

BERNARD STONEHOUSE

Edited transcript of a recording of Bernard Stonehouse interviewed by Chris Eldon Lee on the 12th December 2011 and the 7th February 2012. BAS Archives AD6/24/1/154. Transcribed by Andy Smith and Alex Gaffikin, 7 March 2016.

[Part 1 0:00:00] Lee: This is Bernard Stonehouse, interviewed by Chris Eldon Lee, on the 12th of December 2011. Bernard Stonehouse, Part 1.

Stonehouse: My name is Bernard Stonehouse. I was born on the 1st of May 1926. I think the whole country went on strike about that time. And I was born in Hull, Hull, Yorkshire.

[Part 1 0:00:28] Lee: What was your father's profession?

Stonehouse: Well he had a business in skins, fur. I think he was called a low grade skin merchant, which meant that it was sheep skins and rabbit skins rather than the sables and things like that. But he was hit very hard by the Depression, and he lost his business in about 1928 and never quite recovered from it. So he tried several other things. He was in business but he wasn't a business man and I can sympathise with him now because I think that's why I have always avoided going into business myself. I just wouldn't be right for it in the way that he wasn't. I think it was a warning to me.

[Part 1 0:01:22] Lee: What about further education for you, where did you go?

Stonehouse: I was at primary school and then the Hull Grammar School which was a very good one, a good old-fashioned grammar school. And this was just coming up to war times – when war broke out in 1939 I was evacuated with the school to Thorne which is near Doncaster in Yorkshire. It was about 40 miles away and I could cycle home every weekend if I felt like it, which I did usually. And then we returned to Hull in 1944 I think it was probably. By that time I had signed up for the Navy. So I left school and went to Hull University College which was my local university college at the time because that was somehow involved in the Y Entry Scheme for the Navy. That was the Youth Entry Scheme – I could do some of my pre-entry training there. So it was Hull University just for three or four months while I was waiting to go into the Navy, and then they hauled me in and that was fine. And that was all my formal education, apart from the Navy, until quite a bit later when I came out and then went to the Antarctic, came back from the Antarctic, and then completed a degree course at University College London.

[Part 1 0:03:04] Lee: What drew you to the Navy, Bernard?

Stonehouse: Well I think a lot of our friends around where we lived in Hull, North Hull, were master mariners and people connected with shipping, and engineers and seamen, and they were sort of role models for me in a sense. I liked them, I liked what they did, I liked the idea of travelling and so on. And I'd rather lined myself up for the Merchant Navy as a possible career. And then when it became apparent that the war was going to continue a bit longer and I'd better get into it, certainly the Navy rather than the... I wanted to fly but I also wanted to go to sea. So I joined the Fleet Air

Arm, which was the obvious thing to do. I was very surprised when I was accepted for it because I didn't think I was strong enough or healthy enough or whatever. I was not athletic, in any sense. I was the original 7-stone weakling I think, at the time they used to advertise for, in the advertisements for body building.

[Part 1 0:04:34] Lee: 'Send sixpence in stamps'?

Stonehouse: Yes that's right, he was the one who always...

[Part 1 0:04:42] Lee: Charles Atlas?

Stonehouse: Charles Atlas Courses, that was it yes. I didn't do a Charles Atlas Course, but I always felt one down when I looked at that advertisement. Anyhow I passed the medical and that was fine, and then the Navy helped to build me up a little bit which was a very good thing. After the pre-flight training, which was at Gosport in Hampshire, we went over to Canada and sailed in the *Queen Elizabeth* when she was a troop ship and then I was very fortunate because we were trained in flying by the Canadian Air Force. And they were absolute leaders at the time in building people up physically. And whereas the Navy did a lot of 'knees bend, arms stretch' sort of thing, the Canadian Air Force was way ahead of that, and did some very very good exercising. We did a lot of things like playing water polo which is very good indeed for strengthening your stomach muscles and so on, which was important for flying. Particularly if you are going to be sort of weaving about, weaving and dodging, you need fairly good strong stomach muscles – they did all that. So apart from the flying training I got, I also got some very good physical build up which was useful.

[Part 1 0:06:28] Lee: The interest in flying, can you find a source for that? Can you put your finger on what it was that made you want take to the air?

Stonehouse: No, but it was the thing to do then. The heroes of that war were of course the Battle of Britain pilots and then of course the pilots who were taking the war over to Germany every night and so on so – partly that – but also I liked the idea of flying, and when I started I'd never been in an aircraft before I did this training. I found I took to it. I was never going to be a brilliant pilot but I could manage and I liked the independence of it or the fact I was not in a mob of twenty other people marching or anything like that. You had a certain independence for it and the three dimensional thing was very nice. It was a very interesting training course and I took to it like a duck to water, I suppose.

[Part 1 0:07:41] Lee: There were other specialities you had. I am interested to know where your interest in zoology seems to have sprung from because that was what you did later in life?

Stonehouse: Yes. I think I did biology at school for A-levels as they were then. You could you do physics and chemistry and mathematics, and I hated mathematics; I didn't like physics and I was interested in chemistry but there was also the option of doing biology as zoology and botany in fact, and those appealed to me far more than either physics or certainly more than physics or maths. I was never going to be an engineer or anything like that, so I think I took biology because it seemed to offer more things that I might enjoy, and again I took to it very well. I enjoyed it and

became very interested in animals and plants and how they worked and the whole thing – I became very much immersed in it. So I took courses in zoology and I think geography at Hull University College, but everybody agreed this was just filling in time until I went into the Navy. But I found that what I did in zoology there was very interesting and I thought, 'Right well this is what I am going to do. I'm going to be a zoologist'.

[Part 1 0:09:24] Stonehouse: Of course there were lots of opportunities then for working in the colonies, in the Commonwealth. You could become an entomologist in Kenya or something like that, or go to India and tell them how to run their animals and plants and so on. So it was something with a future. My Mother had put me down for the Post Office when I was five, which was the thing you did then. My family had absolutely no background in university life at all, and this was a time when you paid to go to the university and we wouldn't have been able to afford it. So the whole university idea was new and it opened up all these possibilities. And then of course at the end of the war, as an ex-serviceman I was entitled to further education and training scheme grant which was what got me to London. And by that time of course I had had three years in the Antarctic and I was completely hooked on penguins and seals and things like that.

[Part 1 0:10:37] Lee: Well that's the final piece of the jigsaw in your pre-history, is where this interest in the Antarctic sprang from – what's your first awareness that the Antarctic existed as a place?

Stonehouse: I don't know. It wasn't in my Hull background at all. I didn't know anybody - in fact quite a few Antarctic explorers have come from Hull but there was no connection there that I knew of. No, the Antarctic first came up because my brother-in-law, that married my sister during the war when they were both in the Services, went on Operation Tabarin. Now he was a zoologist...

[Part 1 0:11:27] Lee: Is this Marshall?

Stonehouse: Freddy Marshall, or Norman Marshall, he was one of our lodgers, and he was a zoologist. I liked him very much and I liked his attitude too. He was interested in fish which I was not particularly interested in but he introduced me to one or two other biologists at Hull when we were there at the university and I think that's probably where it came from. And he went on Operation Tabarin which was secret at the time, so he just disappeared and nobody knew where he had gone. And then when he came back he said well he'd been to the Antarctic for 18 months and it was a nice place because it was a good place to go and do some work. So I think he got me interested. And then after the war when I was still in the Navy and by this time I was commissioned and I was doing a rather dull job because the war was over and I was an education officer. It wasn't very exciting.

[Part 1 0:12:36] Stonehouse: An opportunity came up to go on to the successor to Operation Tabarin which was the Falklands Islands Dependency Survey. An order came around the Fleet saying they wanted somebody; I think they wanted a meteorologist. Well I wasn't a meteorologist but I had done meteorology in my flying training; I had never read a barometer in my life that I could remember. But I put in for it and to my complete astonishment was accepted for that. Because I also had the

flying background now and they were taking an aircraft down to the Antarctic for the first time with FIDS, and they had a pilot already, another Fleet Air Arm chap, but I could say well if they wanted, in an emergency, a second pilot or something, I could probably fly their aircraft for them and I would do the meteorology at the same time. So that's how I became involved in the Antarctic myself.

[Part 1 0:13:38] Lee: I appreciate it was a long time ago, but do you remember anything of the interview process? Was it rigorous?

Stonehouse: Oh yeah, no not at all. I think James Wordie was on the committee, the Bishop of Portsmouth¹ was. Now he had been on the British Graham Land Expedition. And Brian Roberts who was a sort of polar guru at the time. He also was on the BGLE, had been, and a chap from the Colonial Office who didn't seem to know very much about anything but as they were providing the money, he had to sit on it too. It wasn't in the least rigorous. I turned up and we chatted for half an hour and I said what I had been doing and so on, what my qualifications might be and I admitted I had never read a barometer, but I work on the principle that what one fool can do, another can. And so they said yes and I said, 'Now I want to go to a base where I can do some biological work, penguins or I don't know quite what but if I can get involved in the biology, I would like to.' This was really as Freddy Marshall had been able to do; he was at Hope Bay.

[Part 1 0:15:09] Stonehouse: Now I remember the chap from the Colonial Office said, 'Well I expect you will be able to do some shrimping in your spare time'. So that was my introduction to my career in Antarctic biology. I don't remember anything of the other two. Wordie I think kept very quiet. Brian Roberts asked one or two questions which didn't seem relevant at all to anything that I could think of. The Bishop of Portsmouth, who was a very good man, was very interested obviously in people going to the Antarctic and what they were going to get out of it. He was by far the most thoughtful, I should say, on the whole of the interview process. And he asked me questions about how I was likely be able to stand being away for a couple of years and things like that and I said, 'Well the end of the war, practically every man of my age has been away from home and away from the world for months and months and months', and I thought I could probably do as well as they had.

[Part 1 0:16:27] Lee: Did you have any concerns or reservations? Was there something that you ...?

Stonehouse: No, not at all. Once I got the idea that I wanted to go, then I wanted to go. Freddy had told me quite a lot about living at the base and so on. He didn't say a lot about it but he told me it was a good way of ... You got plenty of opportunity to sit and think and to absorb new things. If you were in with a good crowd that was fine, you had good company and you could enjoy the very limited social life there was, and I wasn't apprehensive about it. It all seemed fairly safe and straightforward. I had no idea what I was going to be doing apart from reading a barometer three times a day and so on and possibly doing a bit of flying, but I had no other ideas at all about it, so I wasn't worried about it, or anything like that.

¹ Launcelot Fleming.

[Part 1 0:17:31] Lee: Were there any parental concerns?

Stonehouse: Oh well, my mother was always worried that I wasn't going into the Post Office and...

[Part 1 0:17:41] Lee: Life would have been very different wouldn't it?

Stonehouse: Yes, and anything other than that she was ... 'Highly dangerous', she said when I joined the Navy. I'd 'probably signed my own death warrant', which I hadn't. No, by that time, I think she was used to the idea that I was going to do something absolutely daft, and this was as daft as it could get, so that's fine. But Freddy had survived it and come back, and so I might.

[Part 1 0:18:12] Lee: And so that was on your side, that was in your favour?

Stonehouse: Yes.

[Part 1 0:18:15] Lee: What if anything do you recall about the period between being appointed and actually setting sail? Was there rigorous training? Health & Safety?

Stonehouse: Absolutely none at all. I was stationed at an air station at Arbroath, *HMS Condor*, where I was doing a job of education and navigational training and so on. I was doing a bit of flying there because they were training navigators and I got a little bit involved in that, so I did a ... it was a school-mastering sort of thing rather than actually flying in Ansons which were twin-engined, small bombers I suppose. We were flying all around Scotland and the Scottish coast and so. And that was quite... I enjoyed seeing the land from the air. By that time I had picked up enough geology and geography to be able to appreciate that you could, if you took a navigation map up with you that was one thing; if you took a geological map up with you, you could see a hell of a lot more. And that came out later on when I was flying in England after the Antarctic.

[Part 1 0:19:39] Lee: And the book?

Stonehouse: Yes, I was very busy with that and then suddenly I was told when the ship would sail. The Navy gave me leave to start my secondment (as it was going to be). And then they changed their minds and said no. As I was going to be paid by the Colonial Office they were not going to pay me any more, so they put me onto the Reserve, which was fine. But I had about, I had a week in London I suppose. I met one or two friends there and so on, and then off we went.

[Part 1 0:20:34] Lee: Was the Antarctic what you hoped when you got there? What were your first impressions?

Stonehouse: Well I had seen photographs. We were at a place which was quite unfamiliar, because nobody had written about it that I knew of. I realised when I got there that this was going to be quite different from Scott and Shackleton and so on, because they were working round the other side of the Antarctic, and in higher latitudes generally. We were not going to have the extreme conditions that they had. We got to the Falklands, and I spent about a month in the Falklands waiting for... We

went to the Falklands in a passenger ship, the *Lafonia*, which was the one that was going to be running between the Falklands and Montevideo for the next few years. And I was waiting in the Falklands for the expedition ship to come in, which was a thing called the *Trepassey*, which was a sealer from Newfoundland. So I had, that month I was reading what I could in the public library and also in the library at Government House because one of the ... we met the Governor and talked about this and that and he said well he had a job for somebody who might be interested, just organising the Government House library. So I did that.

[Part 1 0:22:15] Lee: Is this Cosmo King?

Stonehouse: The Governor at the time was Jim or Geoff? I have forgotten.

[Part 1 0:22:26] Lee: Don't worry; we will look it up². [AG: possibly Sir Geoffrey Miles Clifford].

Stonehouse: I've forgotten his name.

[Part 1 0:22:28] Lee: So you were in his library?

Stonehouse: It was the Government House library. It did need sorting out, but it had some very good historic accounts and so on, so I was able to do some reading there. And learnt about the Discovery Expeditions which had been based partly in the Falklands Islands; that was in the 19..., from 1925 onwards. And they gave me some insights into what the Antarctic Peninsula was going to be about, because of course that's where they had done a lot of their work, where the whaling was going on. And so that was useful; it was a useful introduction to that side of the Antarctic. So when I got down there, I think, I was very impressed with the scenery and the ice and the snow and so on.

[Part 1 0:23:25] Stonehouse: We called in at one or two of the other bases. I spent three weeks in charge at Deception Island while the ship went off, I think to Hope Bay, and did some other work before they could take us down to, all the way down to Marguerite Bay which was where I was going to be stationed. So that was my introduction to it. Deception was a dreary place; I was very glad not to be having to spend a year there. At the end of my first year they said 'Well if you've had enough of Base E, would you like to come and be the base leader at Deception Island?' And I said, 'No thank you very much!' Having seen it I was quite happy where I was.

[Part 1 0:24:15] Lee: Were there other places of call? Other bases you saw on the way down to Stonington?

Stonehouse: No, I don't think so. I think we went from Deception, well we may have called in at Base F, the Argentine Islands. Yes I think we must have done, because I think that was just starting up, or they were looking for somewhere to build the base, Base F. But we went on down to Base E in this little sealer. We were under sail part of the time. I think we had trouble with the engines or something, but they put up a sail, so I went down to Base E under sail or partly under sail.

² Sir Geoffrey Miles Clifford was Governor of the Falkland Islands 1946-1954 (Wikipedia).

[Part 1 0:25:09] Lee: Give me a little thumbnail sketch of Base E as you found it in 1947?

Stonehouse: This was early '47, January '47, I think. Is that right? Yes that's right. Well it was a shed, rather elaborate shed. They are actually built of pine, double walled and so on, a single storey, set very well in the side of a slight rise on an island with the glaciers in behind. It was on that particular island because the Americans under Admiral Byrd had built an American base on Stonington Island. And Byrd's policy when he had, for his expedition which was 1939–41, was to set up ... He was the first one to think of setting up permanent bases and renewing the people every year, because previously everybody had gone down for a year or possibly two years (a sort of raid), and then come back, and abandoned the base and everything in it.

[Part 1 0:26:36] Stonehouse: He was the first one to think of this idea of permanent bases which of course, as he was well aware, indicated occupation, or constituted occupation. So we put down Base E on the same island. The Americans had chosen that island because it was one of the very few islands where you had a ramp of ice up onto the main Peninsula. The glacier came right down onto the island, and you could get your dog teams and your stores and things up there. That's why they chose it and of course we chose it for now these two reasons, one that you could do that and get onto the Plateau from there but also that it was pre-empting any return that the Americans might have made.

[Part 1 0:27:36] Stonehouse: I always feel that we were there not to keep the Argentines and the Chileans out because they hadn't even started. They were making noises, but they hadn't actually built bases at that time. But the Americans had built a base there and of course another one over on the other side of the continent. And although Byrd was not getting the support of his government in claiming Antarctica, he was making a lot of noise about the Americans claiming Antarctica and this was... I have never been able to establish this because every time I have asked the Colonial or the Foreign and Commonwealth Office for the papers of the time, they always tell me they are missing.

[Part 1 0:28:29] Lee: What is your suspicion though?

Stonehouse: They were in a cleft stick. The Americans were our allies, but on the other hand they had built a base on territory that Britain had claimed to be ours. And although Byrd's claims had been repudiated by the American Government, he was still very much in business and they had the basis of an occupation. Now of course that was upsetting the Chileans and the Argentines as well; they had been stirred up by Byrd, probably more than we had. But people tend to forget that it was the Americans putting down their base on Stonington Island that got the whole thing started up. And you might say 'Well the Americans stirred up the Chileans and the Argentines and then we had to come in because the Chileans and Argentines were ...' But I am pretty certain that when they were working out the need for Operation Tabarin, in war time, the fact that the Americans were there was not by any means a negligible, something that they were not taking into consideration.

[Part 1 0:30:14] Lee: So politics may have got you there, but once you were there, did that all then get washed away? And were you left to get on with other things?

Stonehouse: Well yes, essentially we were. Our terms of reference were to occupy the base, to expand it, which we did. We built Nissen huts and things onto it, improving it so that we would be able to live there year after year after year. Because of course we had adopted this policy now of the permanent bases that the Americans had tried and hadn't succeeded at, we were doing. And to improve the base and make it more comfortable and so on, and to survey from there, to survey the local area that was fine; we had two surveyors on the team. We were the main base; we had about a hundred huskies outside, which I got very much involved with. We had the aircraft and our job was to survey the local area and then to find routes up onto the Plateau and over the Plateau to the other side. So we could continue the survey on the Weddell Sea side and also to go down south from there to King George VI Sound, and explore down there.

[Part 1 0:31:53] Stonehouse: Now the Americans had done quite a lot of that. In the year that they had been there in their base, from Stonington Island they had done some very very good sledging that year. They included Finn Ronne who was an American who had been on Byrd's expeditions as his father had before him. And they had done some very very good survey and we were building partly on what they had done. So we had a very busy time. And also of course to keep the standard meteorological records and things like that, and to collect geological specimens and biological specimens and so on. So we had terms of reference that we worked with, but how we set about it was very much up to us.

