

JOHN KIRWAN

Edited transcript of a recording of John Kirwan recorded by Chris Eldon Lee on the 17th of June 2011. BAS Archives AD6/24/1/124 Transcribed by Andy Smith, 8th May 2018.

[0:00:00] Lee: This is John Kirwan, recorded by Chris Eldon Lee on the 17th of June 2011. John Kirwan.

Kirwan: My name is John Kirwan. I was born November 1938 on the 15th and I was born in Stockport.

[0:00:19] Lee: Just outside Manchester?

Kirwan: Indeed.

[0:00:22] Lee: So how old are you now?

Kirwan: Seventy-two or three, something like that.

[0:00:28] Lee: It's good to be vague, isn't it? You are used to being recorded, apparently?

Kirwan: Well it did so happen that before I went down, whilst I was on the *John Biscoe* awaiting the departure, Sir Vivian Fuchs had a word with me about two things. First of all I hadn't gone for an inspection of my teeth, which at that time was thought very very sensible because the cold air can do ... But I was very definitely not going to do that. And secondly he wanted to ask me about the whistler project, something that Professor Morgan had persuaded them to undertake, which was to take place on Deception Island, the idea being that Professor Morgan had an interest in whistlers. These are natural long-wave emissions from the ionosphere or further up, which he was recording, and he had an idea that he would like to transmit something like that to see if he could receive it, because his theory was: these whistlers travelled the lines of magnetic force and Deception was quite near the South Magnetic Pole and if the impedance of the island (AC resistivity) was adequate at a certain frequency, it would act like an aerial.

[0:01:53] Kirwan: An aerial, in this world we live in, is a very good conductor in an infinite insulating medium: the air. The same thing happens if you have an insulated material in an infinitely conducting medium: the sea. So the idea was that as the length of Deception Island was a quarter of the wavelength of what he wanted to transmit, on the wavelength along which he was listening to whistlers, if the impedance was satisfactory, then at a later stage he would set up equipment to transmit from Deception and see He had listening stations in the Northern Hemisphere, in Naples I believe and elsewhere. He would see whether he could pick them up. Now my job was to go down and on the way to Base F, to stop off in Deception Island and make these measurements with equipment that he had persuaded Pye Instruments in Cambridge to construct. And he ordered umpteen kilometres of nice single-cored cable (orange-covered) to lay from the lagoon to the open sea at the apex of Deception Island. Well we laid five layers from the lagoon to

the open sea, spaced about, as I remember, maybe five metres apart. So five parallel layers.

[0:03:33] Kirwan: Obviously I had help – a number of Fids some on the way down, some from Deception itself. We came out there and we manhailed these drums of cable and laid them out, having transported them by rowing boat, albeit with an outboard, from the base to the apex. So all that took place and this bridge that had been constructed to measure the impedance was set up and I could vary the frequency of the current I was sending, and to see what the impedance was like. And quite fortunately, the graph of the impedance with frequency peaked at 5000 metres, which was exactly what he wanted as a length for an aerial. In aerial technology, an aerial is best when it is a quarter of the wavelength that you want to transmit. So anyway so it all worked out as far as I was concerned. I then sent off the results, went down to Base F, spent two years there. And I didn't hear whether it was successful in the end.

[0:04:49] Lee: You never heard?

Kirwan: No, I never heard. I know that the physicist going out at the end of my first year, Ivor Preece, got the job, I think, of probably setting up some transmitting equipment, but I didn't hear any further from that.

[0:05:07] Lee: And you had to explain the principles of all this to Vivian Fuchs on the ship going South?

Kirwan: That's right.

[0:05:12] Lee: Is that because it was new to him?

Kirwan: Well it was a prestigious thing presumably. Dartmouth College, New Hampshire, Professor Morgan's place, was paying the FIDS money and he wanted to get this, and it was a 78 but it was actually transmitted on the BBC programme, radio, one of the radio programmes. So he was looking, presumably, to enhance the image of FIDS at that time as well. So that was it. It was quite exciting.

[0:05:46] Lee: Thank you very much for that. I have talked to two or three whistler experts and that's the clearest explanation I have had so far.

Kirwan: Is that right? [Laughs]. Very good.

[0:05:58] Lee: When you say the impedance of the island, do you mean the ability to soak up the signals, or what do you mean by the impedance?

Kirwan: Well if you understand what a resistance is, a resistance has so many ohms value on a DC circuit but the impedance is the resistance to alternating current, and so it varies with the frequency. And he wanted to find out whether, at a certain frequency, the impedance was at its best, highest because then he would have the makings of an aerial.

[0:06:27] Lee: And was Deception chosen because it was a particular geology, I guess basalt, or because of its physical position close to the Pole?

Kirwan: I think it was chosen primarily because it was the right length and the impedance measurements were necessary because being of volcanic origin, it probably had vugs, little holes from one side to the other and he wanted to see whether they made it impossible as a resistance aerial. So anyway, that was the purpose, to see how its impedance varied with frequency.

