MUSTAKIM (KIM) GIERDIEN

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Place: Customs House, Cape Town

Interviewer 1 (Q1): Lize-Marie van der Watt | History Department | Stellenbosch University Interviewer 2 (Q2): Dora Scott | Antarctic Legacy Project | C·I·B | Stellenbosch University

Respondent (A): Kim Gierdien | Department of Public Works:

Construction team leader | SANAE, Marion, Gough | 1994, 2004 - ?

Q1: My first question is: How did you get involved in Antarctica and the Islands?

A: When I started here in 1990 ... I'm a freak for adventure, and I saw this red boat leaving from Quay 500, that I can remember, and the guys were going there. And I always asked them "what do I need to do to go there, because that looks very interesting; to go and then you see them only in a while again. But I wasn't aware of what they were doing. And then I started investigating. And then I came about, a year at the top, and they said, no, that's for the islands – but obviously, with the old dispensation, everything ... They said no, you are coloured; you cannot go -and all of this ... This is how it used to be. And I said no, I'm into challenges. And I wrote, started writing letters and ... "I want to go" and "I'm the best at what I do", and like that. I was a plumber. So I said, "I'm the best plumber you can get in South Africa. I've won competitions ... and this company and that company that I've actually entered into." And then I started that process. And then my first opportunity – that is how I started, because I saw it; and my first opportunity actually came ... And then I was chosen, because ... They got a decree from head office, because then it was change of government, and they said no, we need to have more representativity. And then they looked at who the first probable and possible person is who they could really just take in. And then my name popped up.

Q1: Nice!

A: That was in '94, but then in that same year, I was banned for ten years, because I was too political; that is how they claimed, that I was too political. But I came onto ... And that was in Antarctica – we were busy constructing SANAE 4, and then I realised that everything was just being done from one side; there was just instructions, but ... And if people worked until they were half dead, then all that would happen, is they would go to the ship or they would be sent to the ship, and then a new fresh bunch of guys would come. And then I challenged that. And I said that's not right; we need to have a meeting and at least once a week, in the morning, we're going to have a meeting to listen to what it is what you have that might be nagging you. It could be a mental condition; could be a health condition – it could be anything. It's just about what we're doing. And then ...

Those meetings are still being held on a Wednesday morning in Antarctica, from that

time. But then they said, no; that they're not looking for somebody that is going to rally the troopies there in another direction. They want the troopies to be rallied in the direction that is only work orientated.

Q1: So how did they ... Is it because the sun shines so long ...?

A: 24/7.

Q1: 24/7 ... And they just worked people to the bone?

A: Yes. I must admit that I have sometimes now, with myself being a group leader, I also have sometimes the same, because I can realise the method behind the madness.

Q1: Yes.

A: You have to get that work done in that short space of time, because the ship is leaving. So I tend to move toward that as well when I'm in Antarctica.

Q1: But what happened? Did they have like an official enquiry before they banned you?

A: No, no. You see, management at that time was the 'see all and be all'. Everything was ... If they decided, listen, we don't need you there, they don't need you there. They don't need to come to South Africa and say, listen, we need to now ... Like we have processes now that you need to go through and say, okay, fine; why is it that he's not there? No, they just decided listen, you are not fit for the activities there, so we'll put you off. And funny enough, I went back in 2004, not as a layman, but as a group leader.

Q1: Yes. You've been a group leader for quite a while.

A: From 2004.

Q1: From 2004. What can you remember about your first voyage itself?

A: The first thing that came to mind when we started hitting the high seas was "what the hell did I get myself into?" Because then I started ... If you see, you come out of your cabin, and there were rough guys that worked on the ship. So they didn't take anything ... Like you can't be sick or anything; they will be on top of you and "what! you are a baby!", and stuff like that. But for me, you come outside towards the back – I think it's the aft deck – and I saw a wall of water that stood upright, like Table Mountain, and I went inside again. And I swear I took all my insides and put in onto the ...

Q1: Yes ...!