[Part 1 0:32:46] Stonehouse: The leader at the base that year was ... had been the radio operator in the previous year and although he hadn't been a sledging man, he had been the radio operator so he'd had to stay home for the year. But he was very ... he was very keen to get out and do some sledging himself which he did. This was Ken Butler, Kenelm Pierce Butler, and he was a fairly independent spirit. He was great fun in a lot of ways. He liked pulling the leg of the Colonial Office when they interfered too much. If we got orders from the Government or from the Governor of the Falkland Islands, and we didn't like them, well we 'had trouble with the radio'. We appreciated what they were trying to do but we felt that, as we were on the spot, and we knew what the overall plan was, then it was up to us to organise it in the most sensible way that we could, and of course we did. On the whole we were very efficient at what we were doing.

[Part 1 0:34:10] Lee: Who were the other key characters that year, the ones that stand out in your memory most?

Stonehouse: Oh they were some of the most interesting people I have ever been with. Several, I think 4 of the 11, had decorations from World War II. We had all been in the Services to one degree or another. My contribution had been tiny compared with ... It was John Tomkin, who was a Military Cross. He had been in the SAS, the original SAS. Kevin Walton who had got a Distinguished Service Cross in the Navy, as an Engineer Officer, for keeping a destroyer's engines going during an operation. Tommy Thompson, who was the pilot, had a Distinguished Service Cross I think for sinking a submarine off the West Coast of ... in a Swordfish (a sort of string bag) and

so on. They were first class; they were very good company. They were older than I was. They were mostly in their mid-twenties; I had my 21st birthday there in the first year. They were very good company and I learned a great deal from them and they accepted the younger chaps very gracefully and we got on extremely well together. It was a good base, a very good base.

[Part 1 0:36:05] Lee: If you all had military experience, did that filter into the way the base was run? Was it run like a military establishment?

Stonehouse: Yes, but very much tongue in cheek.

[Part 1 0:36:17] Lee: Can you elaborate?

Stonehouse: We had scrubbing out every Saturday morning. That was called Barrack Room Sports, things like this. Whoever was in charge of the stores was known as the 'Pusser'. Well that was from the Navy of course – 'Old Pusser's Stores'. You had a lot of the terminology that came in and a lot of the humour was very much Service based and that helped a lot. I think in that year all of us had been commissioned and we had all, to one degree or another, learned that the Services were a very good thing but you didn't take them seriously, at least you didn't try to take them too seriously. Nobody ever pulled rank on anybody else. Anything like that would have been too silly for words; we would have rolled about laughing. And nobody took any account of what rank you had held. One of the outstanding characters was the air fitter who had been a Sergeant Engineer, a Flight Engineer. He was one of the few who had been in the permanent Services; he was in pre-war, in the RAF.

[Part 1 0:38:17] Lee: Who was he?

Stonehouse: He had done his training at Halton, David Jones. He died a few years ago, unfortunately, but he was the salt of the Earth. Apart from dealing with the aircraft, he dealt with the generators, carpentry and everything else. He was very handy and very good. He made a brass key for my 21st birthday, so I would have the key of the door. He got down in the workshop, got that sorted out in a way that I don't think any other of us would have thought of it. But he saw the need for a piece of kit and he scrabbled around and found the raw materials for it, and then did a beautiful job of finishing it off. And he was doing that all the time, finding things that needed doing and actually doing them. He had been a prisoner of war for three years because he had been shot down over Germany and he then had been on the march from the Polish camps across. He'd had a hell of a war, so two years in the Antarctic and then a compulsory third one, didn't really worry him all that much. He had seen it all before, much worse.

[Part 1 0:39:48] Lee: Was it completely harmonious the group?

Stonehouse: Yes. There were tensions from time to time, because we were all very positive people but there was a great deal of very good humour too, and that simply discharged all the tensions that I think at other bases must have built up. Nobody ever ... You could lose your temper over something but it was usually over something outside. It wasn't over other people and the other people could commiserate with you.

I learned a hell of a lot from this. I learned a lot about how men should behave when they're together and in straitened circumstances and how to keep things under control.

[Part 1 0:40:48] Lee: At some point the Americans returned, didn't they? They weren't there when you arrived?

Stonehouse: No, they rolled up when I had been there about a month, I suppose.

[Part 1 0:40:58] Lee: What more can you say about that incident, because there was a bit of a rumpus I believe?

Stonehouse: Well you had twenty three, I think it was twenty three Americans. There were eleven of us, twenty three of them. Finn Ronne was a very awkward man indeed. He was of Norwegian background, a Norwegian American, Engineer Officer in the US Navy, a Commander, Engineer Commander, very hard-headed. A very competent sledger and so on, but absolutely no idea of how to run people, how to deal with people. I wouldn't have liked his job of running these twenty two awkward bastards, who constituted the American expedition.

[Part 1 0:42:06] Lee: Why were they so awkward and you not? What was it? Did they come from a different pool of people?

Stonehouse: Well they were on a completely different wavelength. They came over and marvelled at us from time to time because we were living in a very civilised society, a very civilised little group. We had this hut, the main living room; we had the bunks round the walls. We had a polished table because we bloody well made it, out of planking, and we kept it polished and that was one of the things we did at Barrack Room Sports every Saturday. We had curtains at the windows; it was a very homely little place. They moved into this barracks that had been set up in 1939 I think it was, which had no windows at all except some skylights. They lived in a very slovenly way. They didn't bother to keep the place clean and tidy, and each of them had his own little area, all open of course to the centre, except the two who were married and had their wives with them (they had sort of huts out on the edges somewhere).

[Part 1 0:43:35] Stonehouse: They had no idea of how to live in a civilised way. Individually there were some very nice ones among them and they were the ones who tended to come over to us and heave a sigh of relief and sit down, have a cup of tea in a cup with a saucer and eat homemade scones because this was something we turned on just about every day. We lived very simply but in a very civilised way, and the idea of having a shelf up there with bottles of whisky and gin and sherry astonished them. They said 'That would disappear in two minutes if it was in our base.' We said 'Well it's there. We have a bung-ho night every Friday. If we feel like a party, we find out whose birthday it is. It might be one of ours or it might be Charlie Chaplin's birthday or something, but something to celebrate and we have a celebration. Nobody gets drunk. It's just bloody silly to get drunk in a place like the Antarctic. I go outside for a pee and I end up in a snow drift. It's just not the way you want to live.'

[Part 1 0:44:57] Lee: So did they then not have a military background, the Americans?

Stonehouse: No. A lot of them had but again, it's a different military. Now Finn Ronne was trying to run a ship. Ken Butler wasn't trying to run an army unit. Ken Butler knew that if he did, he would find himself outside with the door locked. But Finn, the first rule was: no drink.

[Part 1 0:45:35] Lee: The Americans were dry, were they?

Stonehouse: Well officially they were dry. No drink had been brought down, but I think what they did more than anything else in that base was brewing. Two of them in particular were from the Ozarks and knew all about making ...

[Part 1 0:45:57] Lee: Stills, yes.

Stonehouse: The cook, Sig Gutenko, complained that within a month of them coming ashore, he had no raisins left; he had no prunes. Nothing that could be brewed was left in his stores. It all disappeared. Well we knew where quite a lot of it was going on because if you went into the Meteorological Office at certain times, the smell was overpowering which was when they had just started up a new brew, and it was bubbling away under the floorboards. No it was the Seismo Shack, the Seismology Shack. They had a couple of seismos that had to be kept in the dark because they had light beams, so nobody could go in there you see, even the base commander couldn't go in there without upsetting the records. So it was under the floorboards there that the main brewing was going on. Being clever chaps, they had arranged for ventilation and everything else and everything would work very well and they made these foul brews and got completely honked on them from time to time. They looked after each other.

[Part 1 0:47:27] Lee: Did you ever try any of this hooch?

Stonehouse: Yes, I did once but it was the sort of thing you might clean your buttons with but I wouldn't do anything else.

[Part 1 0:47:39] Lee: The other area of contention, or possible areas of contention between the Brits and the Americans were (a) women and (b) dogs, not necessarily in that order.

Stonehouse: Well the two women were perfectly reasonable. They were both perfectly reasonable girls who ... One, the wife of the commander, Jackie Ronne, had I think been a secretary in his office³, and was fairly simple and straightforward, had done his typing for him and so on, and then they married. The other, Jennie Darlington, was married to Harry Darlington. Now she was from the American upper crust; they were wealthy, very wealthy indeed. I forget where the Darlington money comes from, but it's railroads or something, two or three generations back. It might have been banking; it might have been railways, but something of the kind, and they were reputed to be, each of them, a millionaire in his or her own right. I would think that was quite likely. Harry was ... I found him a very awkward chap. He'd been a Navy pilot. He and Finn Ronne got across each other very very quickly.

³ She worked at the State Department (*Antarctica – An encyclopedia*, John Stewart).

[Part 1 0:49:09] Stonehouse: He was supposed to be the lead pilot for the expedition but for some reason he and Finn got across each other. The two wives were loyal to their own husbands, so that meant they couldn't ... Although they had been brought down as company for each other, they were hardly on speaking terms at all, and so you immediately got ... The expedition was divided: there were the pro Finn people (not many) and the pro Harry people, but then not many people liked him either, so you had a sort of rump in the middle who didn't like anybody but got on with it. Now they were great. We had a lot of fun with them. They were nice individually; some of them were very nice people and they got things done. The pilots were very competent pilots. But they were so different from us and to some degree I think they envied us the social life we were living but didn't know how to set that up in their own situation. It would have been very difficult because they were quite different backgrounds, different people.

[Part 1 0:50:32] Stonehouse: The dogs, that was serious; that was a much more serious matter because they had lost quite a lot of their dogs on the way South, in the ship, the *Port of Beaumont*, and they called in I think at Valparaiso. I was told that to make up the numbers of dogs, they had simply gone round the city at night and picked up dogs. And certainly it was a very motley crowd. Any dog that stood more than two feet high was grabbed, whether it was a labrador or a greyhound or what the hell it was, and they brought this mob ashore, and we were appalled. First of all it wasn't fair on the dogs because they weren't huskies and they weren't dressed for it. Secondly, they'd had absolutely no training. There was no question of them being trained dogs. They may have been trained to play the bugle or something but they weren't trained as sledge dogs.

[Part 1 0:51:48] Stonehouse: And thirdly, we were very concerned that they were going to bring any sort of disease over to our mob who we cherished. Our dogs were extremely valuable to what we were doing. Finn Ronne assured us that the two need never meet, and so on. But then some of their dogs got off and came over to ours obviously and barked at them. It was an impossible situation and we were appalled that they had (a) hijacked dogs who were probably other people's pets, and (b) brought them to the Antarctic with any intention of trying to do sledging with them. It turned out every time we tried to cooperate with them over their dog teams, it was always their teams who let us down because they were nowhere near the standard of competence that ours were, which was not surprising.

[Part 1 0:52:57] Lee: Did you ever have any face to face conversations with the two women, or either of them?

Stonehouse: Oh yes. They used to come over. After the first week or so, when this row brewed up between their two husbands, they never came over together. Sometimes one would go out the back door when the other one was coming in through the front door.

[Part 1 0:53:20] Lee: Like Brian Rix?

Stonehouse: Yes. We didn't want any part of it. We had ... I won't say we had problems of our own but we didn't want problems of that kind. We made it perfectly

clear that if they had trouble over on their side of the hill, they could keep it there. They were very welcome to come over and see us and we always had an open house about four o'clock in the afternoon. That's when we made the scones and if we felt the Americans were coming over, we would make a few extra ones.

[Part 1 0:53:53] Lee: It didn't cause any problems with young men stirring, and suddenly being confronted with a woman in the Antarctic?

Stonehouse: No. Of course some of us had been there for two years by that time. I had only just arrived. As far as I was concerned, they were both nice girls. That doesn't mean you are intending to leap on them at the first opportunity. They were both civilised in their own way. We smartened up a bit if they were coming over. That was a good thing and we tidied up a little bit if we knew that Jennie, particularly Jennie – she was a much nicer person than Jackie. That's all, and they would come out sledging with us if we were taking a run and they wanted ... they had nothing better to do, occasionally they would come out and we would go off, race around, hand over the sledge to them and see if they could run the dogs. It was very friendly in that sort of way, but very civilised.

[Part 1 0:55:16] Lee: They were there purely for leisure purposes? They weren't part of any scientific project?

Stonehouse: No. Well Jackie (Edith was her name but Jackie was the name she was known by), Jackie Ronne was keeping records, making up the signals, things like that, for her husband. Jennie had no role at all in the expedition apart from looking after her husband Harry. The book she wrote was called *My Antarctic Honeymoon*, so they had only just been married before they left. It's a very amusing book if you ever come across it. Because of these tensions, she couldn't take on any role at all. She couldn't even mend or sew the chaps' buttons on, anything like that. She was more or less excluded from the expedition by Finn and Jackie, so she was very much at a loss. She was an intelligent, bright girl. I think she probably had a university education and it was a waste, a great waste of any talent she might have had.

[Part 1 0:56:53] Lee: So did she ever sew on buttons for the Brits, or do that kind of thing in your hut (I don't mean specifically that)?

Stonehouse: I'm fairly certain she would have done. She usually came over with Harry but often came over on her own. She would just sit there and talk to us, which was very nice, have a cup of tea and so on. She offered to do various things like ... If she saw somebody darning a sock, she'd say 'Well ...' but she had never darned a sock in her life. 'What are you doing? How do you do it?' She got interested in that sort of thing, and I think if we had been doing needlework, or anything like that, she would have been very happy to join in. We were very self-sufficient anyway, so we didn't usually invite her to do anything like that, but I am perfectly certain she would have done. She loved coming and talking to us, but she couldn't join in anything because she wasn't trained as a scientist or anything like that. Yes, there was one day she helped me to ... I was transcribing from the worksheets into the permanent record and she helped me with figures, putting down figures. She was reading them out and I was writing them in, that sort of thing.

[Part 1 0:58:34] Lee: We must talk about your work but let me just change the disc first, on the machine.

Stonehouse: Yes. Surely.

[Part 1 0:58:40] [End of Part One]

Part Two

[Part 2 0:00:00] Lee: This is Bernard Stonehouse, interviewed by Chris Eldon Lee, on the 12th of December 2011. Bernard Stonehouse, Part 2.

[Part 2 0:00:10] Lee: Tell me about the biological work you were able to get done in your ...

Stonehouse: There is just one point before we got on that. You were asking me about Harry and about the relationships between the bases. Towards the end of their year, the Americans' year there, Harry and Jennie came over to us and said 'We want to leave our expedition and join yours.' We said 'Well, you can't do that because we are a Government expedition and we can't just take on people casually like that, much as we would like to.' They said 'Well money is no object. We would provide money for your expedition in return.' We said 'No, it just doesn't work that way. That's not the way our expedition is set up.' We might have added 'In no circumstances would we want you two joining us anyway.' Because of course we hadn't room in the hut or anything like that. He said 'Well then can we go and live in the Debenhams Hut?'

[Part 2 0:01:17] Stonehouse: The Debenham Islands were six miles away and they had been the science base of the British Grahamland Expedition. A nice little hut was there. I used to go down occasionally with a couple of dogs, take off for a weekend and go and have a weekend on my own away from the main mob and do a bit of biological collecting and things like that. It was a very nice hut. We had taken some of the Americans there from time to time, and Harry said 'Well can we go and live there?' We said 'No. That's a British hut.' It didn't have any particular status then but we said 'No, you can't do this sort of thing.' 'Alright' he said 'you claim to be in charge here. Now I am saying that we have come here and we want your help.' So we said 'Go home and we will think about it.' We sat round the table and we got out a copy of *Stone's Justices' Manual*. Now Ken was of course a magistrate; I had been sworn in as a Justice of the Peace, a temporary Justice of the Peace when I was at Deception Island. I think one of us was the Postmaster and so on. This was all daft but it was real. This was the Administration.

[Part 2 0:02:49] Lee: They were asking for asylum, weren't they?

Stonehouse: They were asking us for asylum so we looked it up in *Stone's Justices' Manual*. We came to the conclusion that they were 'vagrants in our parish' and we therefore had to provide workhouse accommodation for them. So when they came back, we explained that this was the only category we could put them into, and although we couldn't stop them going down to live in the Debenhams, we would take absolutely no responsibility for their doing so. 'Now for heaven's sake, pull yourselves together. Stay where you are. You have only got another month or so to

go. Do anything you like. Set the base on fire, anything you like, but don't try to come and put yourself in this category with us.' You see legally, they were quite entitled to do that. They were accepting that we were in charge of the area. They were very clever; they were not fools. They had worked out that this was a way ... Anyhow it all blew over. We gave them a whisky and sent them away and we didn't have any more nonsense of that kind. But it had got to that stage where they were desperate to get away. These were two, they were a bit like spoilt children in a way. I think Harry had had a very hearty war but apart from that, I think they'd had things very much their own way all their lives and they just hated being constrained by things that they had no control over. Anyhow ...

[Part 2 0:04:48] Lee: Let me ask you a bit about your work, your biological work in that period at Stonington. You had almost a clean sheet with which to work, because little had been done since the time of Scott, particularly on penguins.

Stonehouse: Well I thought I was at a disadvantage because I hadn't read a lot of the biology. I didn't know what had been done, and of course I wasn't scientifically trained, so I didn't know what needed to be done. Collecting was one obvious thing. Nobody had worked in that area since the British Grahamland Expedition and they hadn't been collecting. We were collecting rocks for geological purposes. I had a microscope which had been left behind by the Americans when they left in 1941, and I was looking at rock pools and things like that and finding all sorts of little animals and so on.

[Part 2 0:06:01] Stonehouse: I had a certain amount of biological material. Nothing that the Government had provided but I managed to get some bits and pieces from the Chileans for instance, when they came through gave me some preservatives: alcohol and formaldehyde and so on. I had a box that the British Museum had sent down to the base for bird skinning because they wanted some of the birds skinned, so I was able to do some of that. I collected lichens and mosses, and things like that, without really knowing what I was doing, except just recording where I had found them and so on, which islands they were on, in the hope that somebody, years later in the British Museum, might get around to sorting them out. We caught a lot of fish. I think we got about twenty different species and I recorded all those. I drew them, photographed them and we put some into preservatives. We had some Kilner Jars, collecting jars.

[Part 2 0:07:22] Lee: So were some of these species previously not recorded?

Stonehouse: No, it turned out that they had practically all been found before. You see, you'd had the Belgian expedition down that way. You'd had the French expeditions, two of them, with scientists on board. You'd had the Americans, you'd had the Germans. There had been a lot of expeditions down there, the *Discovery* Expeditions had been working in that area quite a lot. So there was not going to be anything new except that we were much further south than most of them had been. And I banded some penguins because that was what you did, and saw if they came back the following year to the same nest, which several of them did. The others either lost their bands or died on the way. But I wasn't able to do any more than that because I didn't know what needed to be done. There was no manual about it. We had the reports of Edward Wilson, what Edward Wilson had done over on the other side. I read those,

but it wasn't until the third year that I really did anything useful and at the end of the second year we found the emperor penguin colony.