[0:07:07] Lee: And that was the sum total of your connection with the whistler project?

Kirwan: Yes, it was.

[0:07:12] Lee: You never came back to it later?

Kirwan: No, and I didn't hear from him later but presumably somewhere in the FIDS archives he must have communicated back to Sir Vivian.

[0:07:22] Lee: Well somebody would have gone to get the wire back, I expect. It certainly wasn't there a couple of years later was it?

Kirwan: I don't know.

[0:07:28] Lee: Other Fids don't report it so ...

Kirwan: Do they not?

[0:07:31] Lee: No.

Kirwan: Well it would have been covered in snow and so forth.

[0:07:33] Lee: That's true. Maybe it's still there¹.

Kirwan: Yes, maybe. I remember going down to Callender's Cables, somewhere on the Thames to inspect it, just to look at it really, and it was delivered to the *John Biscoe* and all the rest of it.

[0:07:52] Lee: Was this something that was a speciality of yours, because you were hired as a geophysicist.

Kirwan: Yes I was but I graduated in physics and I wanted to move into geophysics because in my final year at Manchester, I saw where physicists were employed, and they were usually in ...

[0:08:19] Lee: You mean sterile laboratories?

¹ There is no record in the BAS archives of the cable having been removed (information from Kevin Roberts).

Kirwan: In basement laboratories or other academic places which didn't appeal to me, as I wanted to work, as far as possible, in the open air. And geophysics and the oil business were two examples that I could pursue.

[0:08:37] Lee: What's your first memory of knowing there was a place called the Antarctic?

Kirwan: Oh I suppose the stories of Scott and Shackleton.

[0:08:49] Lee: In books?

Kirwan: In books, yes.

[0:08:52] Lee: And at what point in your life did you feel it might be a good place to go?

Kirwan: Well after graduation, I thought it would be a very good place. I had during my undergraduate years worked the summer vacations on ships as an ordinary seaman and therefore got a liking for travel and various places. And trying to combine that with the idea of a physicist didn't work out but with a geophysicist, you could possibly find work. I applied to quite a number of oil companies for work as a geophysicist and this was the one that came through first and I accepted this one.

[0:09:45] Lee: So you were interviewed by the redoubtable Bill Sloman, I expect?

Kirwan: Yes, I was. Yes I remember Bill Sloman. First of all he came to the university and made a presentation, and when he was finishing, he was asking for how many people were interested and how many would eventually write to him, and I forget how many it was from Manchester but I wrote to him. The process of selection of course was quite involved inasmuch as the powers that be, the Slomans and the Fuchs's knew the type of character you needed to sustain two years in the wilderness. And so you had to give a referee who knew you for umpteen thousand years and he was asked all sorts of questions as well as presumably some academic referees as well. Anyway it all happened.

[0:10:43] Lee: I appreciate it is fifty years ago but were you aware at the time of being sussed out psychologically by the panel?

Kirwan: No; yes, maybe. Was there a panel?

[0:10:56] Lee: Well Sloman plus others I expect.

Kirwan: Yes, well they would have had a very great deal of background information from the questionnaire which they sent to the sponsor, my referee I mean, and I wasn't aware that ... Today I think you would be very much aware of: with four people in front of you: one would be asking questions; the other three would be looking at you and writing down ...

[0:11:27] Lee: How many times you blink?

Kirwan: Yes. I wasn't aware of that, no. And I guess in those days, it was a less scientific approach than it is today. I understand it was long-winded and very selective but I was not aware of it you know. I was a 21-year old, carefree, felt the world owed him a living and the world provided me with a living, so there was nothing to take away those thoughts from me at the time. It was a great time to move, 1960.

[0:12:08] Lee: So you left actually in 1960, in November 1960?

Kirwan: That's right.

[0:12:13] Lee: On the *Biscoe*?

Kirwan: Yep.

[0:12:15] Lee: And it wasn't just ... You were actually working your passage weren't you, because you were doing work on the boat?

Kirwan: That's right, yes, for a Dr Gordon Robin of the Scott Polar Research Institute. He had an idea. I think he had been down some summer but he wanted to record the waves in the Atlantic. And so he had installed in the *Biscoe*, while it was in Southampton, a wave recorder. It meant putting it in underneath the water level of the ship so they did it in Southampton. The actual apparatus itself was in the wireless office. I was taught how to use it and I had been to the National Institute of Oceanography at Godalming to learn how to use this. And so this was what I did twice a day I think. Of course the Captain and the Mate weren't very pleased because they had to heave to and just keep way going. They didn't want to stop because they would be moved by the waves, but they couldn't carry on at 10-12 knots. They had to heave to. And the wave recording stuff, maybe five minutes or so, and then they were on their way again, the engine room going full pelt.

[0:13:37] Lee: What was Robin's theory? What was he after?