A: And I thought, "what did I get myself into?" And I started praying and ... When we came to Antarctica and I saw this big band of ice, then I thought to myself, "these people say we're going through there, but how the hell can you go through there and it's not water?!" No, but I mean, that kind of experience ... It was ... It definitely put me in a frame where I was very close to my spiritual self. And then you sort of ... Now you're starting a lot of introspection, because "look at this; look at where I am; how I see things

differently now ... "Because I saw a bird coming in – it's called a storm petrel – and had all these clothes on and I was still getting cold; and I saw this little bird coming in, singing, and they said no, they normally come when a storm is about to come on. And I thought to myself, "look at that small little bird; it's got nothing on except for his down that he's got on, but he's got nothing on him!" And look at what I'm ... and I'm still getting cold! It was *lekka*; that was my first real experience.

Q1: You said you were ... That was '94. So were you the only so-called coloured person during that trip?

A: No, no. Even before that, there was one or two that I can remember, that has ever gone there, being coloured – or black for that matter – but I was most certainly the first Muslim to go; the very very first Muslim to go, and the only one – and another colleague of mine.

Q1: So how was that? I don't know ... Are you a practising Muslim ...?

A: Yes! I don't know what that means, "practising" – a Muslim is a Muslim! I know, in the West, it's 'are you practising or not practising' ... Because you're either a Muslim or you're not.

Q1: The ship never leaves during Ramadan, right? Or does it sometimes?

A: Yes, it's leaving now the last week before Eid.

Q1: So what do you do?

A: You keep on going. When you're on the ship ... In our religion, provision is made for when you travel. So when you travel, you eat, because your body needs to be sustained in a certain way for you to be able to cope with that travel. And then when you come to land again, you just pay back in the days that you've lost. Or otherwise, what you can do is you give alms to the poor that would feed one family per every day that you've lost out on. So you will say, okay, to feed a family would be about R80, so if I have lost five days, it would be R400 that I would need to pay in and give alms, and then I don't have to pay it in fasting again. So even ... They get distributed to the ...

Q1: Because I'm thinking, during the construction of SANAE at least, there must have been times when the ship went down during Ramadan; and there the sun doesn't really set, so ...?

A: And then that applies.

Q1: O, interesting. Okay. How exactly does DPW slot in with SANAP? Or what's your mandate; what must you do? From whom do you take orders?

A: NDPW ... We are ... Our mandate is to be custodian of all government buildings in South Africa. We are the custodian thereof; we construct and we are the custodian thereof,

after which we give it to clients. Now the clients are varied. It will be from the Presidency right through to the Department of Environmental Affairs, which is what it's known as now. So each client had a specific need. This client, the need of this client from us, in terms of our mandate, is to construct, building, structures that will house scientific personnel for their needs, so that they can ... So we are critical in the provision of scientific research bases on these three islands. So what happens is, the client will say 'we need a new base', or 'the base is starting to go', or 'you know what? the old base has now crumbled; the snow has taken over; we need a new one'. Then we start the design process, and we say 'let's design a new one'. Now in terms of the design, who needs to have a say in it, in terms of use. The end user always has a say.

Q1: So, when they constructed the new Marion base and the new SANAE base as well, did you have a say in who's going to be the engineer, the architect ...?

A: We appoint.

Q1: Did you appoint them?

A: In terms of the design, we appoint. NDPW, because we carry that mandate from government, we appoint. So what happens is, the client says okay, this is our need; we need to house 80 personnel over a year, or over a takeover, and we need to accommodate for at least 15 to 20 personnel over the year, the overwintering period. This is what they require in terms of their studies that they need to exercise, and this is what is required during a takeover. Then we do what we call ... We do an appointment. We ask for the appointment of various professionals who will see to that kind of need. First thing they do, they do a space ... is it possible, and then we say okay, fine; just in terms of the space, is in terms cost – what it will cost. And then we draft all of that and then creatively put it forward to the client, and then client says 'we can' or 'we cannot' budget for it.

Q1: Oh, I understand.

A: And there the process starts. And when they say they can budget, then those professionals that we've appointed, we normally put them in a management position, to oversee the process. So the source of the design now oversees that the design goes as such.

Q1: So do you have joint committees once the process has started? Do you sometimes have joint committees, where say for instance Henry Valentine sits on the committee, you sit on the committee, and then you decide together ... ?