[Part 2 0:08:58] Lee: How did you find it? Was it pure chance or had you got ...?

Stonehouse: It was pure chance. I was leading a sledging journey which was surveying the north end of Marguerite Bay. The BGLE had done a running survey of it years before, and Charcot had been in there, way way way back. But we were doing an accurate survey of it and we got all the way round the north end of Marguerite Bay and came back along the coast of Adelaide Island. Then when we came back to the open sea, we realised that we needed some cross bearings. Now there was a group of islands over there, on the edge of the sea ice. We could see the sea beyond it so it was dodgy but we decided it was worth making a quick run over there. It was good weather, a quick run over there, spend the day there taking a round of angles because it would tie everything in very nicely. So we did that and the reward was to find a bunch of emperor penguins that nobody knew anything about at all.

[Part 2 0:10:24] Lee: Actually on Dion Islands were they?

Stonehouse: Actually on the Dion Islands, yes.

[Part 2 0:10:28] Lee: Considerable colony, or a small colony?

Stonehouse: No, it was quite small. Well it was, we reckoned there would be about 400/ 500 birds there altogether.

[Part 2 0:10:40] Lee: Should they not have been there?

Stonehouse: Which was very small for an emperor colony.

[Part 2 0:10:44] Lee: Should they not have been there?

Stonehouse: No, they'd every right to be there but it was just that nobody had ever been before. The Dions were named by Charcot because he had gone past them in his ship the *Pourquoi Pas* and just put them onto his chart, but it was the middle of summer of course that he was there, so the emperors wouldn't have been there. This was the trouble with emperor penguins. You only find them in the winter because that's when they accumulate and of course you are not normally travelling around in the winter. So this was only the third ..., actually it was the fourth colony known in the whole of the Antarctic because of that reason. People didn't travel in the winter. We were only forty-odd miles from base in a direct line but anyhow we discovered them, and recorded them and that was towards the end of my second year.

[Part 2 0:11:52] Lee: Did you work out, or wonder why the colony had been kept so small?

Stonehouse: Well yes. Again, I didn't know enough about emperor penguins to know that it was small. I have thought of that since then. Now the colony has disappeared, I think it has become more obvious as to why it should have been, but that didn't occur to me at the time. I didn't know enough about them to question, to ask or even think

that sort of thing. Neither did anybody else; nobody had really sat down and thought about them since Wilson and his 'raid' on the Cape Crozier colony in the *Worst Journey in the World*.

[Part 2 0:12:40] Lee: So you found them at the end of your second winter, and then they all went away, and then fate would decree that you were going to have a third winter, so that gave you a chance to go back and see ...

Stonehouse: Well that was the remarkable thing.

[Part 2 0:12:53] Lee: We will come to that later, but yes.

Stonehouse: I didn't know enough to ask that sort of question. There was nothing we could do in that year because the sea ice was breaking up as we were watching and we had to get out of there very very quickly or we would have been stuck and we wouldn't have had the food and so on, because we were just a sledging party. I would have wanted to come back in another year. I would get back to Britain, find out more about emperor penguins and then come back and work on them but that was not the way things happened. The way things happened was that at the end of that year, we couldn't get out because the ship couldn't get in.

[Part 2 0:13:45] Lee: I'll come back to that point later on, Bernard. Let's talk about the penguins in the third winter.

Stonehouse: So in the third winter, when we had realised that we were going to have to spend a third winter there, everybody was very cross about it, and I had certainly had enough by then. But I said 'Look, this is an opportunity. If we are going to have third winter here, I want to spend it ... it would make very good sense for me to spend it on the colony with a companion, two companions perhaps, for as long as we can, starting when the sea ice is safe enough to get out, which is June, and staying there for as long as we could, until the sea ice started breaking up again', which we thought would be in about August or early September perhaps. 'In that way we would get there at the time that the eggs were being laid and we would see what happened all the way through the incubation and then as far into the chick rearing period as we could, and that way we are going to learn something about emperor penguins that nobody has had an opportunity to do before.' I had no difficulty persuading Bunny Fuchs, who was a scientist and knew that this was going to be worthwhile, and also it would get two or three of us out of the base, which would be a very good thing because it would be ...

[Part 2 0:15:35] Lee: Release the pressure?

Stonehouse: It would relieve the pressure and it would be an objective that everybody in the base could contribute something to, because a lot of things you can't do in the winter. It's too dark to go sledging around the place and taking rounds of angles and so on. You can't see a bloody thing for a lot of the time. So he was in no doubt about it, but when he put it up to the Government of the Falkland Islands, the Governor said he wanted another ... He didn't want this done this year; he wanted it done by a biologist, because of course I wasn't trained as a biologist. He wanted it done by a trained biologist, by somebody coming down the following year. So we couldn't do

anything that year, but it would be done later on. Well Fuchs blew up at this and said 'No, Stonehouse has found this colony and he is willing to go settle on it. I've got two volunteers who will go with him: one is a doctor and the other is the flight engineer who hasn't had an aircraft to get his hands on for a couple of years anyway, and having been a prisoner of war for three years, a winter in a tent on the Dion Islands doesn't dismay him at all.' He said, in effect, 'This is what we are going to do.' So the people at the other end agreed this was the equivalent of doing my shrimping in my spare time, you see.

[Part 2 0:17:29] Lee: So the plan was to spend the entire winter on the Dion Islands camping in tents?

Stonehouse: Yes. We had a three man tent and we built an igloo. This was all we could do. We had to take everything out by sledge of course. We might have built a hut and taken it out but we didn't have the timber for it and anyhow it would have taken up ... we would have been going backwards and forwards. As I say, we just took a tent and camped on the island above the high water mark which of course was all frozen over anyway. And we were there for two and a half months.

[Part 2 0:18:20] Lee: Were you there in time?

Stonehouse: We got there just towards the end. The last of the eggs were being laid. Of course we didn't know then what the routine was going to be. We had no idea it was only the males who were incubating, so we had a lot of penguins with eggs and some that were still in pairs and were about to lay. That was useful because we could get the timed embryos from them. And we also saw penguins leaving the colony because we could see the tracks going away.

[Part 2 0:19:10] Lee: So you did just catch the critical moment?

Stonehouse: Yes, we got there just in time. The sea ice was very dodgy that year. It had formed and we got all ready and then the whole lot had gone out, which was why we hadn't gone out on it too early. Then it re-formed and we decided we could get out to the Dions if we made a rush for it. We could get out to the Dions within 24 hours if the weather was all right. Of course it was dark. This was early June I think it was, late May or early June.

[Part 2 0:19:59] Lee: You took dogs?

Stonehouse: Oh yes, we were using the dogs to get out there.

[Part 2 0:20:06] Lee: And just for the record, the names of the two chaps who went with you?

Stonehouse: David Dalglish, who was the doctor. I had a grumbling appendix and he came with me on all my sledging journeys. I had a team of four, who were my team as it were, and David Dalglish was on my team in case he had to do something drastic if my appendix blew up while I was out. David Jones was the other one. He had been at the base and hadn't had his hands on an aircraft since we crashed the one originally,

and he was desperate to get out and do something else. So he was very happy to come out and be away from the base, running the camp as it were.

[Part 2 0:21:12] Lee: And did I get this quite right? Until that moment it was not known by mankind that it was the male penguins that incubated the eggs?

Stonehouse: No.

[Part 2 0:21:21] Lee: Did that come as a bit of a surprise to you?

Stonehouse: Well what we saw was: when these spare birds had left the colony, nobody came in or out at all. So, OK, we thought at the end of a fortnight there would probably be an inrush and they would all change over and whoever was incubating, the mate would take over. But they didn't. So OK then, so who is incubating the eggs? Well a couple of them died and we opened them up and they were males. Now if you are going to play that game, it makes far better sense for the males to do the incubating because the females had laid an egg which has taken a lot of energy and so it was the males who would do a better job, who would be the right ones to do it.

[Part 2 0:22:28] Stonehouse: Now I was weighing a sample of them fairly regularly and the weight was going down at a measurable rate. It was quite clear they were not going away while we weren't looking, having a feed and coming back, or anything like that. It really was only one lot who were doing the incubating and it turned out that all those that we were able to discover the sex of were males. So it was the males who were doing the incubating. And then towards the end of the incubation period, which was two months, another lot started coming back and these were clearly the females. And again one or two of them very conveniently died and they turned out to be female. So that was how we learned that this was the way things were done.

[Part 2 0:23:30] Lee: And the actual midwinter period, it was the males with their eggs all alone?

Stonehouse: Yes.

[Part 2 0:23:35] Lee: So were you the first to witness the habit of penguins of clustering together for warmth?

Stonehouse: No, the *Worst Journey* people had seen that they were clustered. They had abseiled down the ice cliffs to get onto the sea ice and it was pitch dark. It was much darker than we had.

[Part 2 0:24:11] Lee: Much further south?

Stonehouse: So they didn't see an awful lot, but what they did see was: there were no penguins and then suddenly there was a big mob of them. I haven't read Cherry Garrard's or Wilson's accounts recently. I'm going to do that shortly because I am writing a paper on emperors, but they knew that they clustered, but I hadn't realised just how tightly they clustered.

[Part 2 0:24:49] Lee: So the females returned?

Stonehouse: Then the females returned, found their ... There was a lot of calling back and forth and I didn't know if the females were finding their own chicks or just feeding any old chick. The little bit of background I had said no, they must be finding their own chicks because otherwise the system wouldn't work. There would be no hereditary ... There would have been no evolution to produce this. They had to finding and feeding their own chicks for the gene flow to continue. So I knew enough about biology to make sense of that. We were weighing those. You could see the difference: the male, who had been standing there for two months was skeletal compared with the big fat females coming back, who were just normal penguins who had had a jolly good feed and were bringing quite a lot back in their crop. We did find that one or two of the males were actually feeding the chicks although they had been there for two months. That was the other thing we found, that they can produce a sort of penguin's milk, like pigeons, to feed the chick, although they hadn't had anything to feed themselves. They had a secretion in their ...

[Part 2 0:26:22] Lee: From the milk?

Stonehouse: Mmm. So that was how we came to work it out.

[Part 2 0:26:37] Lee: You were collecting embryos at timed intervals and I presume though the eggs were analysed later in the hut or back in Britain?

Stonehouse: No. We had scrambled egg from the ... That's an emperor penguin's egg.

[Part 2 0:27:03] Lee: I've never actually held one. So were you doing the analysis on the Dion Islands or when you got back to base?

Stonehouse: Two ration boxes piled on each other (this was in the igloo) and a candle. You take the top or the side off the egg. There's the blastoderm, the tiny embryo and its wrap round. You cut around that with a scalpel and you put a blade underneath it and lift it out and transfer it to a special preservative fluid which hasn't frozen because it's fairly concentrated, picric acid, acetic acid and one or two other things. That fixes the tissues so that they are biologically right. There was one wonderful occasion when we had the dogs tethered outside and I got to this stage of having this very early blastoderm on the blade of the scalpel and was transferring it to the Bouin's Fluid and the dogs started growling at each other. I yelled out 'Shut up Darkie!' who was my leader and I knew it was him who was making the fuss and I blew the candle out. And that was a very tricky situation. You can't light a candle with a box of matches and one hand. So I had to put the thing down. Anyhow we got it sorted out. I always remember that as one of the high spots of my biological career, that we managed to get the It turned into a perfectly good specimen.

[Part 2 0:29:07] Lee: I know this is all written up, but just out of interest, in principle did the development of the embryo, when you had all the samples across the time span, were there any surprises, or was it exactly as you might have imagined?

Stonehouse: Well I didn't do that. I just got these together. Again, purely by chance, as I think it comes out in that article, one of the very few procedures that I learned as a biologist in that very short time I was at Hull University College, was how to take an

embryo out of an egg. Which was a bit outlandish because ... but it just happened that the ... There was only one lecturer there at the time. This was the third year of the war and everybody else was on Government work or something, but he happened to be an embryologist. He taught what he knew. One of the things he taught was how to produce good embryos from eggs. So that was how I came to know that this was what you did. But I wasn't an embryologist and I wasn't at all interested in doing the embryology of it but I was collecting them because it had been the point of Wilson's research and they hadn't got anything out of the *Worst Journey in the World* things because when they started looking at them, they found that they had been frozen and the cells were all split up. They were no good. But the ones that I was able to put into this special fixative were absolutely fine. We gave them to a chap called Glenister at ... I think he was at Charing Cross Hospital. He wrote the report on them.

[Part 2 0:31:10] Lee: So you managed to get those samples back to the UK?

Stonehouse: Oh we got them back. We got them They flew out with me I think, when we were flown out, because they were the most valuable thing I collected in the whole of the time I had been there.

[Part 2 0:31:26] Lee: Meanwhile you were living on partial scrambled egg?

Stonehouse: And we were doing very nicely on scrambled egg. You see one egg, that weights about a pound when it's full and that is a lot of scrambled egg.

[Part 2 0:31:3] Lee: Was this again something that Wilson had done or were you the first human beings to try scrambled emperor penguin egg?

Stonehouse: I think we were probably the first. I don't think they ... I don't know of anybody else who had eaten or claimed to have eaten scrambled emperor penguin eggs. They were like ordinary eggs; they were just eggs. They don't taste of anything particular.

[Part 2 0:32:03] Lee: I would like to talk, if I may, in the time we have left today, about *Ice Cold Katy*.

Stonehouse: Oh yes.

[Part 2 0:32:09] Lee: I interviewed Tommy Thompson, the pilot, a couple of years ago. You met him I think in October.

Stonehouse: Yes, you did.

[Part 2 0:32:16] Lee: At the Marguerite Bay reunion at Windermere. So I would be interested to hear your story of what happened on that momentous occasion.

Stonehouse: Well it was a combined operation with the Americans. The objective was to fly over the Plateau, mark out a landing strip using *Ice Cold Katy*, which was a little Auster.

[Part 2 0:32:42] Lee: This was 1947, wasn't it?

Stonehouse: That's right, yes. Mark out a landing strip for their Beechcraft to come in with a load of stores, which would then have made a depot for a sledging party coming over the top later on in the year. We had waited two of three days. We had worked out what we were going to do and we waited two or three days for the weather to clear and the weather came up. I was the weatherman at the time and I said 'Well it's all right for today, for this morning, but probably by this evening we are going to get a front moving in and so we need to get on with this.' The Americans faffed about and so on; and decided it was off and then it was on again.

[Part 2 0:33:34] Stonehouse: So we said 'Right, well we are going. You follow and we will meet you on the other side of the Plateau. Keep an eye open for us. We know roughly where we will be in terms of the existing maps at the time.' So we got over fine. The weather was good. There were three of us: Tommy, the pilot, myself as a co-pilot, one of the surveyors, Reg Freeman, who had come over to fix the place where we actually were, to take a round of angles. We had flown very low over the snow, so the tips of the skis cut into the snow and that told us how firm the snow was. We decided yes, this was a good place to land so we landed quite safely and I think we got out our lunch boxes, things like that.

[Part 2 0:34:44] Lee: Picnic?

Stonehouse: A picnic. And we saw the Beechcraft over there but flying in the wrong direction. Now we both had radio but we couldn't ... we didn't had the same frequencies because they were on American frequencies; we were on British. We had British crystals, so there was no way we could contact them directly by radio which was absolutely daft anyway. We set off flares and hoped they'd see that; they didn't. Obviously they had mistaken where we were going to be.

[Part 2 0:35:21] Lee: Were they also somewhat later than expected?

Stonehouse: Yes. They had faffed about and they were late. They were late, but they obviously were not seeing us. We learned later that the three men in the aircraft had only four eyes between them because two of them had lost an eye in perfectly honourable circumstances in the war, which was their misfortune but was our misfortune. Mind you, both of those saw more through one eye than most people see through two. There was nothing wrong with them as observers but it was just one of these curious things that happens. And then they flew off so we said 'There's nothing ... They are obviously going, so we had better get back.' And by the time we were getting back over the Plateau, we were heading into very strong headwinds which were up at 5000 / 6000 feet which slowed us down. Then it started to snow, so we were among peaks that were rising above us and trying to find our way back in very dodgy circumstances.

[Part 2 0:36:50] Stonehouse: I was looking out of one side of the aircraft and Tommy was looking out of the other side because the windscreen was getting snowed up or covered with rime. Then the carburettor started to cough which meant that we were getting icing in that and we could use the heater but it wasn't working, or it wasn't adequate. With some relief we got down on the other side, which meant we were no longer flying among mountains and we got down to sea level. Of course the sea was

frozen over. We were not going to try to fly any further with the engine coughing. We would go down and we would wait until things got better and then we could take off and we would be fine. Tommy made a perfectly good landing on the sea ice which had fairly thick snow on it, but then one of the skis hit a bump, a piece of ice that was frozen into the sea ice, and that broke the ski and we turned over.

[Part 2 0:38:13] Lee: So you flipped onto your back, the plane?

Stonehouse: Yes, flipped right over, and that broke the main spar so there was no ...; the plane was obviously not going anywhere else. So we tried to contact our base. We thought we had a better chance of contacting our base now. We were about 60 miles from the base I suppose, direct line. We could hear them but they couldn't hear us, so probably something was ... one of the valves in the set had probably been shaken to pieces or something. This was old stuff. The radio had been sitting on the front of the dashboard. It came up and hit me and knocked one of my teeth slightly askew. Apart from that, we were hardly damaged.

[Part 2 0:39:25] Lee: Were you in seatbelts?

Stonehouse: Oh yes. I had cracked a shoulder and I think Reg had fallen on his neck. He was in the back and had undone his seatbelt. He had strained something but that was all. So we sorted ourselves out. We had a pup tent with us. We were grossly undersupplied with emergency equipment. We hadn't sat down and thought it out properly beforehand because we hadn't expected this to happen, and we should have done. It was our own fault for being ... well we were not sensible about it. So we could hardly blame ourselves. We had one tin of pemmican which was a big tin box this size with this very hard material in it which we had to chip out because it was all frozen solid.

[Part 2 0:40:33] Stonehouse: We had a cooking pot and we had a tiny primus, a petrol primus, so we could make a brew of pemmican and water (there was plenty of snow). So we did that and that was our first meal and then we realised that this was really all we had in the way of emergency supplies except I think a couple of bars of chocolate. And we set the pup tent up. We stripped some of the canvas from the aircraft to make a sort of groundsheet and then we had one sleeping bag which we opened up made into a sort of down quilt for us. We turned in and that was how we spent the first night. It was colder than comfortable but that was all right. Then we had a brew in the morning. We set up the primus for half an hour, and then we started out. We started walking.