Kirwan: I don't know. I must say I have no idea what they were doing. Perhaps he was with the National Institute of Oceanography. Perhaps he wasn't with Scott Polar Research; I wasn't sure. I was just glad to have an occupation. I must tell you that for the first 24 hours no waves got recorded because I was horizontal. But we had emerged, actually, into the Channel in a gale and you know how it is. Sir Vivian Fuchs was on board with the Captain, Kelly, and was saying 'This is what it is going to be like. We should wait. We should delay.' 'No no. We're off.' OK, he was off because he was the captain but then when he got out there, he had to turn into the storm and didn't make any progress for about 12 hours, 24 hours, I don't know. But anyway so he had his own way and then we got under way and sailed on down to Montevideo, was the first stop, which was very nice.

[0:14:52] Lee: So what was your assessment of the character of Captain Kelly?

Kirwan: Ah, he was a knowledgeable fellow, quite forthright. He wasn't domineering as far as we as crew extranumeraries² were concerned. He did have his rules and

² More usually known as supernumeraries (supernumerary seamen).

regulations. He liked to walk the starboard side of the boat deck every morning. No-one was supposed to go there. He had us all up in his office or in his cabin once during the trip for a chat and a gin & tonic, just to get to know what was going on. But I understand he didn't wear fools gladly. I mean people like the Director, Sir Vivian, may have wanted a certain thing but he had already given the Captain of both ships their tasks to do and it was their job to do them in the way they felt could be achieved.

[0:16:03] Kirwan: Some of the tasks obviously would involve getting to a certain base to relieve the base and if that base wasn't the Argentine Islands but the bases further south, they may not be able to get there. And so the man on the spot has to make a decision. 'Can I get through this ice or do I need help or what?' And I think in the year before I came down in '60, I think in '59, they failed to get to Base E or Base T, one of the two and those Fids had to come back and they were on the *Biscoe* with me. So things like that: decisions have to be made on the spot and he was the man to make them but without fuss. He wasn't thumping the stick or shouting or anything like that. A calm character I thought especially when we were in the ice. In some bases we had to ... It was a bit strengthened in the bow, so it could get itself through. There was no running about on the bridge. He was there and usually the First Mate was there and they would watch it and well, it worked out.

[0:17:26] Lee: What did you make of the Falklands when you got there? We are looking at the Falkland Islands in the 1960's.

Kirwan: We had, as I remember, a very very good introduction. I think there was a chap there called John Green and he was a member of the Colony Club, very nice for the upper echelon of the people there, which meant the doctor and the Met Office senior people there, and all the rest of it, would access it, but he wangled that the Fids could use it. So we went there but it wasn't our scene but it was there where you could get a nice beer. There were a number of pubs, one at the very end of the dock, and you wouldn't believe this but the guy who ... Dr Kaiser I think it was, from Sheffield University, was going down there for a summer stint on some part of one of the bases, and his stated opinion was: 'I wish to get blacklegged from every pub in Port Stanley.' They had a system: if you got drunk and disorderly, you were forbidden entrance and you would go to the next pub and if it was on the list you wouldn't get in there either. Anyway that was his ambition.

[0:18:35] Kirwan: I was 21; he was 40 or 50 – a sensible fellow but it was an achievement you see. That was the way they thought. But of the place itself, I was impressed by the cathedral, the Catholic church and the Monsignor who was in charge. That was very good. The Falkland Islands Company, they had a warehouse and shop there, and there I bought my first camera – a Voigtlander f2.8, whatever it was in those days, reasonably duty free; well it was duty free I guess. And stacked up with Ektachrome because Ektachrome we could develop ourselves with expertise. Some of the boys had that; some of the Fids had that, so we preferred Ektachrome because we could develop it and look at it, which we did on an occasion when a number of Ektachrome reels were available to develop, because it's a whole day's process in a constant temperature room to do it. Then of course we would make slides of them and show them, so it was a nice occupation.

[0:20:08] Lee: We are talking black and white I presume?

Kirwan: No, Ektachrome.

[0:20:11] Lee: Colour?

Kirwan: Colour. The competitor Kodachrome was made by the same people but you could develop it yourself. So these were full colour pictures and in Antarctica of course, the predominant colour is blue. You wouldn't believe it; you would think it is white but it's not. It's blue. The ice is blue. The caves in the ice are blue. In Base F where we were, we had diatomaceous matter in the springtimes, when the snow began to melt and was exposing the rock, with its lichens on it. In the little bits of snow around it you would see circular areas of a red colour or a green colour, as I remember, and people that knew told us that was diatomaceous matter. Very small matter – just two atoms in size. So it was signs of life in this very very primitive area, just as the lichens were signs of life. So about Port Stanley itself, it was wild. You could easily get outside. The heathland was boring I suppose, I thought. With two others we went ... borrowed a rifle, a .22, and we thought we would go and shoot rabbits because rabbits were all over the place. I tell you, they are smarter than we are. We never got near one of them, but there we are. So that's the Falklands.

[0:21:45] Lee: OK. Eventually you wound up at Base F, Argentine Islands, and that's where you were for two seasons.