A: Absolutely. That is part of the procurement. Yes; definitely. Look, the client is always represented on all of the committees, so that we don't lose the line that the client wishes to have at the end of the project. So the client always ... 'okay, that's the need', and sometimes during a project – that's the beauty of the field that I'm in – it changes

direction, but we still come out at its goal. It changes a bit of direction, because all of a sudden, it moves from 80 to a 100 people, and then you have to increase, and that carries an increased cost. So you know ... things like that.

Q1: It's quite a tricky management story as well.

A: You have to know. That's why we've got Project 2000 that we work on, so we don't lose track. We've got a baseline that we work on.

Q1: How important do you think is NDPW to SANAP?

A: I think it's critical that NDPW ... If we've done a basic variance between ourself, as custodian, and what it would cost if we had put our function out to the private sector — we being in the public sector — and we've realised that, even for a simple ... even for a takeover, the cost would be at least nine and a half times the amount of money that it costs us to do the same amount of work. And then also, with us, you have spin-offs, whereas in the private sector you're not guaranteed of spin-offs. Spin-offs in the sense that I've spoken to you earlier about — about training; getting people trained, qualified. That person can feed his family once he becomes a plumber or once he becomes a ... We've got that kind of spin-off in the public sector; we ... That spin-off is not guaranteed in the private sector. In the private sector, you will get people that are qualified that are employed, and that increases the costs; whereas we are able to maintain that all the time.

Q1: Speaking about training, where do you recruit your personnel from?

A: Our personnel is recruited from ... We've got a workshop, a fully-fledged workshop, that services all government buildings; we've got a maintenance section, so we recruit from internal, and if necessary – we do not find the resources – as I've told you earlier, the resources are depleting – and then what we do, we normally make an application to HR to go to the private sector. But normally that comes at a hell of a cost, and we can already see that it is creating problems, because the guy that comes in from the outside, that has to be appointed, has to be appointed at a certain rate, and the people on the inside are not on that rate, so there's already a problem that I'm working on in terms of training now.

Q1: What do you look for in a person to do construction work on Antarctica?

A: Man, as a group leader, I don't question your ability in terms of your constructiveness. If you're a plumber, you're a plumber. I look for more than that. And I've just had interviews recently for Gough. I look for more than that. I look for people who can live with people; all aspects of living with people. And then I look at your capabilities as a leader within your field and then also as a leader within your workshop environment. And then a leader in your community, because collectively that, to me, will mean that I get a well-rounded person going with me that I can depend on; because I need to attend

somewhere else; I need to see you – you have a need on the island, so I need to know that I can leave her on her own, you know. So that's what I'm looking for. The constructiveness of that person ... I can always use a hammer and a chisel, you know. And you can work on that, because that is bound to change all the time. The systems always change, but the person is what I'm looking for; the person that's able to say, when he comes back, that he's had a good time; he's had a full experience, and that he's gained the knowledge that was necessary on the trip.

Q1: What are the specific challenges – and I suppose you'll have to take it island by island and then Antarctica – of working on Marion Island, in extreme conditions?

A: That's broad; that's very broad. Are you talking about weather, or are you talking about people?

Q1: Both; whatever comes to mind?

A: Both ... The biggest challenge is people; the biggest, biggest challenge is people. And why I say that is, people come with moods. Now I've learned to leave moods at home when I go on a trip. You see the same person, that's it. I'll cry on my own and I'll talk to myself on my own, but you see the same person. And that's important to the other person, because that person, you don't know what that person feels at specific times, or ... I've just had an induction – you should have been there, on Monday morning, when I had it with the guys, because I was telling them, you might find that you don't like stink toes, but she doesn't like bad breath! You know what I'm saying? You put it in literal terms. But the biggest challenge aside from people, is also weather, you know. It retards progress in terms of constructive ability, so for instance say on Gough Island or on Marion Island, we will get a lot of rain most of the time – here and there snow on Marion – so your gear ... Remembering that the work cannot stop; the work has to be completed. So all you do, you just ... you layer the person. And you say, listen, there's no such thing ... And I just had it on Monday, when I told them, listen, there's no time to get sick; you can recover when you're back on the ship; you can sleep for three days; not a problem. But we need ... I don't want to hear that you're sick and you cannot get up; unless it's extreme and the person is half ...