[Part 2 0:41:48] Lee: Did you sleep under the plane? Was the plane shelter?

Stonehouse: We hitched the pup tent to the plane so that it was more sheltered that way. Then we had to decide whether we were going to stay by the plane or try to get back.

[Part 2 0:42:09] Lee: Again it's a long time ago, but can you remember the thought processes you went through trying to weigh up what was the best option?

Stonehouse: Yes. Again we should have thought all this out beforehand. We really should have gone through the whole process. 'We are going out. We are going to crash. Now what do we need immediately? What do we need as a backup? What are we going to do if the aircraft is still there? What can we take from it?' But we hadn't done that. We hadn't done any of that and we should have done. Well then we started walking back and it was very difficult going because we were wearing Mukluks, which are canvas boots with a runner sole and a canvas upper, but we were walking over sea ice which had snow on top of it. So the sea ice had sunk below sea level, with the weight of the snow on top, which meant it was water-logged. So we were walking through slush, essentially, a salty slush and it was very hard going for that reason.

[Part 2 0:43:40] Lee: What's wrong with the decision in favour of walking back, rather than staying where you were and waiting to be rescued?

Stonehouse: We decided that they would have no idea where we were. They wouldn't know even if we were on, which side of the plateau we were on, and it might take them four or five days to find that out and in those four or five days we could be half way home. If we were where we thought we were, which was about sixty miles away. If we could walk about ten miles a day, then in three days we would be half way home, and the closer we were to home, the more likely we were to be picked up, I think that was good thinking, because the aircraft didn't make much of a target. It wasn't something that you were going to see from 3000 or 4000 feet. It was pale cream painted.

[Part 2 0:44:29] Lee: Not red?

Stonehouse: Yes, nobody had thought to paint it red, and they would have had to paint the underneath red as well as the top because now we were upside down, you see. The rule is generally that you stay by your aircraft but in this case we thought we would do better to walk and I think we were probably right then. So we evened out our clothing. I had more kit than ... I had put on a couple of extra layers any way. Reg I think was all right. Tommy was a bit short. He didn't have a windproof top, so we evened things out so that we shared our top clothes between us so we were all slightly better off. Then we just started plodding. We took the spare tank off the aircraft and used that. It was sort of streamlined so we could use that as a sledge. We towed it behind us with a primus and food on it and the tent, packed down to about that size. I was pretty certain that the sea ice we were on, because it was cracked and open; it wasn't well formed at all and I was pretty certain that it was moving this way. We were trying to walk that way over it. I think it was moving, if anything, this way because we were heading into wind all the time and sea ice is driven by wind rather than by current.

[Part 2 0:46:21] Lee: So you weren't getting as far as you thought you might?

Stonehouse: I was pretty certain we weren't and that was why we ... there was a big island over there called Terra Firma Island which never seemed to get ... We would be walking past it and it was over there and the next morning it was there again so I didn't think we were making much headway. But there was nothing else we could do,

so we walked and I think we managed about five or six miles a day probably and we just walked. We didn't talk or chatter, or discuss philosophy or anything like that.

[Part 2 0:47:09] Lee: Or mortality?

Stonehouse: No, I don't think so. None of us was that way inclined I think. Reg was the oldest. He had been a surveyor. He was a Royal Engineer surveyor and he had been in the African campaigns I think and he was used to the idea of dying. I don't think it worried him terribly. Tommy had risked his life several times and by this time I was getting used to the idea that this was ... You don't make a fuss if you are going to die.

[Part 2 0:47:57] Lee: Tommy had already had one serious major escape, hadn't he, by the way he swapped places with another pilot who didn't make it?

Stonehouse: That's right, yes. We had all been brought up in wartime and whether we had seen action or not, we were all pretty used to ... I mean I had been through the Blitz on Hull, and the people I had been talking to half an hour ago had been blown up. I don't think we were worried about dying so long as we weren't there when it happened sort of thing. I think Woody Allen said that, didn't he? There's nothing remotely heroic about it or anything like that. We just plodded on. We had to lie up for a couple of days because the weather was so foul and blowing in our faces. Then we had a good day and we found a small seal and we killed that and that gave us some meat which was good to have.

[Part 2 0:49:16] Stonehouse: When we started walking and the weather was good, the going was better and then we heard an aircraft. Then we saw the aircraft; it had been taking off over the base and was making height. They had been out in all weathers. The Americans had been marvellous over this. They had the three aircraft. They had got them all in the air whenever they possibly could. So they bloody well should have done because it was through them that we were in this position but they did and we appreciated it very much. It was the Norseman that spotted us and just came in and landed alongside us.

[Part 2 0:50:13] Lee: On sea ice?

Stonehouse: On the sea ice, yes, and picked us up. I don't think we would have got home without that. I don't know. We might have done but I don't think so because there was ... It wasn't a direct walk home. We would have had to walk round the end of a big ridge, Red Rock Ridge, and it was almost certain to be very dodgy. The sea ice would be very dodgy off that point. That would have added quite a lot to our journey and I don't think we would have made it. But we were very glad to be picked up any way.

[Part 2 0:50:51] Lee: Again it's speculation, but if you had stayed by the plane, what may have happened?

Stonehouse: Well they hadn't looked as far south as that. They might have had that in their scheme, to do that the following day or something like that. I never found out what ... They would have had a plan, they would have been working to a plan,

because the three pilots would have got together worked out a programme, which would eventually have covered all the possibilities that we had. But as I say, they didn't even know which side of the Plateau we were on and they had a hell of a lot to search on the far side, which was of course where we were supposed to have met.. Certainly they might have managed it. They didn't actually find ..., well of course once they found us, they didn't look any further and they didn't find the aircraft. They sent a sledging party out because we'd had some cine cameras and other equipment with us that we wanted. So a sledging party went out, a well-equipped sledging party went out a few days later and found the aircraft and came back with the equipment that they had wanted.

[Part 2 0:52:18] Lee: And the plane is still there?

Stonehouse: Oh it would have gone out with the sea ice that year. It would be down at the bottom.

[Part 2 0:52:25] Lee: So what was it like going back to base?

Stonehouse: Tremendous relief all round. Both bases had been completely turned over to searching for us, and they landed parties over on the far side and so on, for sledging and to act as forward bases for the aircraft so that they could fly further. In those six or seven days, they had turned over completely to looking for us so everybody was involved and it was very moving to get back and find out how much people had cared about doing what they could. The BBC had got hold of the story and reported us missing and then I think two days after that they had been able to report that we had been found, and we were safe and so on. So it was a bad time for people at home who had heard about it.

[Part 2 0:53:40] Lee: So the BBC named your names, did they?

Stonehouse: Oh yes, yes. Or the press did. Somehow it had got out.

[Part 2 0:53:55] Lee: Two more questions on that then. First of all, did that escape change any procedures at base for future flights, change the way aeroplanes were provisioned and you were prepared?

Stonehouse: Well we didn't have another aircraft, so we didn't do any more flying but we had to write a report, an official report for the Government, because the aircraft, a piece of equipment, had been lost. And we wrote a report that included our recommendations for safety, and I remember Tommy and I and Reg got down to that. That was something we could do while we were recuperating. And we had a Court of Inquiry that Ken Butler, as the magistrate, ran. But of course that was a ... It had a serious objective of reporting exactly what had happened, but of course there was a lot of ??? [incomprehensible] going on, and so on. It didn't have the sobriety, I would say, that it might have had if we had been back in England. But no, we wrote down what we hadn't done and what we should have done and what we would do if the situation arose again. And that may have formed a basis of what happens nowadays. I am sure they take it very much more seriously now than we did.

[Part 2 0:55:43] Lee: Did it in any way change your attitude towards your own life in the Antarctic or your life generally, to have a lucky escape?

Stonehouse: No. It was not the only lucky escape we had. There were a couple of occasions when we were collecting rocks under an icefall and you just walked away and all the ice fell down, things like that. And there were times when you were walking over crevassed areas, you went through and you were on the end of a rope so you were all right. On the whole we were extremely careful and cautious. We were doing dangerous things but we were doing them as safely as we could. Yes, I suppose we showed a little more care as a result of having this happen. The sort of age we were, I don't think we took it as seriously as we might if we had all been in our late thirties or forties or fifties. Again we were brought up ... we were a generation who were used to the idea of life possibly being rather short in a way that it just isn't nowadays.

[Part 2 0:57:08] Lee: I would like to ask you, if I may Bernard, about that decision about staying for a third winter. I mean the decision made itself really but what were the machinations that were going on before it became obvious that you weren't going to get out of Stonington.

Stonehouse: Well the problem was: we had a ship which was absolutely hopeless for what it was supposed to be doing. It was under-powered. It wasn't an ice breaker but nobody knew enough about Marguerite Bay to be able to say that it wouldn't be able to get in.

[Part 2 0:57:51] Lee: The ship was called?

Stonehouse: That was I think the *John Biscoe* and unless I am mistaken, it was a wooden ship because it had been built specially to deal with magnetic mines, and also for harbour duties. It was a boom defence vessel, it was called, and the reason it had been bought was that somebody had said 'Well of course, if you are going into ice, you need a wooden ship.' 'Right, where do we find wooden ships?' Well either they are so old they are falling to pieces, or the new ones are not built as ice breakers but at least they are wooden. I don't think people had really thought very much further than that, who were responsible for buying it.

[Part 2 0:58:48] Stonehouse: Any how it was completely inadequate for being unequivocally able to get down into the furthest south base which was Marguerite Bay. And so we were very cross when we learned that it had got as far as the other bases but then was just waiting for the ice to clear. We didn't have an aircraft for reconnaissance or anything like that. It was a long period; it was a period of about a month when we weren't sure whether we were going to get out or not. Of course we had been there for two years, or half of us had been there for two years and we wanted out. We'd had enough and tempers were getting a bit short. Again we had this sort of background of humour that got us through it, but there were one or two who were very definitely feeling the strain. I don't think I was.

[Part 2 1:00:04] Stonehouse: I think I was probably on a fairly even keel but I just didn't want to spend any more time there. I wanted to get home and get on with my life because by that time I had decided that whatever happened, I wanted to get out of

the Navy, which was what I knew about, and get into whatever the future was going to be for myself, and that would involve going to university and that sort of thing. I wanted to get on with it because it was all going to take time. So I think it was impatience more than anything else and the crossness with what seemed to us to be the inadequacies of the outfit we'd joined. And then word came that the ship had to turn round and go back. I think it was probably running out of fuel as well, and it would have to go back and it wasn't going to get us out that year.

[Part 2 1:01:05] Stonehouse: So we all sat down and thought out what we were going to do. It was a very practical group who sat round the table. We didn't argue and curse the management any more. We'd done all that. The thing was what we were going to do, what changes we were going to make to be able to go through another year. We all agreed we had to keep moving to get up a good programme of research. We reviewed all the equipment and the food and things like that we had. We discovered there was no real problem there. We knew we had plenty of food. We had a year's food in hand. We were running a bit short of some of the titbits that we'd moved in on early. I think we were running out of pear drops and things like that, but some of the goodies that had been ..., but apart from that we had everything.

[Part 2 1:02:13] Lee: Were you running out of booze? Were you OK for booze?

Stonehouse: Yes, yes. One of the mistakes that the Colonial Office had made was over the rum ration. We had asked for a rum ration for 11 and they had sent us gallons instead of pints or flasks or whatever it was. So we had plenty of rum. We could have run the generators on rum, I think.

[Part 2 1:02:47] Lee: And how about coal?

Stonehouse: Anthracite for the stove, that was fine. We knew we could burn seal blubber if we really got pushed but no, we had a good supply of anthracite.

[Part 2 1:03:09] Lee: And were the Americans still in Stonington?

Stonehouse: No, the Americans had gone a long time. They left at the end of the first year, and at a pinch we could have gone over and got a whole lot of stuff there to burn without any difficulty at all. They had left the place in chaos.

[Part 2 1:03:26] Lee: So practicalities were fine, it was more the psychology that was ...?

Stonehouse: Yes, the practicalities were all ... We realised we were all right. We didn't have that to worry about. That was the point of that operation I think; it told us what we didn't have to worry about and what we did have to worry about. What we did have to worry about was keeping busy and we converted the base very slightly. We got a Quiet Room which was about the size of a quarter of this room, where people could go and just get away, just go and sit down and read. I think we called it the First Class Cabin, where you could go and just be quiet and if you went in there, people knew that they didn't want to come in and start arguing with you or anything like that. You just wanted a quiet time; two or three people could use it; it was comfortable.

[Part 2 1:04:27] Lee: Was it used much?

Stonehouse: Yes, I spent quite a bit of time in there. I could write and it just got you away from the main hurly-burly of the base, if you like. And then a big sledging programme, starting straight away with some depot laying, so that we could get out immediately and lay depots for long journeys later on in the year. Then our programme on the Dions; everybody was very much in favour of that and all the bits of equipment we would need for that. Everybody mucked in and got on with that, got our boxes together, our ration boxes and everything else, and of course we left the base for that period. We had a team, we kept a dog team with us. It took four dog teams to get us out, as I remember, to get us out to the islands. Then we kept my team – no we kept two teams with us in case we had to get back quickly, in case the ice started going out and we needed to get back quickly. And of course we had the doctor with us so we had to be in good radio contact all the time in case there was an accident at the base and he had to get back to the base. So all these details had to be worked out and of course that just kept you very busy. That was what it was all about. So I think it was, in a very practical way, this was good leadership. This was what Bunny Fuchs was good at.

[Part 2 1:06:35] Lee: He was on base at this point, wasn't he?

Stonehouse: He was our leader. He had been our leader for the second year and now for the third year. He wasn't an ideal leader by any means, but he was as fair as he could be. He was very open to suggestions as to what to do, he respected us as having, particularly the old hands who had been there a year longer than he had, taught him a lot of the techniques that he'd had to learn. He realised that most of us were, well we knew what we were doing and we weren't fooling around.

[Part 2 1:07:28] Lee: What were your little reservations about his leadership then, if you were not completely convinced by him, as a leader I mean?

Stonehouse: He was irritating more than anything else, in that he had a slightly different approach from several of us. He would make an assertion. He would then want to be challenged. If you didn't challenge it, it was fine. It went, whatever it was. If you did, it could end up in a discussion, usually a very amicable ..., but you very seldom got him to change his mind voluntarily. You might find that things were going your way in practice because if he found that you were doing something and it was working, and it wasn't what he had recommended, or was against what he recommended, he didn't bother with it. He wasn't keen on asserting himself for his own sake. He didn't have that as a problem. He was less genial than Ken had been, less easy to get on with in that sense, but he was very well intentioned and you gave him full marks for that. Even if it didn't always hit the right note, it wasn't for want of trying.

[Part 2 1:09:08] Stonehouse: And there were one or two, well there was one particular member – I won't mention his name – it may have come up before – but he had definitely had enough and he was very much on the edge of sanity, I would say. We all rallied round and gave him what support we could. He was a very irritating man at times any way, but Bunny Fuchs dealt very well with him; he got him sorted and I

think we all gave him full marks for that. He was the only one, the only what you might call casualty I think, at the time, and it was rather surprising because he was a very experienced chap. But he had this weakness, that he wasn't quite capable of staying on an even keel when he was going to be a third year in the Antarctic. He hadn't been three years at the base; he had been one year at another base and then joined us in the second year. So now he was doing his third year, at our base. Essentially we got him out sledging too and that kept him busy and kept his mind off himself which was an important thing. So no, Bunny wasn't an ideal leader but he wasn't a bad hand to have around in those circumstances.

[Part 2 1:10:53] Lee: What kind of communication did you have with the rest of the world at that point?

Stonehouse: We had the radio.

[Part 2 1:10:59] Lee: Voice or Morse?

Stonehouse: Both. I think that two of the years we did part of the Empire broadcast at the New Year, or Christmas or whenever it was⁴. That was unusual, to be in direct contact with the BBC. Usually we were communicating with the Falkland Islands, or through the Governor of the Falkland Islands, because technically the Governor was the Commander-in-Chief of the Expedition. So all our communications were with them and that was quite easy. That was mostly Morse, and we had a very good radio operator⁵ who was the youngest member of the base and he was very competent because we were the main base so all the meteorological reports came to us and then were sent out by us to Port Stanley.

[Part 2 1:12:19] Lee: Were you able to talk to your parents at all?

Stonehouse: In the third year, as part of the third year, Barney Colehan set up a link with parents at the BBC, on the Overseas Service I think it was, and each of us got successive Wednesdays or something like that. He would get the parents in to the studio, or whoever it was into the studio, and play a couple of records and say a couple of things. It was one where we couldn't talk to them but they could talk to us. So it was a sort of ...

[Part 2 1:13:07] Lee: *One Way Family Favourites?*

Stonehouse: Yes, that was it.

[Part 2 1:13:11] Lee: He was the guy that went on to do the *Good Old Days*, wasn't he?

Stonehouse: Yes, he was, yes.

[Part 2 1:13:17] Lee: And was there, I don't know ...? Did you have a girlfriend back home at that point, Bernard, that you promised to come back to?

⁴ Christmas, preceding the Christmas broadcast by the King (Source: British Monarchy website).

⁵ T.M. Randall.

Stonehouse: I had, yes, for the first year. She was a Wren that I had known when I was in the Navy. She was my secretary for a time, when I was doing this job at Arbroath.

[Part 2 1:13:35] Lee: That didn't survive the ...?

Stonehouse: No it didn't. I don't blame her; she had to get on with her life too. It was nothing; it wasn't terribly intense. She was just a nice girl and she liked me and we corresponded. I wrote her several letters and she wrote me several letters and I think I still have them somewhere, but then she decided that she was going to marry somebody. She wanted to get married I think, so she did. That was before we knew we were going to be on the third year.

[Part 2 1:14:20] Lee: So there were efforts put in place to try and improve morale amongst those spending a third winter then, in terms of broadcasts with parents and extra-curricular activities and so on?

Stonehouse: Yes, I suppose we felt we had been let down very badly by the organisation, but by FIDS, and they didn't do very much to remedy it, but I don't know what we would have expected. We didn't expect to get OBEs all round for being caught out on the ice or anything like that.

[Part 2 1:15:05] Lee: The media were making a bit of a song and dance about all this, weren't they?

Stonehouse: Oh, we were the 'Lost Eleven' and all sorts of things. We weren't lost; we knew exactly where we were but yes, they made a fuss on that occasion, and I think there were other times when somebody would put a press release out about how the boys were getting on down in Marguerite Bay. But I have no idea how it was received in Britain. I have never bothered to look it up, except I do know we were the Lost Eleven because that got through to us, but when they decided they had found us again, I don't know.

[Part 2 1:15:58] Lee: What plans were put in place to get you out, because I think, was it Clifford Miles who was the ...