Kirwan: Yes.

[0:21:52] Lee: And I just wonder what your daily work routine was like, being a geophysicist. What were you trying to achieve whilst you were there?

Kirwan: Yes, it was a Met station as well, so we had Met observers and they had to make their regular readings and report them. And part of the geophysics was the solarimeters. You measure the number of hours of sunshine. I think I mentioned the tide gauge; we had a tide gauge there. And basically we were a geophysical base measuring the three components of the Earth's magnetic field and its diurnal variation to this end. Previous years I think: at the time Joe Farman was there, '57 (was it?) IGY, they had constructed a hut to house these magnetometers. The whole hut was constructed without any iron. There was copper nails and wood and brass handles to the door. Insulated so that inside the instruments could work without getting very very cold and this was about 10 or 15 minutes by ski from the base, so it was quite remote from the base. But you could, at the passage of the ship, you would notice it on the magnetometers as it went by of course, because they were very sensitive to such a mass of iron going by. So that was to be done every day. The charts had to be changed once a day, in the evening at a certain time.

[0:23:35] Lee: Before you move on to the next science, to what end? What was the end product of this magnetometer reading process? What were you trying to achieve?

Kirwan: Just to build up a picture of how the Earth's magnetic field varied daily and then, over the year of course, and then compared to the previous years and years to come, to see if there was any collatable relationship with the sunspot cycle, which was focussed on the IGY year, '57 I think it was. And to see whether or not the Earth's

magnetic field had an annual or a longer variation. So they were routine measurements to be made, on photographic paper which had to be developed.

[0:24:22] Lee: Was this new science or were you simply repeating in the Antarctic experiments that had already taken place elsewhere in the world.

Kirwan: I think it was the latter because the instruments that we had to do it were made in Scandinavia where presumably it was going on all the time.

[0:24:39] Lee: So effectively you were filling gaps in our knowledge of the Planet?

Kirwan: Exactly, yes.

[0:24:43] Lee: And was there a perceived practical application of this? Would it affect compass readings and orientation?

Kirwan: I don't know that. Perhaps it would help to locate more accurately the magnetic poles and its variation with years, but I don't know.

[0:25:06] Lee: OK. Were there any surprises, in the readings?

Kirwan: Not that I can remember, no. It was usually the same pattern. At certain seasons of the year the highs and the lows were bigger than at a more tranquil time but the reason we wrote up this work in Edinburgh afterwards was just to delineate it in an orderly fashion.

[0:25:39] Lee: For completeness?

Kirwan: Yes.

[0:25:41] Lee: You were about to mention another area of science which might have been seismic observations. Was that right?

Kirwan: Yes, we did that. At the end of the first year we took delivery of three seismographs and therefore had to build a small extension to the side of the hut. And it was quite rocky where the hut was, so we had to break up quite a bit of the rocks to make them reasonably flat and then pour concrete on them so they were in intimate contact with the ground of the island itself, so that when you laid your three component seismographs on the top, they would react to whichever vibrations were transmitted from the rocks into the concrete base and into the seismograph. So that was completed during my second summer or early winter period.

[0:26:40] Lee: And again you were monitoring the results?

Kirwan: Yes. Every day they had to be read on photographic paper and developed. We were in contact with some other bases in Antarctica outside the British sector who were doing the same thing. And they were looking to see, I think, whether what they recorded in any way corresponded to what we recorded. Now generally speaking a seismograph is bunch of wiggly lines with an occasional bigger one which you would never feel. It wouldn't even be considered a tremor, but we did get one actually that

went quite high, off the scale for a short time, and I think that was ... We would then transmit, through the radio operator, the time of that occurrence at this base, with our longitude and latitude, and the other bases.

[0:27:50] Kirwan: There must have been a central point somewhere, where it was all correlated to see exactly what was involved in it. But yes, again I didn't have any follow-up to do with that. The records themselves were sent off at the end of the year to, I think it was a French base. In those days, in the Antarctic, the big thing was: it was the only place in the world where the East and the West were talking to each other. You know the Russians had a base and the Eastern Europeans presumably with the Russians had a base. The Americans had a base and we had a base. The Argentinians and the Chileans had a base, and scientific information was exchanged. I remember some of the scientific seismographic thing went to the United States base. That's where presumably all the central records went. But the French had a base as well somewhere else. So it was great. '60, while I was down there, ...

[0:28:54] Lee: The Cuban missile crisis?

Kirwan: Missile crisis? Good heavens! I thought I would be coming back to a nuclear war because it was '63.

[0:29:02] Lee: Was that a genuine fear or just a ...

Kirwan: No it was a fear because all you got was radio news, and we had heard about the wall being built. Don't forget that was '61. We weren't there; we just heard about it. And then in '63 was this Kennedy standing up. He wasn't going to blink before Khrushchev did. But then that was '63 and we were coming back in May '63. So we did get it in the newsreels when we got to civilisation. We could see the ships. It was pinpointed on it where the missiles were and I think there was some newsreel of ships doing a U-turn. So phew, we got back.