Q2: Half dead ...

A: I'm not going to say the word. You know, when I go back to how I used to feel about it ... So, that's weather. Marion is mostly rain, so you're kit will be more leaned towards rainproof materials; whereas Antarctica, you don't get rain; you get beautiful, beautiful snowfalls. So it's more cold that you'll be, because once the snowfalls come with wind, it becomes dangerous, and the same little snowflake becomes an extreme danger to your skin. So yes ... So the clothing changes, and with the clothing change comes a further retardation in your ability to construct.

Q1: Yes, I was just wondering, how do you construct with thick mittens?

A: Well, you acclimatise within about week and a half, and then you're able to hit the hammer with the same blow that you could when you were here.

Q1: The workers who go down to Antarctica and Marion, do they get overtime pay or danger pay?

A: Yes. They get overtime. They get all of what is due to them. But the biggest challenge to me at the time, and still is – you're always up against the wall – is the fact that SARS do not see us ... They say we go to a South African base, so we fall within that framework of earning in South African currency, whereas everyone else around you, that are service providers to that industry, are earning – because they moved outside the three of four nautical mile radius – so they earn in international currency. So they earn in dollars.

Q1: Oh ...

A: So you always find ... That is perhaps one of the reasons you find that people are leaving this industry. They're not interested in wanting to stay. Like, for instance, our counterparts in Tasmania, down there in the south of Australia, they earn dollars. So they earn internationally ... They're on Aussie dollars, but when they go outside of their nautical mile radius, they earn in dollars. Because that's how it is; that's just the law. So yes, they get everything, and that is still the biggest challenge for us to overcome. But we've written to SARS; they feel strongly that until such time that it changes ...

Q1: Can SARS ... It's not like you earn millions of dollars, that they're making millions off you ...!

A: Well, a couple of hundred grand's okay!

Q1: You've been going now ... in 1994, and then 2004, and it almost sounds like you've gone every year after that ...

A: Almost every year.

Q1: In that time, can you see any changes in terms of the people?

A: There's a change on Marion. There's a collective with a goal. I see a slight change coming on Antarctica as well. I do think that the one things that holds everyone back in terms of progress with whatever program they're busy with, is still racism. It still comes down to that. And once people can start looking past the person and looking at the ability of the person, I think — and I'm very confident that ... I think we're one of the best nations; give us five to ten years. We're obviously going to be the best in terms of our progress and how we move forward. Because it takes time for people to look past my skin colour of past my lingo or past my method of doing what I do, but getting the job done, obviously.

Q1: But would you say it's better on Marion, if I understand you correctly?

A: It is better on Marion, because on Marion, although they are "siloed", as I feel, that is perhaps one thing that I don't like about Marion, where everyone just does what they have to do, and that's it; but they just need to engage with you about that, and that's it, finish and klaar, and they keep on going again. It's always nice to know ... Who knows? I might find an interest in science, big time, and have moved from here and moved into the science field if I had known more about what they're doing. So it's a bit too closed, but having said that, Marion is a bit more open in terms of ... they look at you as a person. And this is your worth coming as a person. Whereas Antarctica still needs to get that. But when you're in Antarctica and you talk to the Russians that pass by, or the Americans that pass by, then it's like a breath of fresh air; look at this: they come and they can talk to you for hours, and they will ... you know. Whereas your own South African colleagues, your own countrymen, they won't even tap on that kind of knowledge that you have with you. But somebody who's a professor, that's got his PhD at Harvard or whatever, that person will find it interesting speaking to you and you know, saying "that's interesting, but ..." And then you always get this ... they pull up their faces, and I think, jis, we're out in the real world hey, we need to compete; and I tell you, we compete big time with everything we do – our sciences; everything. We're competing there. And in most cases we actually come out tops, but we don't want to give that to ourselves; we don't.