Stonehouse: Miles Clifford, that was the chap I would say.

[Part 2 1:16:06] Lee: Miles Clifford, who was the Governor at that time. There would be lots of omelette on his face if he hadn't got you out the third time.

Stonehouse: I think he did the best he could. He was a bit of an ass but he was a very conscientious ass, if you like. I think he was probably a good Governor. He had been in the Nigerian Service, one of the separate Colonial Office hierarchy and was given the Governorship as a sort of semi-retirement present, but got on very well in it and he did the best he could. They organised a ... they got the RCAF, a bush pilot, to come down and do the flying, to fly us out. They decided they were going to fly us out. At the end of the third year they would guarantee that they get us out by air if by no other

means, and they organised an RAF unit, with an RCAF, a bush pilot, to come down and fly us out in a Norseman.

[Part 2 1:17:36] Stonehouse: They got a Norseman plane which is what they used an awful lot up in Canada at the time. They go on skis and floats and roller skates and everything else; they were completely versatile, and the bush pilot, Peter St Louis was his name. He said it was the easiest job he'd had for years. I think they gave him an OBE for it but he said this was the easiest: just flying a long way down the Peninsula and flying back and they hauled us out. They got us out that way. They set up shop at Deception Island and then moved the whole unit down to Base F or somewhere round there and then they flew us out from there, which was a fairly short run.

[Part 2 1:18:37] Lee: By which time you heard that Miles Clifford had decided to close Stonington down completely, which must have been another body blow after all the ...?

Stonehouse: I don't think any of us could care less what happened as long as we weren't there. It meant that we had to get all our stuff out, that was the thing. If the ship had not been able to get in, they would have done another couple of flights and got everybody out, and just simply left the base where it was. As it was, they were able to get the ship in and that meant they could get all our personal stuff out, and everything else that we hadn't been able to take with us when we flew out. And it made very good sense if they didn't have a reliable ship to get us out, then they had no right to be running the base as far south as that. So apart from actually burning it down, I don't think any of us cared very much. No, one of the sad things was having to shoot so many of the dogs, which we were very attached to.

[Part 2 1:19:57] Stonehouse: The dogs made a hell of a difference. I wouldn't want to be at a base that didn't have dogs now. It's hard to imagine, because they were so ... We've hardly mentioned them at all but they were ... They underpinned the whole of our life there. They were there all the time of course. There were up to about a hundred of them, some of them were having pups and they needed training. They needed taking out every day and so on. They occupied more of our time and energies and affection I think, than anything else and as I say, I would hate now to spend a year at one of the modern bases where you don't have dogs, because they were so very important to us. I had my own team which I ran.

[Part 2 1:20:56] Lee: What were they called?

Stonehouse: The dogs?

[Part 2 1:21:00] Lee: Yes, what was the team called?

Stonehouse: We called them the Choristers because they sang. I sang to them and they sang to me. They get a write-up in *Of Dogs and Men* if you are interested. But they were lovely.

[Part 2 1:21:19] Lee: So they contributed to the maintenance of sanity that third winter?

Stonehouse: Oh absolutely. I think a lot of us would have ... They were always a reassurance; if you were completely sick of everybody around you, and if you were hardly on speaking terms with people for whatever reason, you could go outside and there would be a hundred tails wagging and they were all delighted to see you, and particularly if you were bringing the sledge round with the food. But they were very enthusiastic about what a very good chap you were and that was tremendously reassuring in a completely daft sort of way. That I think was the value of them. We had a tremendous respect for them because they worked very hard and they did their best all the time. Some of them were bloody-minded and so on. A hundred different dogs: they all had their own personality. I think it is symptomatic that within three days of being at the base, I knew every one individually by name.

[Part 2 1:22:34] Stonehouse: And then as spending three years with them, particularly my own team, I got to know extremely well. They were not pets but they had that sort of ... You could release a lot of your finer feelings on them, if you like, because they were very responsive and very receptive. They were like having a hundred very nice people around in a way. So no, they contributed a hell of a lot to our base. I don't think there was anybody at the base who didn't like the dogs. It was a pain in the arse sometimes to have to get out in bad weather and cut up seals and of course it was sad to have to go out and kill just about every seal you saw to feed them. That's the downside of it because we liked seals too, but no, they were tremendously important.

[Part 2 1:23:46] Lee: Let's leave it there for today, Bernard. We will reconvene as soon as possible.

Stonehouse: Good.

[Part 2 1:23:53] Lee: Thank you very much indeed.

[Part 2 1:23:56] [End of Part Two]

Part Three

[Part 3 0:00:00] Lee: This is Bernard Stonehouse, interviewed by Chris Eldon Lee, on the 7th of February 2012. Bernard Stonehouse, Part 3.

[Part 3 0:00:10] Lee: We left you at the end of your first tour of duty in the Antarctic. You came back to Britain, 1950, was it, Bernard?

Stonehouse: Yes, early 1950. About March I think, 1950.

[Part 3 0:00:24] Lee: And was that the end of your Antarctic adventure from your point of view?

Stonehouse: No, I knew I wanted to go back. I had left the Navy (or they had put me on the Reserve) and I decided I wanted to be a zoologist and then go back and work in the Antarctic again. So my brother-in-law, Freddie Marshall, who had been at Hope Bay, and was a fisheries biologist at the British Museum in London, applied on my behalf while I was on the way home, to join University College in London, which I

did almost as soon as I got back. I went up for interview there and they took me on on the strength of my record in the Antarctic. I'm glad because I wouldn't have been able to pass the entrance exams that they were holding at the time. I had a look at some of the question papers and so. I was way out. Anyhow they very kindly took me on and so I enrolled from that October to read Zoology, Special Honours, and Geology as a Subsidiary.

[Part 3 0:01:54] Stonehouse: So that's what I did. Now I had some work to do at the British Museum with the collections that I'd brought home and that gave me the opportunity to think out what I wanted to do afterwards. I thought I would probably get involved with penguins again because it was emperor penguins who were helping me to get into the university. They were what I knew all about and I was more likely to continue working on those than just to become say a fisheries biologist or something like that. So I was pretty well oriented from the moment I got into the university and as the 3-year course proceeded, I didn't have much opportunity to think further about what I had already done. But I went up to Oxford for a course, a vacation course at the Edward Grey Institute, run by David Lack, who was a distinguished ornithologist who wrote, among other things, *Life of the Robin*. I think he was probably best known for that, although he had also done some good work on the Galapagos Islands and so on, and he had been up in the Arctic when he was an undergraduate. One way and another it fitted in very well because I gave a short paper at that conference on the Breeding Biology of the Emperor Penguin.

[Part 3 0:03:40] Stonehouse: Anyhow I read the paper at the conference. He was very surprised that anybody had done more work on emperor penguins because he hadn't heard about it and he said 'Well obviously if you are going to ... you need to write it up for a start.' I said 'The Colonial Office had told me not to write it up because they wanted somebody else to go down and do the emperor penguins properly.' He said 'No, that is absolute nonsense. You need to write it. Now sit down and write what you know and we will get a note into *Nature* and then we will think about a report.' And that was very very positive thinking which I think made me realise that I really was onto a very good thing here. And he also said 'Now when you have finished your degree at London, if you are going into research, you will want to take a doctorate.' He said 'I will tell you now, I would welcome you here if we could arrange for you to do some fieldwork, further fieldwork on penguins.'

[Part 3 0:04:55] Stonehouse: Of course I clinched it and then I began to look around and I talked to Bunny Fuchs who was by then running the ... who was now director of FIDS, and said 'I want to go back to the Antarctic.' He said 'Yes, that's absolutely fine.' I said 'I am being advised by David Lack.' And he said 'If you know something about emperor penguins, you won't get back to the emperor penguins now.' (Because Base E had closed of course.) 'But why don't you work on the king penguins on South Georgia?' So that's how I lined up South Georgia, and as soon as I had graduated, I was enrolled at Oxford for my D. Phil. (they do a D. Phil.) and a year and a half's fieldwork on South Georgia. We had a bit of a problem with the Oxford University regulations because at the time they specified that anybody doing a doctorate based on Oxford had to work within 3 miles of the Carfax, which is the crossroads in the middle of Oxford.

[Part 3 0:06:13] Stonehouse: So we had to write to the Examinations Board, or whoever it was, and say we didn't think there were enough king penguins within 3 miles of the Carfax to justify our study. They wrote back very thoughtfully and said 'Yes, we agree and in the circumstances we will be happy for you to work at South Georgia, so do let us know how it works out.' So then in my Finals year I had to work out a plan for two of us, myself and Nigel Bonner, who was a colleague on the course, a contemporary, who wasn't sure what he wanted to do. So I said 'Why don't you come to South Georgia with me. I am going to need an assistant and you can study seals or reindeer or whatever you want to do.' So I lined him up as well. So then we had a two-man expedition to go and work on king penguins. That was all lined up so when I took Finals, all I then had to do was sort out the logistics of getting the two of us down there and being able to live there and so on.

[Part 3 0:07:36] Lee: So the answer to which came first, the penguin or the egg question, you were going South not to go to the Antarctic. You were going South to study penguins who happened to live in the Antarctic?

Stonehouse: Yes, that's right.

[Part 3 0:07:48] Lee: So it wasn't the Antarctic that was calling you, it was the penguins?

Stonehouse: It was the penguins, yes. Well as David Lack pointed out, 'Look, you are the only one who knows anything about this genus of penguins, the kings and emperors ... Nobody has worked on the kings.' We know they do something funny about their breeding cycle because they have chicks there all the year round. Well now, why is it that emperors ...? You've got two problems: why do emperors breed in the middle of the winter? And why do kings, who are the next in size down, keep their chicks all through the winter? Either seem absolutely crazy and we want to know more about them. Well I had part-solved the problem of the emperors. They are big birds. The eggs take twice as long to incubate as any of the smaller penguins, and the chicks grow very slowly.

[Part 3 0:08:48] Stonehouse: So if you want to launch your chicks in the spring, then you have to lay the eggs at the beginning of the winter and incubate them through the winter. If you are going to do that, what's the economic way of doing it? Instead of having both sexes running backwards and forwards across forty miles of sea ice, you exhaust one sex by doing the two months incubation and then at the right moment, the other ones come back, the females come back, loaded up with food, and then the chicks are away to a very good start. Then by the time the chicks are really needing more and more food, the sea ice is breaking back. So it all fits in. It made sense of what seemed to be a very odd sort of breeding cycle. Now the kings were obviously having part of the same problem, that they too are big birds. So they would have had to have thought up something that suited them. Now what are the details there?

[Part 3 0:09:59] Stonehouse: So it was quite clearly a very nice problem in which I had a very good start. While I was doing my three years in the Zoology Department, I was keeping up my flying because the Korean War was around and anyhow I liked flying and I wanted to continue. I had my commission transferred from the Naval Reserve to the RAFVR and was able to do weekend flying with the University of

London Air Squadron. So I was able to keep up; it took a lot of weekends and every Thursday evening we had ground school studies and so on. But I was doing that at the same time as I was taking my degree and that was very nice. It also gave me some extra money and I was able to run a car on the strength of it because I was getting flying pay. I was getting officers' pay plus flying pay *per diem* which was very convenient. Anyhow I did 18 months in South Georgia. We worked with the whalers. The whalers were the only people there who were doing anything at all active, so I got in with Salvesens. This was all arranged for me by the Colonial Office. I had to buy all the stores and equipment; we got grants for that, and I was employed by the Government of the Falkland Islands to do a survey, not by FIDS, by the Government of the Falkland Islands to do a survey of the king penguins on South Georgia. And that of course included the breeding behaviour and development which was going to be my study for my doctorate.

[Part 3 0:12:10] Lee: Just before we talk about what you discovered about the king penguins, tell me about Nigel Bonner. What sort of chap was he?

Stonehouse: Nigel Bonner? Yes, well he was an interesting student. He'd done National Service, so he was a bit older than the rest and he had done it in the Army. I think he had been a very good officer cadet and then a young officer the two years he was in and he might almost have stayed in the Army because I think it would have suited him very well. He was good company, always good company and he came with me. He didn't get stuck in, in the way that I was able to, because he had to spend more time finding his feet, and he started off very badly by contracting appendicitis in the middle of the last voyage down to South Georgia. So instead of being able to come out with me immediately to the Bay of Isles, where we were going to set up our camp, he had to spend about a month in bed at the whaling station at Leith Harbour. It was a very bad case. He was very fortunate. If we'd had another day at sea I think he would have died of it. We got him ashore just in time to have very much an emergency operation. Thank God there were doctors there who knew what to do about it, but he was still on the sick list for the best part of a month.

[Part 3 0:13:54] Lee: So the operation took place at Grytviken?

Stonehouse: At Leith Harbour which was where we were going.

[Part 3 0:14:02] Lee: Was it a hospital situation or was it ...?

Stonehouse: Yes yes, and as I say, fortunately they had a good small cottage hospital set up there and were able to do something about it, but it wasn't a simple job at all, and so he was an invalid for the best part of a month and I had to get an assistant from meteorological station there – somebody who was able to come out with me to build a hut and get the stores organised and so on.

[Part 3 0:14:48] Lee: Did Nigel display any of the promise that he later fulfilled?

Stonehouse: No he didn't, which was rather surprising. He was very intrigued with it and he obviously loved it. I think he missed civilisation in a way that I didn't because I had done all that before. He couldn't really get down to it and I suggested one or two things he could do in penguins, only he wasn't very interested in that. He was very

interested in nerves and the anatomy of nervous systems and things like that, which of course he couldn't do anything at all about in a 10' by 14' hut in the Antarctic. But eventually I got him interested in the reindeer and we got him interested in the seals. He was able to do some work on those, enough to justify his later coming back to South Georgia as a sealing inspector.

[Part 3 0:15:48] Stonehouse: And it was in that trip that I think he became a dedicated polar biologist that he later was. You might say the foundations were laid when he was there as my assistant for a year and a half. But then when I think later he realised he had missed a lot of opportunities, so he came back and was taken on as a Government inspector. From that, I think he got in with Dick Laws and so on to do his work on seals. He never took a doctorate. He published quite a lot of papers but he never got down to a detailed study of any one corner of biology, which might not have been a very good thing for him anyway because he became a much more general biologist and eventually, as far as I know, did a very competent job as the Head Honcho at BAS, which was good.

[Part 3 0:17:09] Lee: What about this so-called garden shed you found yourself spending your 18 months in? Tell me about that. You seem to have an affinity for garden sheds.

Stonehouse: Well I think that's where it started. I had to sit down and think out what sort of accommodation do we need and I thought something like a wooden hut 10' by 14' with reinforced ... We were going to have to over-winter in it. South Georgia wasn't as cold as the Antarctic had been but we still needed something very strong and stable and that could be insulated. So I had a look at the back of the *Radio Times*. Halls, I think it was, the firm that was advertising garden sheds. At about £100 you could buy a 10' by 14' garden shed, so I had a look at one of those and said 'Yes, that will do. Can you fit me double windows and supply some timber that we can make internal partitions and things like that?' the benches and the furniture that we were going to need. I knew what sort of kerosene stove we would need for it. We weren't going to have anything more elaborate than that and it served us very well. Oh we needed some heavy timbers for the base-plate but we got those from the old whaling station, the Prince Olaf Whaling Station. We went and paid them a visit.

[Part 3 0:18:47] Lee: Was it double-skinned, the walls, with kitchen foil?

Stonehouse: No, it was just tongue and groove timber and we lined it with ... We took down some lining material. It wasn't asbestos; it was some sort of plastic furry material and we lined it with that and then plywood. So we had a wall, a good insulated wall about three inches thick, and that did. Now if I were doing it again, I would want to put a porch on it, so it didn't open to the wide world. It wanted a better door rather than a sort of panel, rather poor panel doors that they supplied. We took some corrugated iron that we got from one of the old whaling stations and some timber from that. We built a store-shed, just a distance away, so that if the hut caught fire, we would have somewhere to go into with all our stores there. And we had a radio that only worked very intermittently to keep in touch with the whaling station. Oh and a couple of little generators just to generate enough power to give us battery lighting in the evening and the long winter nights. It was perfectly adequate and very very cheap.

[Part 3 0:20:23] Lee: How did you stop it from blowing away?

Stonehouse: Anchored it down in a way that I'd seen Antarctic huts anchored down. You put ropes over it, attached to a box of rocks at either end. We had no problem with that, and it stood up perfectly well for the time we wanted it. I think it was eventually burned down by one of the other expeditions that came along. I am told they had a party in it and they set it on fire. It was certainly burned out when I eventually got back to seeing it.

[Part 3 0:21:03] Lee: And the equipment you had inside for your scientific work, was that elaborate or ...?

Stonehouse: No, very simple. I was doing observation and I was collecting embryos and I was collecting some bits and pieces, pituitary glands and things like that because we had an idea that those might tell us something about when the birds came into breeding condition and so on, but that was all a side-line. Nigel, I think, if he'd had more ..., if he'd had a laboratory there, he'd have got down to his studies of nervous systems which I think he would have liked, but of course there was never any question of that. We didn't have the money and we didn't have the motivation for it anyway. So no, it was very simple: some weighing equipment, measuring equipment, some boards to write our notes on. No computers or anything like that of course.

[Part 3 0:22:14] Lee: No, quite.

Stonehouse: It was way before that time.

[Part 3 0:22:16] Lee: Not even clockwork ones?

Stonehouse: I had a complete *Encyclopaedia Britannica*, which I bought at the door while I was a student at London. I thought we would take that down; it might save one or two arguments. We had quite a good small library: a few yards of a shelf with a selection of books on. We had visits from the whalers during the whaling season, which was all but about four months of the year. They came once in the middle of the winter when they were going round fixing buoys or something like that, and they called in to see us. We had an incentive for them to come and see us because we had the only free supply of whisky on the island. I didn't have much but we had been told that if we wanted to get special treatment from the whalers, that would be a very good thing to have.

[Part 3 0:23:16] Lee: So tell me about the science then, that you did. In what way were you able to further the knowledge of the breeding patterns of king penguins?

Stonehouse: Well I went out every day. We marked a number of birds; we painted numbers on their shirt fronts, which was the obvious way to mark a penguin of any kind.

[Part 3 0:23:37] Lee: With ordinary paint?

Stonehouse: Yes. We had several different kinds of paint we tried out but the rubberised paint which was best because that would stand several months of going back to sea and things like that. And also I took aluminium bands for the flippers to identify them positively that way. We found a small colony; I was careful not to use one of the big colonies, but the whalers told me where there was a colony of about 2000 birds, which was smaller, in the Bay of Isles. As soon as I saw it, I said 'Yes, that's right. This is the right sort of set-up. We can have the hut here.' There was an old sea cliff along the back, provided shelter and some fresh water from a glacial stream flowing right past the door. We had to chase some of the elephant seals away because they were using the beach as a resting area. No fur seals at that time of course. In the whole 18 months we were there we saw one fur seal. So they were just starting their extraordinary recovery.