[0:29:50] Lee: Well it's interesting. This comes up quite frequently in these interviews about Fids being several thousand miles from the rest of the planet, and how they reacted to hearing that kind of news. It goes in two ways normally: either people are very very worried or they are completely depressed because there is nothing they can do about it, they are so far away. Do you remember your inner feelings?

Kirwan: Yes, I do, very well. It wasn't that I couldn't do anything about it. It was because I wanted to get back to carry on my life with all the things I knew and all the confidence that had given me. I didn't want to come back to be called up into the Army and to face what was going to be a nuclear war at that time. So those were very strongly my feelings and I do quite remember that.

[0:30:42] Lee: Did you consider, as some Fids did, how long they would survive in the Antarctic? And it might be the best place to be.

Kirwan: Well I know the radio operator, Alan somebody³. When I was down there for my first year, he was in his third year, and when we left in 1963, a chap called Thomas⁴ was his surname – he is a Dr Thomas now – but he and a colleague, not perhaps from Base F but somewhere else, they landed in the south point of South America and made their own way home. Presumably not for the reasons I have explained, about fear of this that and the other, but because they were so adventurous. I forget his first name now.

[0:31:36] Lee: It doesn't matter. We can look that up, don't worry.

Kirwan: Quite strangely, about ten years ago, no it was exactly in '99, we were in America and we went across Chesapeake Road tunnel-bridge⁵, or whatever it is called, and we were coming up that side of the case, and it was the time of the year when they run wild horses from one island, through the sea, to another island. And this other island was called Chincoteague or something like that, but the thing was: when I got back, there was a programme on the TV showing this but also there was an aeroplane, scientists in an aeroplane going over this area measuring – nothing to do with the horses – but doing something and the fellow there was this Dr Thomas. He had married, presumably an American girl and he was running a scientific programme in oceanography, a scientific programme somewhere in that area⁶. So that's why it stands in my mind.

[0:33:00] Lee: Just flipping back slightly, then, would world issues become discussion points on base? Would chaps sit round the table at night with their beers, taking about Khrushchev and Kennedy?

Kirwan: It didn't feature a lot in our base. We had mainly scientists. We had a cook of course, a radio operator. The Met men were that but we didn't have theoretical people. We had a few dogs that were retired to our base and we could use them. Therefore we could hunt seal, when we could, to feed them and ourselves of course. It was quite nice. So we got out and about. Sitting around in the evening times, well there was always something to do or some scientific observations to do. The Met men had to be there every three hours, outside doing something. We had the ozone measurements to do twice a day and I think the biggest highlight was we all gathered in the radio shack once a month to hear the BBC's broadcast where your parents could sent a message, and you could write. It was a hundred words a month I think, something like that. It would all go out by Morse Code and be delivered. So those were the things that ... No, I think hobbies were developed. Bill Shirtcliffe built a greenhouse.

[0:34:41] Lee: Jim Shirtcliffe?

Kirwan: Jim Shirtcliffe, sorry, built a greenhouse. This was the Argentine Islands, known as the Banana Belt, in which he successfully grew lettuce. Jim Shirtcliffe brought his motor bike down, which in the winter, when it was really hard, he could

³ Alan Piggott.

⁴ Bob Thomas

⁵ Chesapeake Bay Bridge-Tunnel

⁶ Bob Thomas, who worked for NASA, died in 2015. His obituary is at www.igsoc.org/news/bobthomas/

use to tow us on skis. Because we had dogs, we had some people who were dog handlers and they needed harnesses for the dogs and I was very good with string and ropes and things. So I developed a hobby of knots, splices and handiwork. We had the Met men who ... they had to send up a balloon every morning to monitor its movement by radio, so they had to generate hydrogen every morning in some place. So everybody had something to do. There wasn't any unpleasantness which you might expect: thirteen men cooped up for about six months without any outside knowledge or contact. But it wasn't anything. In the final year, interestingly enough, one of the Met men was given the job of breeding one of the bitches. I forget whether she was brought pregnant or she was made pregnant on the base, but he had to build a large size kennels for the bitch and her puppies when they arrived, and it was successful. We did get puppies in 1963, early part of '63 they were born. So there was activities.

[0:36:49] Kirwan: Another activity for me was maintaining the rowing boats. In the winter obviously they would be brought up and they had to be scraped and varnished, and things like that; any rope work had to be fixed on them. We all got ten days holiday a year. You could either manhaul yourself to a place or use the dogs. And you were supposed to be ... well you were always three people. You would not go alone or with two. And so we three went off in the first year to: I think it is called Charcot Island. There was a hut there which I had learned from my time in Deception Island, living in a tent on the snow is not comfortable. It's very wet in the morning inside your sleeping bag and so we went to this Charcot Island. There was a hut, benches there, sleeping beds there, so we could stay in the hut. We couldn't do much. The weather wasn't very nice but at least we counted how many sardines were in a tin, and it was always nine.