Q1: You spoke now a bit about Russians and about Australians visiting. How much exchange are there between ... because there's quite a bit of exchange going ... scientists moving from base to base, learning there ... But do you learn from other people on other bases?

Do you sometimes visit other bases?

A: Oh yes. I've visited Neumayer. I've still to go to Troll, so in terms of what I do and the mandate that I carry, we're always looking at systems in terms ... say the sewerage system, the water system – how does theirs compare to ours. And I don't use the other way around – how does ours compare to theirs. How do theirs compare to ours, because currently we've got the most advanced scientific base in the Antarctic, although we don't have as practical as I would have seen it happen at for instance Neumayer, the German station – they've stuck to basics and the basics are working. We've gone a bit beyond, but going beyond, it comes with certain amount of problems because of the extreme weather conditions. So your properties of the materials change, so we haven't taken that into account. But I'm trying to go back to basics in terms of damp, or whatever, you know; little things. And yes, we do engage with each other and we go through the bases that we do visit. And then we look at what they've done that could benefit us. And then maybe look at how we can redress ... So that we can see okay, well, the washer lasts a bit longer than ... Because we've got to heavy and too intricate a design on our taps ...

Q1: Okay, explain just a little bit for people who would not know – which are most people – how does a day in the life of a construction worker on Antarctica proceed?

A: I'll tell you, it starts very early in the morning. Because you don't have night, you don't have darkness; there's no absence of light. You can start very early, and normally what I do, I take advantage of that. Sometimes you let guys work through, and I've done it in the past – I'm still doing it if it's necessary – you let guys work through two days, and on the third day, you tell them, okay fine; let's rest; let's go and sleep. But typically, a constructive worker out in Antarctica, 1: you have to be able to carry your own body weight very, very well, because you're going to put on between 22 and 27 kg, and you're going to be walking in snow that drops to about say up to 500 mm, so you're going to have to lift yourself out every time and move forward – that's in the external environment. Internally, it's okay, because the ... it replicates the same as what you are working here. But that's the challenge. Working in Antarctica is always challenging for a constructive worker in that sense, because you're putting on extra weight and now you still have to produce the same as what you have produced. The other challenge is, because of the extreme cold, you might not be able to immediately register hurt or pain yourself. So you come back to the base and then you realise that ... why this hand of mine, why is it starting to turn black; and then you realise that you've almost got frostbite. But when you're outside, you maybe had a ting and you took off your glove, and now you keep on going, because the coldness just deadens it quickly, and now you just keep on going, but you're not realising what you're doing to your body. So you've got to be aware of your body; at all times, you have to know the condition that you're going in. And then ... a 4-pound hammer's not a 4-pound hammer anymore; it now becomes an 8-pound hammer, but with a 4-pound blow ...!

Q2: That sounds incredible! How do you prepare the workers who go down? How do you train them? What do you teach them?

A: I have a method when I go down to the Antarctica. What I do is, each person has got their own area of responsibility – being a plumber, so he's responsible for plumbing; so what I do is, as we come closer – I start here, but I obviously increase it as we come closer – and I let the plumber give us a presentation on how and what it is that he will be contributing to the team, in terms of what his responsibility is. And then I try and then I do the same thing all the way through, so that when we come there, it's a matter of just getting off and doing the work that needs to be done. No one needs to be told what to do and where to do it and when to do it; everyone knows what to do. But in terms of getting them to acclimatise, I start doing that when we're say about two or three days out, when you start realising that the sun is not going down and it's eleven o' clock at night or it's ten o' clock. So I push those presentations to that time; so I move with their body language and they start being up later and later and later, and they're not realising and they're not realising ... And then all of a sudden, they've been awake for two days and they don't even know it! So that's what I do.

- Q1: Quickly going back to SANAE ... I recently came across a range of articles from 1995, 1996, when it opened, that said it was painted in the old South African flag. Did you notice that in 1994, or wasn't ... That was just construction still?
- A: That was a directive. You see, the entire design, the construction, was based on the old South African flag, so all of your fibreglass and your resin were made out in the old South African colours orange, white and blue. And then in 1994, there was a directive that came from the Minister the first thing they needed to go for in terms of representing the country which now had a new democracy, was to change that. Because people would see that, and they would still ... Although you still find that attitude there, it had an impact, obviously, on people. But after that, people realised that this is just a building; it's just a building, but coming to that building, that impact that you would have had, would have been ... you know. It's like being on an ... I don't know if you're rugby lovers ...