[Part 3 0:25:06] Stonehouse: And I must have marked altogether, I would think ... I had a population of about 200 birds marked and I followed them through their season, and the pattern gradually emerged. I went down every day to the colony and just wandered round it. They got used to having me around and I was able to pick up the numbers. All the numbers that I had were on a board, and I ticked off the ones I saw and what they were doing. That went on day after day after day, and you gradually worked out what individual birds were actually doing – how they were getting involved. When they moulted and when they came up for breeding, you could weigh and measure them. Some of them got quite used to being weighed; all you had to do was put a sling round them and just lift them off the ground on a spring balance. You could do that with them still holding on to their egg. They got very blasé about it.

[Part 3 0:26:22] Lee: If penguins could fly ...?

Stonehouse: Well they couldn't. Every day was very slightly different. We saw the season through; that's very important. I have always regarded that was very important for anybody who is trying to understand what polar regions are about as far as animals are concerned. You have to be there all the way through at least one season even if they are animals that don't do anything at all in the winter except hang around waiting for spring. You want to know how they are hanging around and what they are doing while they are hanging around and I was very fortunate there. I'd already had the three years further south and now I had 18 months which was one winter and the two summers; the summer that I went in and that gave me a very good understanding of what the biology was about all the way through the complete cycle.

[Part 3 0:27:30] Lee: Well the thing that puzzles me, if I have got my facts right, is: you unravelled the fact that they were able to raise two chicks in three years, and you did this having only been there 18 months. How is that possible?

Stonehouse: You saw they did very little after September. Then you started seeing birds that were quite clearly not raising chicks, and the chicks were there. So you had a population of birds who were raising chicks and you had some of those marked, and you knew when they stopped raising their chicks, which would be about October. You saw them come back three weeks later all ready for moulting. They would moult for three weeks to a month, go away to sea, come back again, fattened up because now the sea was full of plankton for them. Then they would start breeding. So you knew what they had been doing for the last 12 months essentially, because previously they

had been raising the chicks. Now they were starting again but they couldn't do this within a year. The chick that they had just finished with must have been laid as an egg in about January but by now it was March.

[Part 3 0:29:01] Stonehouse: They started laying again in March which meant that they couldn't fit one chick into one year. So now you could follow them through the next ... Now about half of them lost their chick or their egg in the normal course of events, so then they would go back to scratch. They would go back to start again as early breeders in the following October. The ones that succeeded would have to start again after that. So they could get two chicks in three years but they couldn't get three chicks in three years. Many of them of course didn't get the two chicks in three years because they lost a chick and then they would start again. So they would ... and so on. This was how you worked it out. They just don't have time to fit one chick rearing into the calendar year. Of course all the little ones can do that, standing on their heads. The emperors do it by setting back into their incubation during the period when there isn't really anything else to do at all.

[Part 3 0:30:25] Lee: So as a consequence, in any colony there will be chicks of all ages simultaneously?

Stonehouse: Mm. There are chicks in the colony all through the year. This was what puzzled people in the past who had visited the colonies and said ... Well in fact they thought these brown penguins were a different species. What did they call them? Woolly penguins. They were identified as that because in the middle of winter the colony consists of 2000 chicks and about three adults because all the adults were away. Now the adults come only about once in three weeks. Each adult will come back and pick out its chick from this mob and feed it and then push off again. They are only around for two or three days; then they go off again. Then the other parent would come back say three weeks after that. So the chicks were only fed ...

[Part 3 0:31:29] Lee: How was your research received in academic circles?

Stonehouse: Well I got back and went to ... now back at Oxford and wrote it up and somehow I managed to write a history of Antarctic exploration while I was doing all this.

[Part 3 0:31:54] Lee: And get married?

Stonehouse: Well it was only published in Dutch eventually. The English publisher had dropped out. But he sold the rights to a Dutch firm so it was published only in Dutch. I may have a copy of it around but I wanted ... It was David Lack I think who pointed out to me 'If you want to know something about something, write a book about it.' Because if you are going to write a book about it, you have to ... and it's easier to do it that way because you have got a purpose for learning and a direction to go in, and I have very often used that. But I wrote my thesis and it was examined by two very good examiners and accepted, and then it was published as a FIDS Report, as my emperor penguin had been. And that was fine.

[Part 3 0:33:04] Lee: Was it that that established you as a *bona fide* scientist?

Stonehouse: Yes. Well then I was still at the Edward Grey Institute in Oxford. I had written up and I was kept on as a demonstrator, which was a sort of trainee lecturer. And then the British Ornithologists Union, which is the oldest established ornithological union in the country, probably in the world, was having its centenary year and they planned two expeditions and I was approached through David Lack (I was part of the grapevine then) to see if I would lead it. I think they were impressed with the garden shed, if you were doing work in the garden shed. So I thought of the Arctic, but one of the major issues in biology at that time, in bird biology particularly, was what controls breeding seasons? What are the environmental stimuli that get birds started in breeding? I think it must have been David Lack pointed out 'Well now there is a problem on the Equator. Would you be interested in going?' He said 'We are beginning to realise that where there's seasonality, it's day length that's controlling it through pituitary glands and so on, that's controlling the breeding season.'

[Part 3 0:34:50] Stonehouse: 'But what happens where there is no seasonality, as on the Equator?' So we had a look for localities on the Equator. I wanted to work on seabirds because I like the sea and I like being on islands. So we found Ascension Island. There is a very interesting problem there because there was a population of terns that were breeding on average every 9.4 months. How the hell do terns decide that they are going to ...? Now there were known to be another dozen other species there which is enough to make a nice little population. So I said 'Why don't we go to Ascension Island and do some work there and find out what these breeding cycles are? I am very good now at working out I know how to start working out breeding cycles. Let's go and work there and at least keep warm.' I had just got married to Sarah so she was able to come with us. So we set up the British Ornithologists Union Centenary Expedition to Ascension Island, which again was an 18-month thing to be able to cover the whole of a year and then a bit at either end. I think it was that that really got me launched as a ...

[Part 3 0:36:29] Lee: Did that require more than one garden shed?

Stonehouse: Well we had three. We had two garden sheds and then we were able to build more from the debris that the Americans had left on Ascension Island during the war. But that's another story and it's not polar so you probably won't want to know too much about it.

[Part 3 0:36:50] Lee: All right, well let's ...

Stonehouse: But it was great fun.

[Part 3 0:36:51] Lee: Yes OK.

Stonehouse: And it got me away from the Antarctic into another field altogether.

[Part 3 0:36:57] Lee: So at that point did you suspect that your Antarctic days were over?

Stonehouse: No, because then along came George Knox from New Zealand, the University of Canterbury. He was in Britain looking for a biologist who would be polar, would be able to take up a senior lectureship straight away in the university, in

his university – the University of Canterbury – and start a polar operation for his Zoology Department. He would be interested to do it himself but he hadn't time because he was running the department but he wanted somebody of status, let's say, who could come along and get the University of Canterbury involved in Antarctic work. Of course I fitted the bill absolutely. Now I was keen to go to New Zealand because I had served with New Zealanders during the war. In my squadron there had been several New Zealanders and I was very impressed with them. They were my sort of age but way ahead of Brits in independence and freedom. I liked the way they thought and things like that. So I was very keen to go to New Zealand and he was very keen to have me, so we went off to New Zealand. The main advantage was that Operation Deep Freeze which was working out of Christchurch. So right on my doorstep I had a bunch of Americans who were only too happy to take New Zealanders down to McMurdo Sound.

[Part 3 0:38:39] Lee: That's how you went to live at McMurdo, was it?

Stonehouse: That's how we got involved with that. I was there for eight years and for each of the first five years I ran our biological expedition. I set up a biology unit which would go down to the Antarctic and work in McMurdo Sound, working out of Scott Base, because at that moment the New Zealand Government wanted to get the universities involved. So far they had succeeded only in getting Victoria University of Wellington to send a small geological party. They went down every year. Well I said 'Right, if they can go and do geology, I and go and do biology,' We decided we couldn't work in with them because they were doing other things and doing it in their way. But I went down with a unit of four, I think it was, in the first year and we had a very quick look around and homed in on Cape Royds where there was an Adelie penguin colony. It's the southernmost Adelie colony in the world where numbers were known to be declining because of ...

[Part 3 0:40:06] Stonehouse: A biologist from Canterbury, who wasn't able to continue his work there, but had spent a season there and said 'Well the colony is much smaller than it had been in Shackleton's time,' and he was afraid that it was declining. So we said 'Right, we are going to concentrate on Cape Royds. We are going to set up there.' We actually lived in Shackleton's hut for two seasons which was not the right thing to do at all but of course it was then. The New Zealand Antarctic Society had sent volunteers down to clean it out, get all the ice out of it, and they were looking then for people who would actually live in the hut, because they were getting a lot of American visitors helicoptering in. American VIPs wanted to go and visit them. So they were quite happy to have the little unit working in there, and that's what we did.

[Part 3 0:41:13] Stonehouse: So I started marking the penguins, individuals, to get to know them and marking their nests and so on. You can do that with Adelies because they make nests. It was quite a big area of colony but only little patches of it were being used, so it was quite clearly declined very recently. Well it didn't take us long to identify why. It was because these helicopters were flying in and landing on the lake which was in the middle, right alongside the hut. So the VIPs could get out and walk into the hut and have a look at it. Now American VIPs were congressmen, journalists, senators, army people and so on, who were taken down to McMurdo Sound, to the McMurdo base by the Americans, the journalists particularly, so they

would write good things in the papers and get more money for the National Science Foundation to continue the work. But on the whole they couldn't care less about the Antarctic; they were just there to do the job. You land a helicopter in the middle of a penguin colony and the penguins get bowled off their nests and I had photographs of that actually happening.

[Part 3 0:42:41] Stonehouse: So we said 'Look, this is nothing ecological as far as we can see. It's nothing about plankton supplies or anything like that. It's simply the mechanics of this being a ...' These were some of the first tourists in Antarctica. This was before tourism as such actually started. We had very interesting encounters. I reported to the New Zealand Government that this was happening but they didn't feel they could do anything about it because it was the early days of the Antarctic Treaty. Now they claim the Ross Dependency. The Americans didn't admit that claim, but nobody wanted to quarrel about it. But the New Zealand Government didn't want to appear to be bossing the Americans around. So they said 'We are not going to approach the Americans about this.' So I went from the University in Christchurch, down to the American base in Christchurch, made an appointment to see the Admiral who was in charge of it, who turned out to be a very good chap indeed.

[Part 3 0:44:02] Stonehouse: I said 'Look, your pilots are blowing the penguins off the colony. Now you don't want that happening do you?' and he said 'No, I don't.' I said 'Well right, I am a pilot. I can draw up flying regulations for the colony which will land them about half a mile up the hill, fly right around, keep right away from the colony, land. We will mark out a pad, half ...' He said 'Well, that's a problem because most of the VIPs I take are not capable of walking half a mile, up or down the hill.' But he said 'We will try it out. You draw up some regulations, give them to me. I'll sort them out and I will see that they are taking account of them.' And they did and it worked. And from that moment the colony started increasing again. I was able to follow it for another four years and we were getting very good, very positive results. It was very simple but very clear.

[Part 3 0:45:12] Lee: You were using your piloting skills to determine how many penguins there were in a particular colony at one point, weren't you?

Stonehouse: Yes. I got onto that. The Americans had a very good set-up down at McMurdo. They had dozens of their own American scientists coming in from American universities and so on. They were very keen to help the New Zealand units to get their work done and if you knew what you wanted, they would help you. Several of the pilots said to me at different times, 'Well you are easy to deal with because you know what you want. Most of our chaps coming down don't.' It's not surprising because they hadn't been there before. I had and knew what I wanted. We worked out that Adelie penguin colonies, there is a time about three weeks into the breeding season when all the nests have the eggs in and each nest has just one bird sitting on it and the other one is away at sea, and they are very highly synchronised. That is the time to take a photograph from the air, because every dot is a nest, is an active nest.

[Part 3 0:46:32] Stonehouse: We worked that out and they were flying DC-3s at the time, which I was quite familiar with. You took the side off and you put your camera over the side and you kept at about 5000 feet so that you weren't disturbing the birds.

If you had a decent camera, you could get a very good series of photographs. We used colour photographs because the definition was better, and you showed them up onto a screen and then you could count them. Of course there are much better ways of doing it now. So we pioneered that technique of counting penguin colonies from the air. At the same time I was able to fly all around the place and we found I think it was four more emperor penguin colonies in that area that nobody knew about, that hadn't been reported. And there were all sorts of useful things like that we were able to do during that five years when I was taking parties of students down, three and four students at a time.

[Part 3 0:47:46] Lee: We are still very much in the early days of scientific exploration in the Antarctic but you were already getting concerned about the impact of the scientists themselves were having upon the continent they were studying?

Stonehouse: Well yes, those VIPs. I wrote an article, I think it was for *New Scientist* or for one of the journals, saying 'too many tourists in the Antarctic', with a query after it, and of course tourists then were these visiting parties, the VIPs and so on. I also pointed out that they were doing these big operations, operations run by the military on behalf of science, were playing hell with the environment. The rubbish dump outside McMurdo Sound was enormous. They put all the rubbish out on the ice in the hope that the ice would go out but of course it doesn't go out every year in McMurdo Sound, as we know darned well. Eventually, when about four years had accumulated, it had grounded the ice so even when the rest of the ice went out, that didn't because it was ... The turning point there was a very ... one of the first cruises by genuine tourists coming down. It was run by Lars Eric Linblad, who was the pioneer of Antarctic tourism, who was a very responsible chap himself, taking parties to all sorts of places all over the world. He was dealing with wealthy people who he could train very easily not to kick the place to pieces.

[Part 3 0:49:43] Stonehouse: Well a small party came down to the Antarctic. It was the first tourist cruise to go into McMurdo, and I met them at a reception later on. One good lady on that, an elderly lady, said 'Are you the young man who's protecting those penguins at Cape Royds?' I said 'Well, yes.' I was in my forties but she must have been in her eighties. She said 'Are you still having trouble with the Admiral?' I said 'No, the Admiral and I are just like that. We are getting things sorted.' She said 'Well if you have any trouble from him, let me know, because I play bridge back in Washington with his mother, and if she thinks that he's giving penguins a hard time, she will make his life hell. And that was when I realised that here was a whole constituency of people coming down to the Antarctic. They were not coming down to gain seniority in the Services. They were not coming down to get their PhDs. They were coming down because they were curious about the Antarctic and they wanted to something once they'd got there.

[Part 3 0:51:08] Stonehouse: They bought it and they wanted to do something to help it. I didn't follow it up then but later on in life, when I'd come back to Britain and was getting back into Antarctic research, I got a message from one of the cruise companies. Would I like to go down as a lecturer on the ships? Now at that time that was not a popular thing to do among scientists but I remembered this group and I thought 'Yes, this is an opportunity to find out what is actually happening here.' I had heard that the industry was building up a bit. Well OK, I was invited to get involved

in it and I did. I was very glad I did because it opened up a whole new research field for me.

[Part 3 0:52:04] Lee: But you were initially anti- or at least sceptical of the idea of tourists?

Stonehouse: I was very sceptical of the idea if anybody going to the Antarctic who wasn't actually doing some useful scientific work there and that included all the support.

[Part 3 0:52:20] Lee: So first of all why were you so anti- and secondly how come you changed your tune?

Stonehouse: Well I realised that the cruise ships were being run on what I called the Linblad pattern, which was first and always to protect the environment. (a) It sold tickets. This is why it worked. It was for fairly wealthy privileged people who, even if they wanted to kick the place to pieces, wouldn't have done so, and generally they didn't. They were all involved at home in the Audubon Society or this society or that society or the other for protecting the environment and they were when they came to the Antarctic. So anyhow Americans are much better trained in this sort of thing than we are. Smokey the Bear and that sort of thing; they have all these marvellous natural history reserves of one kind or another that they were brought up on this. So they were very easy to train when you got them down to the Antarctic.

[Part 3 0:54:44] Stonehouse: When I started lecturing to them, I realised they were very very interested indeed. They were also influential because, like my good lady who knew the Admiral's mother, they would all have environmental interests when they got back home. Somebody said they became ambassadors for Antarctica. I think that is overstating it slightly but it's in the right direction. And now they were beginning to come down in their hundreds, and then in their thousands, and they were not leaving any mess, any of them. If there was a mess in the Antarctic, it wasn't tourists who were doing it, it was the scientists who were there 20 years ago and had finished and abandoned it, or it was the aviators who had left 40-gallon drums there that had now rotted away. Everybody else was mucking up the Antarctic but the tourists weren't. Once you accepted this, then you realised that really there was a lot to be said for a certain amount of tourism in the Antarctic.

[Part 3 0:54:56] Lee: That's a key fact, isn't it? It's a key phrase 'a certain amount'. Would you want to put a ceiling on it?

Stonehouse: The conclusion I came to was that the Antarctic Treaty simply was not able to cope with this. First of all, it was not willing to because they thought that Antarctic tourism was a flash in the pan and it wasn't going to continue. I knew better than that after about five years because I realised that these were very popular cruises and the number of ships was increasing every year. The prices were going down because they were cutting costs in various ways. They were getting very cheap Russian ships to come down for practically peanuts. Some of those were an absolute menace because they didn't have the right charts and things like that but, OK, that was something you could do something about. They had a very good trade organisation called IAATO which more or less helped set up some of the rules that

they set for the industry, and it paid everybody in the industry to join IAATO and get the privileges that you got from being a member of IAATO, that's the International Association of Antarctic Tour Operators, which were doing a very good job.

[Part 3 0:56:29] Stonehouse: They were bothering to do this when the Antarctic Treaty was simply not into it at all. So I was getting all the support I needed from the industry to get round, because I could lecture on board the ships and in return they would take my parties and put them down where they wanted to be, and then pick them up again after a few months of observations and so on. The tourist operators knew that I wasn't anti tourist. I wasn't necessarily pro-tourist but I was sharing all the information I got and if I saw something going wrong, I pointed it out. I set up guidelines for some of the popular areas, which I gave to the Government but they took no notice whatever. I gave it to the tourist operators and within a year or two, you would find that it was in all the guidelines that they put for their own lecturers on board the ships.

[Part 3 0:57:45] Lee: The process that you described is: Getting to the Antarctic at all was always an elitist operation.

Stonehouse: It was expensive.

[Part 3 0:57:57] Lee: You had to have either a particular scientific interest or as a tourist, lots of money. The ships got bigger, the prices came down, the ships got dodgier (some of the Russian ones), more people came. If that trend continued, would you start to get worried because ...?

