm looking at something in Antarctica and ... The format would be different, but the aspects you look at are more or less the same.
- Q:** When were environmental management plans first implemented on Marion?
- A:** On Marion, in 1996, the first Prince Edward Islands Management Plan was published in 1996.
- Q:** What do you think brought about the change that they thought such a management plan was necessary?
- A:** I think ... That was before my time, because when I started, they'd already done a lot of the groundwork for the plan. It took them quite a number of years to get it in place. But obviously there's a necessity, because Marion and Prince Edward were declared as a special nature reserve and obviously you need to manage it properly if you've got such a status. And I think that's mainly why the plan was put in place.
- Q:** In general, what are the major challenges to be managed with regard to the environment?
- A:** Well, most likely the introduction of alien species. And then the management of those that are already there. And the new Management Plan will encompass an alien eradication program.
- Q:** When is that going to be finished?
- A:** I don't know. You would need to ascertain this from Henry. I'm hoping this year. There is a draft in place – you must be aware of this?
- Q:** Yes.
- A:** And at the Management Committee meeting last week, it was mentioned that the finalisation thereof has been outsourced, and I think they're hoping to get it done by the completion of the new base. It's not under my mandate though.
- Q:** And Antarctica? What are the challenges facing you, for instance, as Environmental Officer there?
- A:** When we commissioned our new base in 1996/97, there was an ISO 14001-based environmental management system put in place. It is implemented still, today, but it needs to be updated. So Gideon van Zyl, at the Antarctica and Islands division, and I are busy looking at updating the system. We won't seek certification, because we're a very a small programme. We visited the AAD (the Australian Antarctic Division), I think two years ago, because they have received certification. But they have about 300 people working for them, so they've basically got like 5 people doing my job, so they have a lot more manpower to be able to do that. SANAP is a much smaller programme ... we're 3 here, and I'm not sure how many people fall under the

Directorate: Antarctica and Islands at the moment, about 30. And then you've got all your scientists, and Public Works and your various stakeholders, but to actually implement and manage a system where you need certification, which is complex and encompassing ... we don't have the manpower to do that. So we will base our system on the ISO system and then we will try and implement it.

**Q:** Certified with whom?

**A:** With SANS ISO. In South Africa this the South African International Standard (SANS) under the International Organization for Standardization (ISO).

**Q:** So what would you say is the importance of environmental management? Why is it necessary?

**A:** It's necessary to regulate how we operate there, so that we can protect the environment and conserve it as far as possible. And then, I think the most important way to do that is through education of people; that you can't just ... it's not just like it was many years ago, where you could kill seals or penguins for meat for your dogs. Of course, dogs are no longer on Antarctica, so, times are changing, and I think, in order to conserve these areas that are so precious and so pristine, to a large degree, is of utmost importance.

**Q:** What would you say is the most difficult part of your job?

**A:** I think, honestly ... most people are extremely amenable to environmental precautions that need to be taken – boot washing ceremonies, checking their gear for seeds and propagules and things like that. But then you get ... and I think sometimes it's more the older mindsets of people that have evolved with SANAP for many years and they are just ... 'But why do we have to do this now?' and then you've got to go and explain the reasoning behind why we need to do what we do, that the areas are so important and so pristine, and we want to conserve them as much as possible. And don't throw your cigarette butts down when you've finished working and things like that. So I find that the most challenging. But that's just a small part that frustrates me. For the most part, I think, people are pretty amenable to anything that we might suggest that they do.

**Q:** Have the challenges changed over time?

**A:** See, I've only been in the environmental unit now – where I've obviously focused more on this – for the last two or three years, so over time, it's difficult to say. I think that maybe we focus on this more now; a lot more than what we used to, five years ago or ten years ago, which is a good thing.

**Q:** And your previous work here, at DEAT (former Department of Environmental Affairs and Tourism) – what were the difficulties then, when you were in the ... you said you ...

**A:** ... Science Administration and Liaison unit. I enjoyed it tremendously. It was basically just an admin job, all the administration related to the SANAP projects; things like taking minutes and organising Prince Edward Islands Management Committee meetings – so it was more admin than management, which the environmental component is more geared towards. My heart is in this programme. If you asked me, do I want to do something else? I would be like ‘What else would I want to do?’ So, each aspect has its own challenges and rewards. I enjoyed my time tremendously with my previous unit. I can’t really think that there were hectic frustrations, aside from your day to day ‘ickyness’ and stuff, which, you know, would be there every now and again.