Q1: No!

A: If you go to Newlands, or you watch on the TV, you watch at Newlands, and you see all of these South African flags, and then in between you see one of these old South African flags, and then ...

Q1: Yes, I know all about that ...

A: And then obviously you ... you might get a different feeling to me; I might get a different feeling to someone else. And then you look at that and ... I don't get cross; I think to myself, "Wow! In what age do you want to find yourself?! I'm moving forward."

Q1: That's my reaction ...!

A: You know what I'm saying? I mean, we have to move past that; we've moved past colour; we've moved past ... of looking ... what?

Q1: So now, what happened?

A: It's the same effect.

Q1: Is it still those three colours? Or have they painted the base?

A: No, no. They had to paint it, and the ...

Q1: So how does that work?

A: Well, it remains a challenge. The company that was ... the company that we sourced the paints from was Sigma, I remember, and they had to ...

Q2: Is it a local company or international?

A: It's an international company, because the paint ... But we are local now; in terms of all our stuff, we keep it local. But at the time, there wasn't a company in South Africa that could give us a mix of paint that could withstand that extreme cold weather. So what

Sigma came out with was a paint that had to be mixed with a resin and it could retain its colour. So that company we ... But for now, we're sourcing it locally; Dulux does the same thing, because their technology has progressed, so they can also produce the same thing and they can mix it for us exactly the colour that we want.

Q1: So it doesn't have to be repainted every year?

A: No, it doesn't have to be repainted every year, but I think I should be repainted every say three to five years. Because it's something that is not born into the product itself; it is something that you are applying, which needs maintenance.

Q1: Okay.

Q2: So do you have construction workers walking along the top of the base, painting?

A: Yes. And under the base, putting up the scaffolding. And I have to do all of those logistics before. I have to not forget anything, because there's no little shop around the corner ...!

Q1: How important do you think it is that South Africa has an Antarctic program, which can be quite expensive?

A: It's extremely important. For one, we've got ... Look, they measure seismic activity from the Antarctica at best; that's one – that kind of information, for us, and more. And I'm talking outside of my mandate. I'm talking of what it is there that you learn when you go down and you meet, and you meet different people, and you realise that this information, having been gathered and sifted, it finds itself in archives within universities, like yourself, doing a PhD. So that is important to me, because I would like ... Hence, I've started the challenges, so that ... And people always refer ... "When is the next edition coming out?" Similar with you – it doesn't stop, your PhD; it goes on.

Q1: Yes. For sure.

A: Because we know that it's a mineral rich environment, but that environment is also giving us information that tells us how the world is moving. So climate change, because the one thing that I've learned there, the biggest hole in the ozone layer is above the Antarctica. So that kind of studies indeed, you know, we've been part of balloon shoot-ups, for the Americans; you find yourself, interestingly enough, part of exercises that tend to move you away from your mandate, but then you find that interesting; you say, "Ah, what is this?! The miner's balloon campaign ..." "What is this about?!" "Oh no, we send balloons into different stratospheres, or spheres of the atmosphere and we gather data to see ..." "Oh, okay; okay!" So yes. And it's important for us to keep that all the time, so that it is not lost and that there's always a future generation that can go and want to explore, so that it benefits our country all the time.

Q1: What do you miss when you're down in Antarctica for three months or on Marion for a month?

A: My family. But I tend to think about that when I get back onto the ship, on my way back, because I kind of switch it off when I leave. That's the only way I survive. When I leave here, the people on the ship becomes my family; the people on the base become my family. And then I speak once a week to my family at home, for ten minutes, not longer. And all I want to know is, is everything okay; put down the phone and that's it. Then I put down the phone and I go back to my "family". And when I get back on the ship, then I withdraw myself a bit, and I'm going to meet "my family" ...

Q1: And do you sometimes miss things about Antarctica when you're here in South Africa?

A: Yes.

Q1: What?