Stonehouse: Well again, I had to get to know quite a lot about industry, and this is why I was interested because it was broadening my interests, the whole of the time. You had to try to sit down and work out how an industry of this kind worked. Well I talked with the operators, and I talked to a lot of the ships' captains, because I was able to help them on the bridge by saying 'Look, there is an interesting ... If you are looking for something to do, there is an interesting penguin colony over there. I know you can land people there because ...' I could be useful and at the same time I could be learning a hell of a lot. So a lot of this accumulated round me, if you like.

[Part 3 0:59:01] Lee: The point I am making though is that in the 19th century, getting to Venice was very difficult, so Venice wasn't threatened. In the 21st century, anybody can go. It's under threat, and the same process is possible ... It's possible the same process may begin to undermine the pristine nature of the Antarctic, isn't it?

Stonehouse: Well, right up to the last three or four years, the graph of numbers of ships and tourists going was going up like that, and right up to the last few years, there is no reason why it shouldn't continue doing that. Now the Antarctic Treaty has absolutely no control over this. The industry was driven entirely by its own profitability, and more and more ships were coming in.

[Part 3 0:59:50] Lee: David Attenborough films were making people want to go?

Stonehouse: Well of course, that and the *Geographical Magazine*, the *National Geographic Magazine* and so on; everything was pointing to this increasing and

nothing was holding it down. Now the Antarctic Treaty can't stop tourism. It can't control tourism. There is absolutely no way it can. It can cooperate with the tourist operators and occasionally it can put the boot in as it has done recently with the big ships by saying 'If you are burning thick oil, you can't go beyond either that distance north or that distance south.' That has been accepted as a general proposition all over the world, and it's affecting the tourist industry, and some of the big ships have had to stop going down, and they don't go there anymore. It's a pity because in fact some of the big ships are in a sense some of the safest ships that can go down because they don't take any risks.

[Part 3 1:00:57] Stonehouse: They always go down the middle of the channel. They don't go into odd corners. They are very well-equipped for navigation, far better than some of the smaller ones. They always have at least one and possibly two ice pilots on board who know the area like the back of their hand. They often have people like me on board who also know the area like the back of our hands, and between us, on the bridge, they are about as safe as any ship could possibly be anywhere. This is possibly not the time to be talking about the safety of big ships – what's happened in the Mediterranean⁶ – but for Christ's sake you don't get people like that in the Antarctic. No, they are some of the safest and I think probably ecologically they are some of the best anyway because they take so many passengers in one unit. You can take 4000 passengers on one big ship, or you can take 400 passengers on each of 10 ships. Now which is better ecologically? You can argue along those lines.

[Part 3 1:02:24] Lee: On the other hand, if a small ship gets into difficulties and needs to be assisted, getting a hundred people off a ship is easier than getting 4000 people off.

Stonehouse: Well it's always the small ships that are getting in now. Some of them do get into trouble. It's the small ships that are getting into trouble. The answer to that we proposed as soon as it came up. If you are sending one big ship down, for Christ's sake make sure there is another big ship within steaming distance of it because that's your safety valve. If you've got 4000 passengers on a sinking ship, you need a bloody great ship alongside to take them on board, because you can't get them all on board ...

[Part 3 1:03:04] Lee: On a Zodiac?

Stonehouse: You've got a big problem, but it's a much smaller problem if you have another big ship alongside or within steaming distance. We worked out about 20 hours would be fairly critical.

[Part 3 1:03:19] Lee: In your guiding years ... Sorry, in your years as a tour guide on the ships, what was the knowledgeable level of the public? Was it improving all the time?

Stonehouse: Always very mixed. There were some people who didn't know where they were from one day to another. They were on a big ship and I remember one lady, a very well-to-do lady on one of the big ships. I said 'How long did you spend

⁶ He is referring to the *Costa Concordia*, wrecked off Italy 13 January 2012 with the loss of 32 lives.

cruising every year?' 'Oh about ten months of the year.' 'I said 'Well where do you go?' She said 'I don't mind. It's the ship that's important. It's my home. Every day I am living in a wonderful hotel. It's moving around so I have different scenery every day. The service is wonderful. I'm not going to get mugged. I've hundreds of different people to talk to. I can come and talk to you. I can go and talk to the Chief Officer. I can go and talk to the cook if I want to.' She said 'It's ideal.' Now she wouldn't care if she was in the Antarctic or in Florida. She wouldn't mind which she was in.

[Part 3 1:04:38] Stonehouse: Others, and I would say the majority, are so thrilled to be in the Antarctic, because of Admiral Byrd of course. This is the generation that was brought up when Admiral Byrd was very much in vogue. I have had dozens of elderly men come up to me and say 'When I was a school-kid, Admiral Byrd came to our school and he patted me on the head and he said "One day son, you have got to go to the Antarctic." That's exactly why I am here today.' It's in their background in the way that Scott and Shackleton are in our background. And then you get a ship with 400 Japanese on board. You can't do a darned thing with those because they have their own translators and their own guides, who are absolutely hopeless.

[Part 3 1:05:30] Stonehouse: They don't know anything about the Antarctic at all. All they want to do is take photographs. Well in a sense, those are some of the safest people of all because that's all they want to do. They don't want to hold a penguin. They don't want to collect rocks. They don't want to leave litter. They don't even want to go ashore. They just want to take photographs and they take photographs of themselves with the mountains in the background, photographs of themselves with the ship in the background and then they go home. Now they've not done the slightest harm to Antarctica, so millions of these could come down and be taken out. No, the industry is much less of a menace than the scientific industry was in the past. It isn't now because it's much better controlled and anyhow it's getting so expensive. The time the tourist industry is coming up, I think the scientific industry is, if anything, going down.

[Part 3 1:06:30] Stonehouse: What I don't like is the fact that nobody is controlling the numbers of ships except the economic circumstances, and if the numbers are down now, compared with four or five years ago, it's because of the external situation, not because we have reached some sort of plateau that has something to do with the ecology of Antarctica and its protection. Now I would like to see that. I would like to see somebody sit down and think 'What are the implications if in ten years' time we have twice as many ships going down as we have now? Is it safer?' Some would say yes, because the more ships you have, the more safety factors you have. Two or three ships are going around the Antarctic on their own are a bloody menace, but if you've got thirty or forty all within reach of each other, you have a sort of self-maintaining community. But let's not pretend that the Antarctic Treaty is able to protect the ..., is able to do anything about this in any way. OK?

[Part 3 1:07:42] Lee: Let's pause for a second. I need to change the tape. Thank you.

[Part 3 1:07:48] [End of Part Three]

Part Four

[Part 4 0:00:00] Lee: This is Bernard Stonehouse, interviewed by Chris Eldon Lee, on the 7th of February 2012. Bernard Stonehouse, Part 4.

[Part 4 0:00:10] Lee: How did you get involved in SPRI, Bernard?

Stonehouse: How did I get involved in SPRI? I first went as a visitor when I was going down to ... well when I was an undergraduate, because I met Apsley Cherry-Garrard in London. This was when I had just come back from the Antarctic for the first time and had the emperor penguin story and I had this idea that it was only the males that were incubating. I wanted to know if the ones that they had killed on the colony had been only males. He said he didn't know. He was a little bit vague but he was an elderly gentleman by then. This was in one of the clubs in London. I forget where it was, now. But he said 'Have you checked any of the ships' logs because they occasionally saw emperor penguins and took them on board, prepared them as specimens and so on?' He said 'The one that might be most helpful is Worsley's because they found a lot of ...'

[Part 4 0:01:30] Stonehouse: So I went along to SPRI and got hold of Worsley's report and I didn't really know enough about the expedition to be able to get my money's worth out of it, but I did many years later when I was doing some more work on emperor penguins as I am at the moment. Anyhow that was my first encounter with SPRI and then I had it in the back of my mind all the time. I got involved with it more fully when I'd come back from New Zealand and I was a Senior Lecturer and Head of a Department at Bradford University and was running courses in environmental science. I wasn't able to get down to the Antarctic from there (I had no excuse for going) but I got involved with SPRI because I visited two or three times to look up particular points of research. I got talking to Gordon Robin and so on. We lived in his house, right here in this village, in Swaffham Bulbeck, when I did a 6-month tour, a 6-month sabbatical leave at the Scott Polar, when they were just starting up the Masters' course, the MPhil course.

[Part 4 0:03:11] Stonehouse: They took me on first of all as an advisor on it and then external examiner. So although I was now working at Bradford University, I had an excuse to come up to SPRI every now and again and do a bit of examining or helping with the course, a bit of lecturing and so on. And then when I had done about 11 or 12 years at Bradford, I decided I was going to take early retirement. They were offering it and I was one of the first to grab it because I wanted to get some work done, get back into Antarctic work. I suppose running a department and attending professorial board meetings and God knows what wasted an awful lot of time. So about that time the Editorship of the *Polar Record* came up, so I said 'Right, I will take my retirement. I will draw my pension. We will come to Cambridge and I will edit *Polar Record* for you – a very good reason for working in SPRI.' That gave me all the facilities I needed to run research students and I was able to join a French expedition from SPRI.

[Part 4 0:04:39] Stonehouse: They very kindly gave me a few months on Kerguelen Island where I worked on fur seals and I was able to join a German expedition, the Winter Weddell Sea Project, where we spent one late winter and spring in the

Weddell Sea on a German icebreaker, so I was able to get back into fieldwork through SPRI and then the whole business of the tourism came up. That was I think in about 1990 I got the first offer to go down to the Antarctic as a lecturer on board, and it was then that I realised here was a whole new field of research opening up. There was an industry starting up in the Antarctic and nobody was studying it or working on it. It was a very good excuse for taking students down. So I was able to do *Polar Record* editing which I did for about 10 years, but at the same time I had this field programme. We got over a dozen PhDs and Masters degrees out of it with the students I was able to take down, and some of them have now go on and are working in the industry itself. It was a very very profitable time for me and it gave me three or four months in Antarctica every year. We set up bases here and there to study what tourists did when they came ashore. We set up one or two long term projects to see what effects, if anything, this was having on, say, the penguin populations that were being visited every year.

[Part 4 0:06:46] Lee: Were there any surprises?

Stonehouse: Well one surprise was: one base we set up, we declared one end of the island and the penguins colonies off limits and the other was the area that all the tourists were visiting. We didn't even go to the far end ourselves except once to count the number of breeding birds and then at the end of the season to count the number of chicks that were going away. We were doing the same in the control area as well and we found that the breeding success was actually higher where the penguins were being visited every day by tourists than it was in the control area down the other end. Of course if it had been the other way round, everybody would immediately have said 'Of course it is the tourism that is upsetting the penguins.' But in fact I don't think they had the slightest influence on it either way.

[Part 4 0:07:45] Stonehouse: No, we got a lot of information about how birds behave, all kind of birds behave in areas which are being visited. Some birds, Dominican gulls for instance, you can't do anything about. You just have to keep out of their colonies if you don't want to disturb them. The giant petrels are terribly sensitive to visits and we said in our guidelines 'Don't go anywhere near giant petrels if you want to keep your reputation for not disturbing birds, for conservation.' People took notice of this because these were unbiased opinions. On the whole we were saying ... IAATO had put out guidelines which were drawn up by a group of naturalists on very sensible lines. But we said 'We ought to test those guidelines.' So we went through them systematically and tested them. Now some parties were going ashore in groups of ten or twenty, and staying together of groups of ten and twenty, with a lecturer in charge. Others were letting their tourists wander through the colonies. 'Don't go within 15 feet of a penguin and everything will be all right.' Now which of those is the better?

[Part 4 0:09:24] Stonehouse: Rather to our surprise, we found that the guided tours were probably more disruptive than not. I think that it is if you are walking around a colony, slowly and quietly, you are just another penguin, but if something with twenty heads and forty legs comes through, and a lot of people are chatting about their hairdresser back in Oshkosh, Wisconsin and so on, that's something penguins haven't seen before, and that is disturbing. They don't get up and run, but we were monitoring their heartbeat and things like that. We had some bugged eggs while they were sitting on the nest; we were recording their heartbeat through the eggs. A party going

through, it didn't disturb the penguins but it aroused their interest. You could see them taking an interest: 'What the hell is this? Haven't seen one of these before. It's probably alright.' And then they go back to sleep. But that's using up energy which on the whole they can't afford when incubating. We were doing that sort of ... We were testing the guidelines and we were testing one or two other propositions that had been put out about conservation in Antarctica and drawing our conclusions from all this, so it was very profitable.

[Part 4 0:10:53] Lee: There's a story, about that time, of the search for the food source for a colony of emperor penguins. You were doing water column tests which were proving to be almost empty of food and yet there was a substantial number of emperor penguins breeding on the spot who must be getting their food from somewhere.

Stonehouse: Yes that was the *Polarstern* expedition, the Winter Weddell Sea Project. We were October / November and accepted wisdom was that there was nothing at all, that the sea at that time of the year was empty of plankton. In the icebreaker, we were going through the ice and putting down nets of all kinds: big nets, little nets, plankton nets and fishing nets and God knows what, because the *Polarstern* could turn itself into a trawler when it needed to. We weren't catching anything at all and so this was going along with accepted wisdom but every now and again we came across an emperor penguin colony of, say, 20,000 penguins who were feeding their chicks. And then we would see 400 seals we were over-flying in helicopters. You would see 400 seals with pups and they were obviously fat and prosperous, so they all knew something that we didn't and we had to find out what it was and we found out more or less by accident.

[Part 4 0:12:33] Stonehouse: We had a machine with cameras on it that you could send down into the sea and move around. They use them for inspecting the legs of oil rigs and things like that. All the lights and the lenses were pointing downwards so that you were examining the seabed. Then we got the idea 'Well let's turn the whole thing upside down and have a look under the sea ice.' And of course that's where everything was; that's where all the action was. The sea ice itself was draped with phyto-plankton, with the plants alive, and in among it was the krill. They were like mites in cheese, in all the interstices underneath the ice, and that's where the fish were and that's where the penguins and the seals were hunting. But we weren't catching anything in the nets because you never put a net down under sea ice because you will tear it to pieces. So that was a marvellous discovery I think. It taught us all an awful lot.

[Part 4 0:13:53] Lee: I've got some questions from other people, including Ken Blaiklock, but not exclusively him.

Stonehouse: Yep.

[Part 4 0:14:01] Lee: ... which is more to do with your feelings about the Antarctic, I think probably. Let me just tell you what he says. Ken and yourself 'were sledging over sea ice from Stonington towards Neny Island one autumn day, to go and do some seal culling and Bernard commented to me "Remember this day" and I have done for fifty years.' say Ken.

Stonehouse: Good Lord!

[Part 4 0:14:26] Lee: Do you remember that day?

Stonehouse: Yes, I do.

[Part 4 0:14:28] Lee: Describe it to me.

Stonehouse: It was just a gorgeous day. I expect we'd had a spell of bad weather and now we had one of the lovely days that you get: everything absolutely pristine and marvellous. It would have been a sunny ... the sun would have been up and the shadows on the ice and everything else, and we felt very lucky to be alive and very lucky to be seeing something like this that we hadn't seen before and were unlikely to see again in later life.

[Part 4 0:15:03] Lee: What was your favourite non-British base?

Stonehouse: Artowski, the Polish base.

[Part 4 0:15:09] Lee: Why was that?

Stonehouse: Because it was run very much on the lines of our old bases. It was a homely, small base for about ten or twelve people. They were very pleasant company. They took us, myself and a couple of students, in and looked after us very well and allowed us to join in the base life. A small base, curtains at the windows, out in the open in a lovely setting in Admiralty Bay. These very interesting surrounds and a lot of very nice people who were really too pleased. We were pleased to help them with what they were doing and they were very pleased to help us. I was there for the purpose of seeing how they could cope with the increasing numbers of tourists that they were getting. They wanted to continue getting them but they were getting so many that they were beginning to interfere with the work of the base. So I was there to advise them and to set up projects to divert the people so that they would still get their money's worth going round the base but not necessarily through it, particularly at mealtimes and things like that. So we were helping them; they were helping us. It was the sort of base I understood and enjoyed very much.

[Part 4 0:16:51] Lee: Compare that to the Russian base on King George Island or the Brazilian base at Admiralty Bay.

Stonehouse: Well the Brazilian base at Admiralty Bay, that was where you got the best parties in Antarctica, but to live at that rate, at that pace, with a bunch of very lively Brazilians, it would have exhausted me completely, I would think. I was terrified when I was in it because it was an absolute fire-trap. They had no concept of ... I knew bases that had burned down because they had let snow build up round the windows, so if you got a fire, nobody could get out, and that was just such a base. Very uncomfortable from that point of view; lovely people, absolutely delightful. They were all colours of the rainbow, as Brazilians tend to be, very noisy, very cheerful. As I say, lovely barbecue parties but I don't think I could have done much work there.

[Part 4 0:17:57] Lee: The Russian base, at King George Island?

Stonehouse: Well I went through it and it seemed to me very much a sort of barracks. I think they probably had a much better ... Visiting a base, you never really get the feel of it. You have to live there for a day or two to get the feel of it. I just felt it was a bit like the big American bases, very impersonal and not very comfortable. I always reckon any fool can go to the Antarctic and be uncomfortable. The way to be comfortable is to make it as much like home as you can. There was nothing homely about them at all.

[Part 4 0:18:36] Lee: What do you remember about playing practical jokes on Bunny Fuchs?

Stonehouse: Oh I am sure you will have all sorts of ... Yes, he tended to be a bit serious-minded and needed his leg pulling every now and again. He was always very responsive to it. You are probably thinking of the boat race, you'll have heard ...?

[Part 4 0:19:03] Lee: There are two in here. Yes the boat race is one of them, certainly.

Stonehouse: Well you know all about that don't you, or you've had accounts of it? It was simply that it was Boat Race Night and he was scouting about how Cambridge was bound to win. So we put the clocks forward, because he was going to listen to the BBC account of it. We put the clocks forward and ran our own account of it. It was myself and somebody else in the engine room, so that was a helicopter. We were overhead in a helicopter and Raymond Glendenning or somebody in the quieter corners saying his peace. I forget what happened but I think the Cambridge boat sank on that occasion, and he was getting more and more agitated. We were finding this more and more hilarious. Anyhow it was a good one.

[Part 4 0:19:56] Lee: And another one about the Governor's plan to dismantle the American base. Does that ring any bells?

Stonehouse: Oh yes. We got a lot of pompous instructions through from the Colonial Office and from the Governor, some of which were almost unbelievable, so much so that occasionally we simply went off the air and said 'Sorry we can't hear you.' and got on with whatever we were doing. This was a party of some kind. We decided we would pull Bunny's leg, so we sent him a mail in cypher. We took the trouble to put it into code and then it came in and we had to decipher it and we said: 'Hey Bunny, there's something very funny here from the Governor.' He said 'What is it?' 'Well it's about the American base.' We said 'It's marked SECRET.' He said 'Oh well, I had better get de-cyphering.' Then we saw him turning purple. I think the instruction was to take the base down and pack it up ready to take to some other site, which of course was completely spurious. There was no way on Earth we could have moved that base; it was thoroughly frozen in.