[0:38:01] Lee: Just going back to the ozone measurements you were doing, did anybody ... do you remember anybody explaining why you were doing those?

Kirwan: Yes. Joe Farman had explained before we came down. That's why we went to Eskdalemuir Observatory in Scotland, to learn how to operate it. It's very important that the layer of ozone that we got keeps back too much ultraviolet radiation, and so it was important to measure the thickness which we did with the spectrophotometer. And on days when you could expect a clear sky from sunrise to noon, or from noon to sunset, cloudless sky, we had to make ozone measurements every fifteen minutes because we were looking for what's called the umkehr, the turnover in whatever it was we were measuring, the thickness or something, some aspect of it. So Argentine Islands of course was adequate base. I don't know why but it always got the best of the weather, and so we had to do those two or three times during the summer and the winter months. Of course we always got the sun in Argentine Islands We never lost it, but then it would be only an hour or two in the middle of the winter.

[0:39:23] Lee: And what do you remember of the results? Was there anything ... Knowing what we know now, all these years later, was there anything in those results which was first giving any clues as to what was going to be discovered in 1985?

Kirwan: I do not know that because when I came back, all those results were handed to Joe Farman. He was in charge of the scientific side of things at Edinburgh and presumably he was the one that collated those year by year by year from the various

returning Fids. My involvement in Edinburgh was simply to get the geomagnetic results in such a way that they could be tabulated, formed. So all the old films that we developed were there. I had to go through them and measure this, that and the other.

[0:40:15] Lee: When he made his announcement, or his team made their announcement in '85, and you heard about it on the radio or read about it in the papers, what were your feelings?

Kirwan: Well I thought 'Yes, I have had a part in that.' And at the next Fids reunion, when Joe was there, he said 'Yes, we did use the results and see what has happened.'

[0:40:38] Lee: He had to have the earlier results for the later results to make sense?

Kirwan: Exactly that, yes. You feel, I suppose, that you had a little hand in something ...

[0:40:50] Lee: A moment in history?

Kirwan: ... in something that was discovered.

[0:40:53] Lee: What did you make of Joe Farman?

Kirwan: I have seen him nearly every year I have been to the Fids. He is very precise. He knew about Schlumberger. You know I joined Schlumberger after FIDS and soon after that they built a very modernistic laboratory/ workshop in Cambridge. So he knew about that; he knew I was with Schlumberger so we often talked about that at the reunion dinners. But I don't know anything about his personal side, I must say. I only ever met him in a professional capacity.

[0:41:38] Lee: And in that capacity ...?

Kirwan: Oh he was very clever. He was awarded a PhD I believe, from Cambridge, and a Fellow I think, even a Fellowship. I am not sure about that. I think he was a Fellow, yes. So obviously he was doing very well with the results. I don't know whether he ever went down again. I think not because his job was to coordinate everything and that was very important, whereas the people that went down were really information gatherers. He would determine what they were to be doing when they were down there. For example, one project that we had to do down there, when we went down in 1960, we were given a neutron precession magnetometer⁷ and it never worked. And we couldn't make it work. It was the latest thing in science. We didn't have much in the way of transistors or anything like that. It was valves, miniature valves and so forth. You were supposed to press this button and something would happen and after about 5 or 10 seconds something else would happen. Then the readings would come out on those illuminated valves with figures in them.⁸ You've probably seen a valve with ten figures, one behind the other, and each one would light up according to the impulse given to it, so that therefore you could take a reading. And these readings were supposed to be systematic in some way and they never were.

⁷ He means proton precession magnetometer

⁸ Nixie tube

We couldn't get it to work. I don't know whether it remained at Base F after we left, and whether it was ever got to work, but there we are.

[0:43:33] Lee: In your second winter you were doing ... Is this what you were talking about earlier, the variations of the Earth's vertical magnetic components on nearby islands? It that what you were talking about earlier? Is this a NERC project?

Kirwan: This was another project. This was a sort of a winter freebie. You got to go over the ice to – I think they call them the Balkan Islands⁹ – not far from where we were and you would set up this on a tripod, this vertical magnetometer on a tripod and measure the strength of the field. And then you would go somewhere else on the same island and so forth. And then you would try therefore to plot lines of constant vertical component and to map the island like that. The previous one, Ivor Preece had started it in that area and I continued it. Well it wasn't successful as you probably remember. I broke my leg with this instrument in a haversack on my back, skiing down to the next location, fell over and broke the two bones in bottom of the leg.

[0:44:50] Lee: How was the machine?

Kirwan: The machine survived. [Laughs] But I must say, I laid there on the ice and the other physicist was with me, Bob Lewis. I said 'Look, I can't get up.' I had no pain. I was in shock, couldn't get up. So he went off back to base and they came out with a Nansen sledge and the dogs, and I was given a shot of morphia and placed on the sledge. By the time I got back, obviously word had gone out and all the crew, all the base crew were out there to welcome me and I was euphoric with this shot. I was going 'Like the Queen.'