**Q:** What would you say is the importance for South Africa to keep running this programme and what is the importance of Marion Island for South Africa?

**A:** Well, we annexed Marion in 1947 and Prince Edward in 1948. So this is South Africa’s only remote territory, and I think, as such, we need to firstly conserve it, and then it’s pretty important to have a presence there. And then also for the science – the unique laboratory that it provides for the broad spectrum of work that is currently being done there, I think is essential.

**Q:** And of our involvement in Antarctica?

**A:** Okay, South Africa is one of the twelve original signatories to the Antarctic Treaty, and we’re a non-claimant state, which kind of makes us objective and ... So I think that as an original signatory, with a long-standing involvement, we should definitely have a presence there. And then also in terms of the value of the science that we’re doing down there – SANAP is a flagship programme for South Africa.

**Q:** In your work as Administration Officer liaising with the scientists, could you see a shift in the kind of science that is done, or ... ?

**A:** We had four disciplines that we reviewed science on when I started here. They were biological sciences, earth sciences, oceanographic sciences and physical sciences. So obviously there wasn’t a social sciences component, that there is now. And there were task groups that looked at each project proposal under each discipline, and then there was a committee, the South African Committee for Antarctic Research, which had the chairman of each task group on it and then a couple of independent people. And basically your project needed to fall into one of those disciplines. If you didn’t fall into one of those disciplines, you know, there was no scope for your involvement in SANAP. Then, when it moved over to the Department of Science and

Technology, they created new themes, the threads of which are more or less the same I think, but it gives a broader spectrum for involvement in a greater number of disciplines.

**Q:** When was this move?

**A:** Oh, my goodness; now you're asking me a question ... 2003, I think. Officially it went over in 2003, but I still continued to administer it for about two years after that, because DST (Department of Science and Technology) was obviously not equipped to handle it, with all due respect – I don't think the decision to move the science was very well thought-through. But DST then delegated the administration of the science to the NRF (National Research Foundation), who I think are currently doing a sterling job. I worked very closely there with Candice Levieux, now Steele, and conveyed to her all our processes here. And a lot of them were put into the guide in terms of the funding aspects, because those were so difficult to sort of extricate, like what is strictly research and what is strictly, you know, logistics. Because the programme is inextricably linked: you can't do the science without the logistics, and the logistics is not necessary if you don't have the science. So, when it was all under one department, then you could manage everything more easily, because you knew what projects were happening; you knew what support they needed, etcetera. Now, you need to have very close liaison between two different departments in terms of what needs to be done. It's manageable. It's not always ideal, and things do slip through the cracks – as we discovered the other day – but if there's good communication between the departments –and I feel that it's getting there – it probably can work. It's not ideal; I kind of still think that maybe having SANAP all under one umbrella, would work better than having it under DEA and DST.

**Q:** Say for instance like BAS – the British Antarctic Survey, or you can think of something along those lines?

**A:** Yes, or like the AAD, yes.

**Q:** And Gough Island? But you don't really work with that ...

**A:** No. But I could answer questions if you needed me to.

**Q:** Gough Island; what would be the significance of South Africa keeping a Gough programme?

**A:** Well, we've had a weather station there, historically, for ages – I'm not sure from when; and we have a lease agreement with the British to man a weather station there, because it is a British Island. We also undertake research there from time to time.