[Part 4 0:21:35] Lee: Was the idea not to erect it on the Larsen Ice Shelf?

Stonehouse: Quite probably, yes. That would have been a lark too.

[Part 4 0:21:42] Lee: Could Bunny take a joke?

Stonehouse: Something like that, yes. That appealed to him. Once he realised that he was having his leg pulled, that was absolutely fine. He was sometimes a bit slow. He wasn't good at badinage. He wasn't good at the sort of tri-iking [phonetic]; that wasn't his scene at all, but something like that, a little bit up-market, a little bit well-thought out and clever, he liked that very much.

[Part 4 0:22:25] Lee: I notice this Christmas you can buy localised versions of Monopoly, but you seem to have had your own 60 years ago?

Stonehouse: Yes we did, that's right. I don't remember any detail if it but we did, we made a Monopoly board with local ... I wonder what happened to it? No, I don't remember. We got very much stuck into something like that. I remember when the people came in, sledged in from Hope Bay, and there were I think 14 of us at the base which was really only for eleven. We were a bit crowded but it was right at the end of the season and we were waiting for the ship to come in and somebody said something about pop-pop boats. Do you remember pop-pop boats? Little tin boats that had a boiler in them with a vibrating top. Put a candle underneath; put water in them, put the candle underneath and as soon as it boiled, it started vibrating and that drove the boat forward.

[Part 4 0:23:42] Stonehouse: These were toys and we had a couple of engineers at the base. I think I may have said 'I once had a pop-pop boat.' 'What's a pop-pop boat?' I said 'We will make one.' So we got out all kinds of tins. You had all these chaps, very solemnly, sitting round the table, cutting up cigarette tins to make pop-pop boats, we could never agree on how we ... Everybody had an idea of how they worked but nobody could actually think of how we could make one. We must have spent three days, three or four quite serious, well-qualified engineers, sitting round a table trying to make pop-pop boats out of bits and pieces. Another occasion when somebody mentioned pikelets⁷. Now do you know pikelets?

[Part 4 0:24:41] Lee: The little sort of Scottish pancakes?

Stonehouse: A little sort of bun with a very rough surface and a very smooth surface underneath. Well how do you make a pikelet? We theorised about it. Obviously it is something you make in a pan and because the two surfaces are so different, it must be something a bun which you cut in half. The big holes must be made by yeast. So we all sat down and tried to make pikelets. Well we spent three or four days, everybody, very seriously working out how to make pikelets. We never succeeded. We could make things that were vaguely like them but didn't have anything like the texture that we all recognised and all had ideas about. Things like that, these were all ways in which to pass the time.

[Part 4 0:25:32] Lee: You served under two Base Leaders in the '40s. One was Bunny himself and one was Ken Butler. What was the difference in their Base Leader styles?

⁷ A West Midlands term for what is elsewhere known as a crumpet.

Stonehouse: Chalk and cheese I would say. Ken Butler was a radio operator. He'd been in the Royal Signals. He had been at the Relief of Norway and so on. He'd had quite an interesting war. He was a bit of a pirate and basically he was ... Well they were both selfish in that they both wanted to make this their ... Leading an Antarctic base was going to be the keynote of what they did in the future. Ken was very insecure because he didn't have much of a future. He didn't know what he was going to do in the future. He'd been in the Army I think for seven years, six or seven years because he joined up before the war, but he wasn't going back into the Army because he wouldn't have had the seniority he needed. He wanted to make his reputation; that was what he was focussing on. He was very amiable, very agreeable. He was a lot of fun. He was a nice chap. I was very glad to have been with him for a year. Yes, he was fine.

[Part 4 0:27:05] Stonehouse: Now Bunny Fuchs came along, about as different as he could be. He was very well organised. He was an academic, a geologist. He had been in the Army for four or five years. Yes, he was a Territorial before things started, in the Cambridge Regiment. He had been to Cambridge before that and got his doctorate. He was a German background; his father was German and had been interned during the war. He had become a Town Major at the end of the war, in Germany, in the Army of Occupation himself. He had military discipline, was his idea of running ... If you have a dozen chaps, you impose a sort of discipline with them, which we hadn't had before. We were all ex-Service but we all knew how to dodge that sort of thing and I must say for the first couple of months, we had quite a job training him not to treat us like a squad. Very well-intentioned. He often didn't know any other way of getting onto people.

[Part 4 0:28:30] Stonehouse: I think we taught him a lot. He certainly taught us a lot. It was perfectly amicable; we didn't have any quarrels or anything like that. We never did at the base at all. Some bases, I know, had a lot of quarrels between the people. We didn't at all in the whole of the three years, and under all sorts of pressures. That base was as pleasant an atmosphere as I could ever have hoped to find myself in, with some very fine people. But they were just two completely different kinds of people and we had to get used to the difference in each case. We had to train them. Because they were the leaders, we could see their faults and we could see their good points, but they were three very agreeable years from the social point of view.

[Part 4 0:29:37] Lee: What are your feelings about BAS, because you started off as a member of the FIDS, as it was then? And then you went off and did other things and then to SPRI, and I am wondering whether you have any sense of loyalty towards BAS; any sense of thankfulness?

Stonehouse: I am very thankful to some of the people I met on BAS, or on FIDS. I've no time at all for the organisation of FIDS, as it was. It was run by, I think, some very incompetent people when it was being run, but there was nobody any better who could have ... Well it was a branch of the Colonial Office.

[Part 4 0:30:20] Lee: You are talking about the Fifties now, the Forties and Fifties?

Stonehouse: I'm talking about FIDS in the 1940s. There were people like James Wordie, who had been on Shackleton's expedition. There was Brian Roberts who was

a sort of guru who had been on the British Grahamland Expedition. These were ex-Antarctic people but they were ... We didn't appreciate the problem at the time but of course they were being run by our political masters. I think FIDS was set up, or Operation Tabarin was set up in the 1940s, not as everybody says to keep the Argentine's out of Antarctica, but to keep the Americans out of Antarctica. The Argentines didn't have any bases; the Americans did have a base and they had Admiral Byrd who was trying very hard to get the Americans to take over Antarctica as a whole. Have I been through this with you before?

[Part 4 0:31:30] Lee: No.

Stonehouse: Well he was the one who first invented the idea of a permanent station where the personnel are being replaced every year, or every two years, and that was the point of the base on Stonington Island, and they had another one of course over in Little America, on the Ross Sea side. Now his views were repudiated by the American Government which was why that particular expedition ran for only one year, and then Congress simply cut the funding for it. But the threat was there and of course that got the Brits on their toes. This was 1941/42 and it also stirred up the Argentines and the Chileans because he had chosen to put this base down in a place where three nations were already competing for ownership. But the immediate threat was, as I say, not the Chileans, not the Argentines, but the Americans. Well we couldn't admit that at the time because the Americans were on our side. They were the Arsenal of Democracy⁸ which meant that they were selling the arms to us instead of to the Germans. But there is no evidence of this available.

[Part 4 0:33:09] Stonehouse: I have been trying to chase up all the archival material on this and it has simply disappeared, but I am pretty certain that the people that were running Operation Tabarin, and then FIDS, were in a sort of dilemma about this, and they had to say 'Of course it's the Chileans and the Argentines that we are keeping out.' Ultimately it didn't matter; what mattered was how they ran the operation and they were absolutely hopeless. I mean the ships they were operating simply weren't up to the job. They said 'Well of course in our time we had wooden ships, so you have to have a wooden ship if you are going through the ice.' This was despite the fact that the Americans and everybody else had icebreakers. No, they had to have a wooden ship so they got a wooden ship. What wooden ships were going? Well the ones that we used for anti-magnetic mine and used in harbours for boom defence vessels and things like that. So they got one of those and it was absolutely bloody hopeless because it leaked like a sieve and was underpowered and that was what they took us down to the Antarctic in and then of course they couldn't get us out. 'And what aircraft shall we take down?' once we had got rid of the Auster for them. 'Oh well in the BGLE we used a Tiger.' It wasn't a Tiger Moth, it was a Gypsy Moth which was just the next size up. So they had to get a Gypsy Moth and send that down.

[Part 4 0:34:48] Stonehouse: Well they sent it down but they packed the skis in another set of packing so the skis never got ... I think the skis got to Marguerite Bay but the aircraft itself didn't so we didn't have an aircraft for the following two years. And so on. It was all ... You began to realise that these people were all part-time. It was a part-time operation; they weren't really giving much attention to what they

⁸ A phrase used by President Roosevelt in 1940.

were doing. James Wordie was Master of a Cambridge College. Brian Roberts was in the Foreign Office and was helping to put together the Antarctic Treaty and things like that. It was hopeless; we were being run by some very incompetent people. Then we saw that gradually building up into: I think there was a time ... I sat down once and worked out: when I got back in the early 1950s (you can check this in Bunny Fuchs's book) there were something like ten bases run by three people in London.

[Part 4 0:36:12] Stonehouse: Well now you have got one base⁹ run by about 600 people. Of course we saw all the stages in between that. There was a time when everybody was putting down bases as fast as they could, and sometimes putting them down in completely wrong places because it was left to the ship's captain to put them down. He could see where it was easy to offload stores and take them on board again but he couldn't see what would happen in the winter when people wanted to work around the place. They couldn't get out and and get in a way around, and so on. It's always been ... and I was never able to work with it later because I work on a completely different scale. My job in the Antarctic is to take a small number of people down and work on them intensively and get them doing the research in a small base in very small units, as economically as you can.

[Part 4 0:37:18] Stonehouse: If I had joined BAS to do what I was doing, and that was a possibility at one stage, when BAS was compelled by the Government to cooperate with universities ... This was about the time I was starting up and I went along to see them about it. They said 'What do you want to do?' and I said 'I want to work; I am studying tourism.' They say 'Yes, but what's your project?' I said 'Well I don't know because I am still working ... I am going down and finding out what these ...' 'Is it cutting-edge of science?' 'No, it isn't, but it's very good training for students.' 'Well they have to compete for funding with other bodies in Britain and they have to represent themselves as the cutting-edge of science.' That phrase came up. My job is training students in fieldwork and that's quite a different proposition because there's no cutting-edge of science in it but there is some very very good training in it.

[Part 4 0:38:28] Lee: There's a future cutting edge?

Stonehouse: So that was ... and then they would say ... I would say 'I want to guarantee to get a student down there every year for two years because they are doing their PhD's and so on.' 'Well of course your projects would have to take their turn with everybody else's and there would be times when we might take them down but we couldn't get them into your place because we have been held up elsewhere.' I said 'That's no good to me because PhD students don't have that sort of option available to them.' So I got all my logistics done through the cruise operators themselves who were only too pleased to take down, to cooperate to help to take down parties of students and land them. Then we would get the stories from them at the end, which was very nice for the passengers because they would feel that they were involved too and we got them involved when we could.

[Part 4 0:39:30] Stonehouse: So I have always worked on a different scale. It came to the fore when I said 'I am going to use Zodiacs.' They said 'If you are taking a

⁹ Actually there are currently two all-year stations (Rothera and Halley) run by BAS in British Antarctic Territory.

Zodiac, you have to have a boatmaster.’ I said ‘No, all my students will have training in Zodiac ... we go up to the Firth of Forth and get that certificate training in Zodiac handling and I will be there for at least a month with them, teaching them what I know about it and they will be using them not only to get around from here to there for scientific purposes, they will be using them for recreation as well, because that’s when you get to know how to handle boats.’ This was another language from the language that BAS has to use, with all its requirements to follow the Government guidelines on this that and the other, and so on.

[Part 4 0:40:34] Stonehouse: Now I claim that my system is a great deal safer and I have seen boats used at BAS bases that I wouldn’t go across the Serpentine in – little aluminium boats without any ... I said ‘What happens if the boatmaster goes over the side?’ ‘Oh well, boatmasters never do. That’s why they are boatmasters.’ I said ‘Well all my students are going to be competent operators. They are going to know how to fix the engine if it goes wrong, how to tow one boat with another. We are going to do all that and that’s as safe as you’ll get.’ So for all these different, small reasons I’ve never been able to ... I’ve never found any cause to go back into BAS or work with them.

[Part 4 0:41:35] Lee: Does that amount to almost animosity towards them, or just a ...?

Stonehouse: No, not at all. I’m very glad that I have been able to do everything ... I’ve been able to do far more on my own, or doing it my way.

[Part 4 0:41:48] Lee: You had the freedom to do what you wanted to do?

Stonehouse: Well the freedom to take opportunities. The opportunities were there and I was able to take them and I had the freedom to do that. You see they had only one, or at the most two boats operating in the Antarctic. There were some years when I had the choice of thirty and I could call up one ship and say ‘Look, I have got somebody here that I would like to have at another base, at another of my bases. Are you calling in? Are you anywhere near us? Could you pick him up and take him or her to this other bases?’ They say ‘Yes, no trouble at all.’ They would have two or three days aboard the ship. They would pay their way by lecturing, by giving a talk on what they were doing and everybody was happy. So I had a much wider choice that way, you see.

[Part 4 0:42:52] Lee: Final question. You experienced the Antarctic in three different ways: once as an independent, once through SPRI and once through FIDS. What’s your feeling about the next few years in the Antarctic? Do you have any concept of how things are going to be over the next few years? Are you worried about it environmentally? Are you worried about it administratively, ecologically?

Stonehouse: Well I don’t worry about it at all because there are some things I worry about and some things that I don’t. No, I’m very much out of Antarctic research now. I’m not touching tourism anymore and I’m already way behind. I was asked to write a paper on something about it the other day and I had to say ‘No, I’m two years out of date on it and that’s a long time because things are changing all the time.’ I think the science is getting so advanced, so specialised and so expensive that one nation after

another is going to say 'We can no longer afford this. We can no longer afford it at this scale or that scale or whatever.' So I think the amount of scientific research coming out of it, of new scientific research, is going to be very much diminished and the funding will now go to the long-term programmes which can very often be run automatically, without people involved, which is the expensive element, which is a change in emphasis.

[Part 4 0:44:47] Stonehouse: We always complained in the old days, that you could never get a long-term operation going because no grant would ever guarantee you more than about three years at the most. If you wanted to do a 20-year research project, you had to do it starting out as a 3-year project and hope that you could pick up the money on the way. Well I think now that you are getting a lot of projects which are run by technicians, or are run from Britain by radio or God knows what, or satellites, which is a quite different game. It doesn't suit me because my business is training people (or has been) to work in the Antarctic and all that goes with that: work independently; work in new fields. That's where my emphasis has been. I think there is going to be less and less opportunity for that, which is fair enough. There will be opportunities for people to sit in their offices at home and do Antarctic work from home. It won't be half as much fun as what I have been ??? [incomprehensible] with. It would bore me stiff, but these are all very necessary changes. I think tourism is probably levelling out a bit now.

[Part 4 0:46:16] Stonehouse: I think the Antarctic Treaty is beginning to get a little bit more relevant to what Antarctica actually needs. The main business of those involved in the Antarctic Treaty has been to keep the Antarctic Treaty going. I mean the whole of Antarctica is to keep the Treaty itself going which is a very necessary thing to do because there were several occasions when the Antarctic Treaty was beginning to look like quite an unnecessary expense. Well I think it has established itself now and it can pay more attention to the Antarctic's own problems of Antarctica itself. It still has nowhere near the powers that it requires to control Antarctica. There's no police there; there's no policing. It's impossible to afford to police the seas for example, to see that cram the results from the ... Well the fisheries; it's impossible to control the fisheries because simply there isn't the money; there isn't the motivation to do it.

[Part 4 0:47:45] Stonehouse: So I am concerned about that, way beyond concern now because I think they have already wrecked the Antarctic fisheries, almost completely wrecked anyway, certainly compared with what was available twenty years ago, as they have all over the world. It's just no different in Antarctica. I'm not worried about the ... You can't sit and worry about the ice shelves breaking away, because all right, they are breaking away, but there's nothing I can do about them, or anybody else for that matter. We might be able to do it if we get down carbon, whatever it is, but there is nothing to do in the Antarctic itself about this, except monitor it and take an interest in what's happening, if we are capable of doing that. We have all the technology for doing that, so it will be done. It would be very interesting to know what is there when the ice has gone, but that again is not a thing I sit and worry about.

[Part 4 0:48:59] Lee: A whole new continent?

Stonehouse: Very probably, yes. We will probably make just as much mess of that as we have of every other one. Apart from that, no, I've no ...

[Part 4 0:49:11] Lee: Good, well let's leave it there, Bernard Thank you very much indeed for your time.

Stonehouse: Good.

[Part 4 0:49:18] [End of Part Four]

ENDS

Possible extracts:

- [Part 1 0:26:36] Reasons for the American & British bases on Stonington Is.
- [Part 1 0:42:06] Differences between the American and British bases
- [Part 1 0:47:39] The two American women
- [Part 1 0:50:32] Inadequacy of the American dogs
- [Part 2 0:00:10] The Darlington wanted to join the British
- [Part 2 0:08:58] How the Dion Island emperor penguin colony was found
- [Part 2 0:13:45] Studying the penguins in the 3rd winter
- [Part 2 0:21:12] Discovery that the males incubate the eggs
- [Part 2 0:27:03] Collecting an embryo in the dark
- [Part 2 0:32:16] The *Ice Cold Katy* incident
- [Part 2 0:41:48] Walking home from the plane crash site
- [Part 2 0:57:51] An involuntary third winter
- [Part 2 1:06:35] Memories of Bunny Fuchs
- [Part 2 1:18:37] The decision to close Stonington
- [Part 2 1:21:00] Importance of the dogs for morale
- [Part 3 0:04:55] No penguins near Oxford
- [Part 3 0:17:09] The garden shed at South Georgia
- [Part 3 0:23:16] Painting and studying the king penguins at South Georgia
- [Part 3 0:41:13] US helicopters disturb the penguins at Cape Royds
- [Part 3 0:47:46] The first tourists
- [Part 3 0:49:43] "I play bridge with the Admiral's mother"
- [Part 3 0:54:56] Standards set by IAATO
- [Part 3 0:59:50] Big tourist ships safer than small ones
- [Part 4 0:06:46] Tourists not upsetting the penguins
- [Part 4 0:10:53] Looking under the sea ice solves a puzzle
- [Part 4 0:13:53] "Remember this day"
- [Part 4 0:15:03] Polish base the favourite
- [Part 4 0:19:03] Practical joke: the boat race
- [Part 4 0:19:56] Practical joke: dismantle the US base
- [Part 4 0:22:25] Pop-pop boats
- [Part 4 0:24:41] Trying to make pikelets
- [Part 4 0:33:09] Shortcomings in the direction of FIDS
- [Part 4 0:37:18] Cooperation with BAS not suitable for tourism studies