[0:45:44] Lee: Waving left and right?

Kirwan: Yes. Quite fortuitously in this extension to the hut that they built in my first summer and winter, they had put a hospital room upstairs. So I was put in the hospital and laid out and they got in contact with Dr Sparke; he was the doctor in Base F the year before¹⁰ and asked him what to do. So he gave instructions over the phone. So they put a plaster round my leg, having pulled it to be as nearly straight as the other one as possible and then I had to sit and wait for it to set.

[0:46:37] Lee: Tell me about how you felt about that because it is the biggest fear of being a Fid, that you become ill whilst you are down there, particularly if you become ill in the winter, and you were. Was it the winter? It was wasn't it?

Kirwan: It was August I think. It was August and ...

[0:46:48] Lee: Were you in despair?

Kirwan: No, it didn't affect me in that way, mentally, at all. It was just quite painful because he wouldn't give me as many morphia shots as I wanted, and it did wear off from time to time. The one concession was that they placed a chair over my leg so

⁹ This would be the Button Islands

¹⁰ He was at Base E in 1961 (according to the Database of Winterers).

that the blankets would rest on the chair, because anything on your leg was very painful. So that was the only thing that upset me really. I could attend to my natural functions without much embarrassment and after while I could hobble around inside the hut. But no, mentally, because I knew it was just a broken leg. It wasn't as though it was a chemical malfunction inside you where you needed expert advice, and a slip here and a slip there ... No it was a break and a break's repair. But I didn't know it was a break; that was the thing. It wasn't until the *Protector* came down in the summer or the spring that I was sent on board and they X-rayed it, and you could see two perfectly repaired bones which was fine. I didn't tell my parents.

[0:48:20] Lee: And how is it now?

Kirwan: Oh it's fine now. I have been skiing since because you know it's this leg here and I'm a bit less flexible with the ankle than the other one, and skiing is so much involving use of your ankles a bit.

[0:48:41] Lee: Was that the only alarming moment in your Antarctic experiences, or were there other near misses?

Kirwan: Well I must tell you there's one amusing incident. When we were in one of the ports on the way down, either South Georgia or somewhere like that, we were getting ready to move off and I had a porthole in my cabin and I stuck my head out. And somebody let a rope fall from the top which took my glasses off into the water. So I was without a pair of glasses. Now the omniscience of the British Civil Service: they had written to me not only to inform me in writing that I was a temporary civil servant, but 'We have noticed that you wear glasses. You are advised to take a second pair.' Well good heavens, without that foresight it would have been embarrassing, but anyway that was an amusing thing and quite fortuitous really because you can't stick your head very far out of a porthole. And for the rope to come down flush with the side of the ship and just wipe your glasses off ...

[50 mins]

[0:50:06] Lee: Very omniscient of the Civil Service. And how about the deprivations of living in such an alien climate? Did it grind you down? Did it wind you up or were you fairly flamboyant about the whole thing?

Kirwan: I don't remember having any high or low spots, nor do I recall in others seeing them in high high elation or down in the dumps. I think the routine daily work kept your mind off dwelling too long on that system. Obviously you missed contact with your family obviously, girlfriends, but you know we had an enterprising fellow come down at the end of my first year and before he came down, he had written to *Hello* or *Honey* magazine and said 'I am going down to Antarctica. This is my address. Would you like to write to me?' And when he got down there, he had three sackfuls of mail, all girls, some with their photographs in and begging to be answered. So quite magnanimously he shared them out. So we all got a bunch of letters from these girls we had never known, and we could write to them, and get answers maybe, next year. So that was another amusing thing.

[0:51:43] Lee: I will tell you a little story after we've finished, along those lines. Your third summer, you were doing more visiting of bases, pottering around a great deal.

Kirwan: That's right, yes.

[0:51:54] Lee: Was there any particular moment that you remember from that summer before you came back?

Kirwan: Yes, I remember, I think it was Port Lockroy. It was a base which was either just closed or was about to close. It had recently had a visit from a Chilean ship I think, and they had a barrel of wine which was very welcome. The reason I remember that is because I think Port Lockroy closed down after that. And the other one was a bird watching base, H was it? Some island¹¹.

[0:52:42] Lee: Bird Island was it?

Kirwan: I forget, but Hope Bay, that was a base and we went ashore there. This time we had experienced our own hut and we saw their hut and its inadequacies, because they all lived and slept in the one long room, whereas we had dormitories in our hut, so it was quite civilised compared to that. So we saw all that. I changed boats. I came back on the *Shackleton*, so that was a new experience with a new skipper, a new crew. I can't remember any particular outstanding thing about other bases. I had hoped to get down to Adelaide, Base T I think it was, but I hadn't because that was the base which was ... That was opened when I started and a Dr Brian Taylor was the geologist, and he was a very nice fellow but very very corridor of a mind as regards the exactness of his work. And I met him because he came to live near Nottingham when he joined the British Geological Survey And so I have met him once or twice But he had the most precise detailed maps. Nobody liked him because they were always carrying rocks back for him. He had tons and tons of rocks you see. But he went back to do his work in Birmingham under Dr Adie. I would like to have got there because it was a base, a sledging base obviously, but it was also the subject of, what was his name, this American that went down after the war¹².