**Q:** Are there scientific ... ?

- A:** There's limited scientific work being done there. Most recently looking at the possibility of eradicating mice on the island. This would be a huge undertaking and probably very valuable, if successful. But it's not a South African island, so what the future holds, remains to be seen.
- Q:** And weather-wise, is it really important?
- A:** Well yes, weather-wise, definitely. Because it provides important data for forecasting. That's essential. But it doesn't mean South Africa has to do it. I suppose somebody else could do it, but ... yes it's extremely important in terms of weather data.
- Q:** Has the lease agreement changed over the years?
- A:** Originally it was for one peppercorn per year, but more recently I think it's remained essentially the same. It's normally a ten-year agreement that we can man a base there, in return for which we will transfer passengers from Cape Town to Tristan da Cunha. I'm not sure when it expires.
- Q:** So they'll have to renew that?
- A:** SA and the UK will have to renew it again for another ten years if they want to; and if they don't ... well, I don't know. That's more a management issue from Henry's side, so it's kind of difficult for me to say. I would be sad if we didn't go there, but that's probably just personal.
- Q:** We already spoke a bit about Marion and science. Do you think that Marion can exist as a special nature reserve – as a specially managed place – without the science?
- A:** Well I imagine it could.
- Q:** Would that be ...?
- A:** But we've just built a huge new research base there, that cost millions of Rands, so that would not be very sensible!
- Q:** I don't know whether you are the right person to ask this, but what vessels do South Africa currently have at its disposal to travel to the islands ... in the present, and in the past ... ?
- A:** The SA Agulhas is currently the vessel that we use to travel to all three bases. She's ice-strengthened; she's not an ice-breaker – Class C1, I think. We have in the past used the SAS Outeniqua, from the South African Navy, especially when we were constructing SANAE IV, because obviously you've got to take down a lot of construction material, so we used her as well. And she also did a couple of trips to Gough and to Marion; especially if the Agulhas was not available, or in cases of emergency. And then the Africana's gone down, to do – I think – a Summer Survey

on Prince Edward, and then we've got the Sara Baartman that goes down as well. We're currently busy building a new ship, but Sam Oosthuizen can probably tell you more about that.

**Q:** Does your job include the ship?

**A:** Yes, well in terms of pre-voyage inspections, we look at whether they've got their electronic fly catchers in place and that they're in working order, and if there's a problem any invertebrates on board. We get the fumigation certificates from them prior to the departure of the voyage, check that rat guards are in place on the mooring lines when the ship is in port and so on, and this forms part of our audit reports.

**Q:** I'll also ask Sam this, but do you know when the new polar vessel will be finished?

**A:** Sam will know.

**Q:** Okay. Did you have to draw up a little ... Did they also have to ... in the building of the vessel, what kind of regulations are there – environmental ... ?

**A:** We were not involved with in the process at all.

**Q:** What is the best part of working on the SANAP programme?

**A:** The cool places we get to visit ... ! And the people you get to meet. You get to meet very interesting people.

**Q:** Like?

**A:** In general, it's usually people that have got, I think, a different view on things. And they are more your adventurous type of people than your accountants and your lawyers kind of people ...

**Q:** About artefacts on the islands ... What do you think – as somebody involved with management ... I don't know whether it falls under environmental management, or whether it has a place where it falls under, but, for instance, all sealers' remains, etcetera, do you think that should stay on the island, or should be conserved in a museum?

**A:** The relevant experts will need to advise on that, but I suppose if items are going to remain in situ on the island and gradually deteriorate ... then they should probably be put it in a museum. But if they are of particular relevance or not in any danger of being destroyed, they should probably be left there.

**Q:** And tourism?

**A:** No. I don't think tourism to Marion should be allowed ...

**Q:** Why not?

**A:** ... or to Antarctica for that matter. We don't have the infrastructure to deal with tourists ... It's a gut feel for me. The Antarctic Treaty doesn't support tourism to Antarctica. I know it happens, and it's fairly well regulated, but it's not supported as such. And it's just my feeling that it's just something that shouldn't happen. I suppose with the risk of introducing alien species to such sensitive and pristine environments. Marion is a special nature reserve currently, which is the highest protection status that you can afford an area under South African legislation, and unless you have absolutely the most stringent and proper mechanisms in place ... I don't see that will be feasible for South Africa. I don't think it's going to generate that much revenue, and then the risks outweigh the benefits, I think. And we'd have to have infrastructure in place if you took tourists down, and that would be additional costs again. I don't know. I just think some areas on the planet should be protected and conserved.

**Q:** Tell me more ... If I understand correctly, the ocean around Prince Edward Islands has recently been declared an exclusive economic zone?

**A:** No, there is an exclusive economic zone around the Prince Edward Islands.

**Q:** What has recently ... Around last year (2009), something else as well happened ... I'm not clear ...

**A:** You mean ... It's ...

**Q:** Where they expanded a special nature reserve zone or ... ?

**A:** To include the marine area.

**Q:** Yes, to include the ...

**A:** It is envisaged to declare a Marine Protected Area (MPA) around the Prince Edwards, but this is on hold at the moment. I heard at the Management Committee meeting last week that there were some serious concerns and that it's still under consideration. But that it hasn't been declared yet.