A: The one thing I miss a lot about Antarctica is, when you're there, there is a great, great awareness of working together. Because people depend and need each other in that environment. When you put your foot down, you don't hear from that person again until the next time you go down. And we can be so ... We can be bombs if we're put together, you know. It's one of the sad things that all of that experience, be it in different fields, is just left to go in their own directions ... You'll be doing a PhD, and you will be doing that, and you'll be doing that, but there's no collective understanding of how to ... like I believe the Australians have. They have a centre, where all of this comes together and they create a knowledge base for it. And from their knowledge base – it's like I think you are intending to do – you are always ... You can just go there and you'll find anything and everything on it. Now I know that SANAP has got a website, but I mean, we can improve and we can include more of what is currently being shown. So that it benefits more. The reason we don't have a big skills base is because this has not been shown to people. Why ... The President two years ago made a statement that the skills have left and it is still streaming out of our country in terms of artisans. Now I see an artisan in the same way I see a doctor, someone who's got a doctorate. It's the same thing, but you haven't made it interesting enough. People don't know that ... out there even in Antarctica; you are able to go and exercise as an artisan. It's not only the scientists that need to go there, because you need to provide the infrastructure for them to be able to cope in that environment.

Q1: Scientists can't really live without the artisans at all.

A: Exactly. And I've realised that, because we are the practical people putting together what they want us to put together. And I've realised that on the islands.

Q1: What do you think about the idea of a Polar Research Institute?

A: Brilliant! It's so overdue. It's long overdue, and South Africa will play the most important part. And you know why? We are the furthest south. Everyone has to stop here, before they leave. So we need it. We need it more than ever, because everyone stops here. I

mean, the Polar Stern comes here. This is the last stop before they actually go down. So why not have an Institute? Why not bring everything here and move it from here? And then we can have – if you're looking in terms of money – we will get those budgets back into our country. It's revenue ...

Q1: Because they have to pay harbour levies and what other ...

A: Thank you.

Q1: Yes. I should ask someone to inform me when the Polar Stern next comes, because I hear it's quite an impressive little ship.

A: Yes, it's an icebreaker. So it's got a massive, massive bough ...

Q1: Are you going to try to be on the first journey south with the new South African ship?

A: If you say "try" ... This is funny, because I'm now getting sick of what I'm doing. But if I tell people that, they say "How can you?!" Because they've never been there. I've been doing it for too long. We need to broaden that skills base, so that other people can start doing it. And yes, it will most probably be ... I won't be trying to get on; I'll most probably be going on the new ship next year, if it's there. So too until that ship goes and I'm still alive and I'm able to serve in this industry ... Then I'll serve it.

Q1: So, if there's one thing you could change about the whole South African Antarctic program, what would it be?

Attitudes of people. They must realise that the programme is so big, and that we are thinking ... But that's a typical South African mentality. We are the most critical of our sport players, our ... You name it. Whether it's a politician or a sports player, we are very critical, number one. But attitudes in terms of this program – we don't realise the magnitude of it. We will talk about the Madrid Protocol; we will talk about a treaty that's been signed ... To people across the world, that treaty has a certain amount of status that needs to be upheld, whereas as a South African, one comes in, and because of our past and what we're moving towards, "Ag, wat wil jy hê van my? Da-da-da; ek sal dit doen soos ék ...", or "I want to do it the way I see it, because I'm South African, man! Never mind the world; never mind the status; I'm just going to do it." So yes.

Q2: What would you like to improve in the program, except for the attitude, in terms of logistics or ...?

A: I'd like to see that all of the ... You've got one program, and that is it sticks to one program. Although we have different people adding towards the success of that one program, people think that their own success is the success of the program. Sometimes it will be to the detriment of another one and they just don't mind and they don't care. We need to have that cross-functional teams working and saying, okay fine, you being scientists and me realising that you need a bit of practicality within your frame, you also

need to realise that you need me. Because we all need each other, and not a matter of 'that's what I need and that's it; if you don't want to give it to me, fine, I'll wait for another year to go and do it' – that's not the attitude that you need to have, because everyone needs to progress and that's one program. So yes, I'd like to see it being one program, one program only. And if the success of that program is determined, it will be determined by the collective and not by the individual or the groupings.