[0:54:53] Lee: Ronne?

Kirwan: Yes, Finn Ronne had gone down there, broke the most cardinal rule in the book, took his wife with him and it wasn't a very pleasant winter. Whereas we had been told, and it obviously was right, we were all one sex and there was no favouritism. We went to visit the military bases on Deception Island, the Argentinians and the Chileans and they had military personnel there with the rankings, and it was considered a punishment base, I think, for many people. And so we hear from our own people on Deception Island that all wasn't sweetness and light on those bases, whereas on our base, where everybody including the Base Leader had to take his turn emptying the slops, doing the cleaning, doing the cooking, and so forth ... So everybody did the same and it worked very well.

[0:56:52] Lee: Your career, post Antarctic, was in the oil business?

¹¹ Probably Signy Island (Base H), Bird Island was only occupied continuously from 1982 (BAS website).

¹² He is probably referring to Stonington, Base E, where Ronne had his base, rather than Adelaide.

Kirwan: Yes, it was.

[0:55:57] Lee: You mentioned a company Schlumberger.

Kirwan: Yes, Schlumberger [French pronunciation] or Schlumberger [Anglicised pronunciation] if you are from Germany. It was a French company, headquarters in Paris, and they provided information from the wells that were drilled by the oilfield clients. But this information was information immediately available, whereas if they drill a well and they took a core, first of all coring was very expensive and then had to be sent away to be analysed, whereas the sondes that we used would measure more or less the same physical parameters of the formation through which the drill had passed, from which the geologist was able to determine the lithology, the speed of sound, porosity, the dip of the formation, all sorts of other physical parameters.

[0:56:51] Lee: Did you use any of the expertise you picked up in the Antarctic in your future career?

Kirwan: Yes, inasmuch as how to exist in remote locations, do your own thing with electronic instruments, repairing I mean and maintenance.

[0:57:09] Lee: So being self-dependent?

Kirwan: Yes, because the places where you were sent with Schlumberger were always remote locations where you were there with a truck with a bunch of instruments, some local people who didn't know one thing from the other so you had to do everything, in some cases drive the truck even. So that was something that was very pleasing. The other thing that was very pleasing was: I was in Antarctica for two years, a very clean germ-free atmosphere. My next big assignment with Schlumberger was in Libya, in the desert – again more or less a germ-free atmosphere. So I had some very lucky assignments in terms of health risk, whereas later on I was sent to Sumatra and Taiwan and these were all rather humid areas where if you threw an apple out on the ground, there would be growing something tomorrow; very very fertile which meant that if you scratched yourself, and you didn't adequately cover it, it too would be festering tomorrow because life was very very cheap. You had no problems there so those first four or five years were adequate.

[0:58:36] Lee: Looking back now, over your life, how do you rate the Antarctic as an episode in your life, on a scale of one to ten? Is it up there with the rest of them or ...?

Kirwan: I think it was very formative and it came just at the right time. The reason I say that is because when we came back and worked in Edinburgh for six months, there were offers going round to go down again for a French outfit which were tempting. But I am glad I didn't because then you would have gone back to the same job, more or less, in the same remote atmosphere and not had the same sort of exposure to the world as it could be, exposure to different peoples of different languages and cultures and so forth. So it came at the right time, when you didn't know much about the outside world, and when you came back, you had enough experience to go out and find what you wanted to do.

[0:59:22] Lee: So when you got back and found the world was still there, it was your duty to explore it, was it?

Kirwan: Yes, it was.

[0:59:26] Lee: It's been fascinating John. Thank you very much indeed.

Kirwan: It's very kind of you. I have enjoyed it. Thank you very much.

[0:59:30] [End]

ENDS

Possible extracts:

- [0:01:53] Deception Island as an aerial.
- [0:14:52] Captain Kelly.
- [0:17:26] Tom Kaiser and the Port Stanley pubs.
- [0:18:35] Buying a camera and Ektachrome film.
- [0:20:11] (Not) shooting rabbits in the Falklands.
- [0:21:52] Magnetometer measurements at Argentine Islands.
- [0:28:54] Reaction to the Cuban missile crisis.
- [0:34:41] Jim Shirtcliffe, his greenhouse and motorbike.
- [0:36:49] How many sardines in a tin?
- [0:41:38] A new magnetometer that didn't work.
- [0:44:50] Breaking a leg and its aftermath.
- [0:48:41] Thank goodness for the Civil Service.
- [0:50:06] Three bags of mail from girls.
- [0:52:42] Comparison of Hope Bay and Argentine Islands.