**Q:** What would be the concerns?

**A:** Possibly how South Africa would manage the area once it has been declared – we wouldn't want the status withdrawn if we weren't able to manage it properly.

**Q:** If I understand correctly from the photos on the website, in 1995, there wasn't a SANAE team down. Am I correct?

**A:** I think so. There was one year where there was a gap.

**Q:** Do you know what happened there?

- A:** Basically, the new base wasn't ready for occupation yet. The old base, SANAE III, was unsafe for human habitation and the new base wasn't sufficiently ready for them to house an over-wintering team, so we had a gap for a year.
- Q:** When did construction start on the new base on Antarctica?
- A:** It was ... Wow, it was also before my time ...
- Q:** It was finished in 1997.
- A:** 1996/97, I think, yes.
- Q:** When you were around, can you remember when the first woman member was sent to SANAE? Woman team member ...
- A:** Susan Vosloo of the Directorate: Antarctica and Islands can give you the exact date. She works with Richard Skinner upstairs. She's appointed expedition members since before I was involved in the programme and has the records with all the expedition members' names, so she can give you the exact dates.
- Q:** So you weren't involved with that at all, in the sense that ... Do you know why they suddenly decided to send women ... Or can you remember from the meetings you were administering ... ?
- A:** I just know that teams were always male, and then obviously, you have to move with the times. And then we started sending women down, which we're very pleased about, so yes.
- Q:** I'll also ask Susan or other persons, Henry for instance, about that. ...
- A:** Henry was instrumental, I think, in sending women from the Department down. So he was, I think, insightful in that sense. I think prior to Henry's involvement, not many women from the Department were sent down. Henry also ensured our training as DCOs. So, ... yes. You went down as Admin Officer and then as Assistant DCO, and then as DCO. I think Alma Human from the Directorate: Antarctica and Islands' Cape Town office was the first woman DCO of a voyage. Later on I did two trips to Gough as DCO. And Sandra Durand thereafter.
- Q:** What does DCO stand for?
- A:** Departmental Coordinating Officer. So we coordinate everything when you're down there, yes.
- Q:** What kind of job is that?
- A:** Hectic. It's great, in the sense that you have your finger on everything that everyone's doing, I think. And it's nice to plan things and try and work out how you can get a vast amount of work done in the least time possible, especially when

there's bad weather and this kicks in and that kicks in ... So you have Plan A, and then Plan B, and Plan C, D, E ...

**Q:** Internationally, how does the SANAP programme fit in?

**A:** How do you mean?

**Q:** I mean, for instance, how important is the SANAP programme internationally, either on Marion or on Antarctica? And I assume you've been to ATCM meetings and so on – what kind of role does South Africa fulfil there?

**A:** Well, Danie and I serve on the Committee for Environmental Protection at the ATCMs and South Africa has a delegation which goes to the meetings every year. I think our science ... I know from when I was still working with the science – I don't know what it's doing now in terms of the Scientific Committee on Antarctic Research, which is the international scientific committee – but back then (and still today, I think) our science was very highly rated, especially certain scientists within SANAP had a good standing internationally. In terms of our featuring on the Committee for Environmental Protection and the Treaty meetings ... I know that SANAP was one of the first countries to put in a CEE for its new base ...

**Q:** What's a CEE?

**A:** A Comprehensive Environmental Evaluation – because South Africa wanted to build this huge new base in Antarctica, we had to put in this environmental evaluation in accordance with Annex 1 of the Protocol on Environmental Protection to the Antarctic Treaty. So the CEE that South Africa submitted for SANAE IV in Antarctica was very well and highly received by the Treaty. That was in the early 1990s ... So there was ground-breaking work done by South Africa. At the moment, I think that we're pretty much too low key at these meetings. We're trying to change that in terms of getting more working papers submitted and information papers submitted. But we're there, and it's important to know what's going on in this international forum and to make sure that our programme complies with that.

**Q:** You mentioned that some of the scientists were very well rated – or are very well rated ... Do you have examples; can you give me names, or ... ?

**A:** Profs Steven Chown and Marthan Bester, I think. And then probably the Physics work – Profs Dave Walker and Harm Moraal at Kwazulu-Natal and North West Universities. And many others did, and still do, really good work. They were very highly recognised internationally.

**Q:** That's about it. Is there anything else that you would like to add from your side?

**A:** No, just to say, good luck with your work, and I hope that you get everything that you're looking for.

**END OF TRANSCRIPTION**