Q1: Two last questions. First is: how is to work with scientists?

A: Brilliant. We can save the world. Brilliant. I'm somebody ... I like to have deep conversations; very deep. And I read a lot my Qur'an, and my Qur'an tells me a lot about the world and I cannot make out what it says, because it's beyond me; the time for that to be revealed is not yet. But I find that with scientists, with their research that they do ... Like for instance, if I would talk to the oceanographers, I will tell them 'did you know that if you go at certain depths into the ocean, that colours change? That this colour becomes that colour?' And they said 'how do you know this?' 'No,' I said 'I read the Qur'an, and the Qur'an tells me that; it says that that colour becomes that colour and that you get salt and bitter water on the one - because the Qur'an says: "I've let loose two flows of gushing water. The one is salt and bitter, and the one is sweet and ... " - I can't get the word now. So that even is realised when I talk to them and I say 'Ja, but did you know that the oceans will never cross? That there will always be a line between them?' They said 'how do you know that?' 'Because I get in my Qur'an. And it says that.' So now I get the practical in that they're doing their tests and they're doing their research and they're putting stuff into the water and I'm talking to them – and now I realise that that is true.

Q1: Nice.

A: So for me that's the brilliant part of my interacting with scientists and scientific personnel.

Q2: Do you find that everything is in the spirit of one is learning from one another?

A: Yes; brilliant. In fact, with me, I'm busy reading a book called *The Phenomenon of Nature* in the Qur'an, which is about chemical properties and how we make up ... we are part of the entire properties that is to be found in the earth. We are no different.

Q1: It's interesting.

A: You know ... And we are finding that it takes you down to atoms and that your entire make-up, if you look into this earth, therefore that is where the saying comes from "from dust to dust", because that is what you are made from. So you're a part of that entire chemical make-up. So I'm busy doing that so that I am waiting to prepare and see who's going to now engage with me on that ... that kind of discussion! So I kind of prepare myself. But that is what I have, because that is what I find interesting, and if the trip is 26 days, then I start to talk about every day to someone and I can relate to it.

Q1: And then a last question: describe Antarctica.

A: Phew ... Okay, if I'm going to describe it, I would like to say it's like this: you close your eyes, you take Listermint and you put it into your mouth and you gargle it for about 4 minutes; and that fresh part that just comes out, that's Antarctica – that whole ... That ad, did you see on the TV? It's like ... everything just ... That's Antarctica.

Q1: Wonderful! Thank you. Do you have any questions ... ? Oh, I've got one last question – I don't know why it popped into my mind now ... Do you ever have women construction workers going down?

A: I'm working on one now. They are very slow on entering. We've had a slot, a one-hour slot, in Alexandria township – on the radio, we were inviting women to enter into the construction world; although they're coming into construction, they are merely coming in at a management entry level, so that they can manage. But I would like to see ... and I'm busy working on the first electrical person to be a woman from our workshops.

Q2: So you're trying to train the women so that they have the skills to be able to go?

A: Yes. You see, there's not all the trades that would be suitable for women.

Q1: Yes, of course not.

A: Like for instance, electrical – why not? And I feel that with women in the electrical field, I feel that I will have an edge over a man, because I think the woman will just be a bit more ... they will have more depth in their kind of study that they do, so that they can give me better feedback in terms of what it is that I can do better on Antarctica or on the islands.

Q1: Cool. I hope more women get interested, because I also think it's something that would have to come from them as well.

A: There is another one that's entered ... But they're slow, man; they're slow. There has been previously ... What happens is once they realise that they're on to a certain field — it's human nature — I look at what you earn and I think that I want to earn what you earn, but they don't look at where you are and how you can make where you are as comfortable in terms of earning as what you should be making it. So they look at that and they change field and they change course. And they say okay, I've started out becoming a plumber, but you what, now that I've got my diploma, I need to go quickly; I want to move in that direction, because that ...

Q1: Yes, they get advanced easier at the moment ... Okay, thank you.

A: That's it!

END OF TRANSCRIPTION