

This is Nick Beer, interviewed at his home at Landford, near Salisbury, Wiltshire, on 15 February 2009, by Chris Eldon Lee.

**Beer\_Nick. BAS Archive ref: AD6\_24\_1\_34\_1\_1a, Transcribed by Barry Heywood on 22.06.2017**

Part 1

Nicholas Anthony Beer. I was born in Epsom in Surrey on 7<sup>th</sup> October 1949.

[Part 1 00:00:27] Lee: What was your first job after school?

Beer: I went to sea. I went to a nautical college, Worcester, a boarding school, between the ages of 13 and 17. I was contracted to Port Line, which was a shipping company that ran out to Australia and New Zealand. And brought back refrigerated cargo – meat and apples and things.

[00:00:51] Lee: What is a young chap, from Epsom doing, going to sea?

Beer: I don't know! I would have to go back three generations on my Mother's side. There was an Engineer who was at sea, but other than that, I am the first in the family. The reason I went to sea was, my brother, who is four years older than me, getting career brochures from school. I saw one with a picture of a merchant navy officer in tropical uniform on the wing of a bridge in the Tropics taking a sight with a sextant. I thought that was pretty good – it looked pretty attractive. I thought that to go to sea the best time to make up your mind was that age I was at at that time. Fortunately my parents were able to get me to school – to pay for the school fees at Worcester – so off I went.

[00:01:50] Lee: So it was more a 'fashion statement' than a career choice?

Beer: Almost. Pretty well everybody, who went to Worcester, went to sea. You didn't go to sea if you failed your eyesight test. So 19 out of 20 people went to sea, in the Merchant Navy. I was taught seamanship and navigation, and nautical knowledge. We were running around in boats because the ship was off the shore in the Thames down at Greenhithe, so were pretty well prepared to go to sea.

[00:02:28] Lee: Did you go to that college with 'going to sea' in mind?

Beer: Oh yes.

[00:02:31] Lee: So at quite an early age, you were intended to going to sea.

Beer: Yes. At the age of 13 I decided that I wanted to join the Merchant Navy. It all started from there really.

[00:02:40] Lee: Did your parents encourage you? Discourage you?

Beer: They must have encouraged me, I suppose. I don't remember them certainly not discouraging me. They were all for it. Looking back, I don't think that they would have changed it, anyway.

[00:03:05] Lee: What was life like on Port Line?

Beer: Good, in those days. My first trip, I joined the ship in January 1967. I flew out to New York to join the ship, and in those days we lived pretty well. We carried 12 passengers on Port Line ships. They were very smart ships. We had good accommodation. We had very good food. We had smart uniforms. Every evening was Mess Dress, bow ties, and seven course meals, if you could eat it all. It was a pretty good life!

[00:03:52] Lee: But you were also viewing it as a career. You had Captaincy in sight?

Beer: You have to. You are starting off as an Apprentice and the end of the road is Captain. In those days you tended to think you would have to work for 20 years to become a Master. Things changed actually, over the next five or six years. After I had started at sea, there was a general shortage of labour. Maybe more ships were being built, I am not really sure of the reason but promotion became pretty easy for a while, for British officers, anyway. People were getting promoted to Master and Senior Officer positions pretty early on.

[00:04:44] Lee: So do you feel that you were striving to be promoted or was it thrust upon you?

Beer: I think that it just happened. I don't think that it is competitive in that way. Generally you reached a certain stage, got a Naver's [*Merchant Navy* (?) Transcriber] Certificate of Competency, and you would get your promotion.

[00:05:08] Lee: Are you still in Port Line or...

Beer: I did a three year apprenticeship with Port Line, but the life was rapidly changing in Port Line over the three years that I was there. So I left them and went out to Australia for a year and worked on a small cruise liner all around the South Pacific islands and New Zealand. Then in the Austral winter we would go up to cruise from Australia to Singapore, Bangkok, Hong Kong. So that was a pretty good relaxing time actually.

[00:05:52] Lee: A fairly easy send.

Beer: Fairly easy because we had done most of the routes before so it was very easy navigation, and there was no cargo work or anything. In fact as one of the Junior Officers, I was expected to entertain the passengers to some extent on board the ship, and also ashore, taking them around to places.

[00:06:16] Lee: How were your dancing skills?

Beer: Good, yes! [Laughter].

[00:06: 21] Lee: It was part of the job, was it?

Beer: Yes, it was. There were 350 Australian passengers, and a lot of them seemed to be young Australian secretaries and people like that, going on holiday. There were 180 Chinese crew. The only two European officers on board...the only two crew members under the age of 25... were myself and one of the radio officers. So we were quite sought after.

[00:06:53] Lee: How was it working with a Chinese crew?

Beer: Difficult, actually. There were some really tense times...

[00:07:02] Lee: How do you mean?

Beer: There was one occasion when the Second Engineer was chased around the passageway by a mob of Chinese with sticks threatening to kill him. There was another time when there was a very bad injury on board when two Chinese, well a number of Chinese, were fighting over a gambling debt. The Second Engineer was in trouble because he treated them appallingly, I think. I found them very personable and I got on with

them very well indeed. They worked very hard. I enjoyed that experience.

[00:07:55] Lee: What was your first Captain's post?

Beer: The first time I was Captain was when I was appointed to look after the building of the RRS *James Clarke Ross*.

[00:08:07] Lee: Oh right. How did that come about?

Beer: I had been a Chief Officer for 15 years and I had also an Extra-Master's Ticket. The four Masters that had been Masters ever since I was promoted to Chief Officer had been promoted to Master at the same time. The two ships that we were operating then, the *Bransfield* and the *John Biscoe*, were going down to the Antarctic each summer, so they needed someone else to look after the building of the new ship...to be ashore. I could have either taken over one of the ships from the Masters, the *Bransfield* or the *Biscoe* and left one of the existing Masters to come ashore and do that job, or I could have been promoted into that job. For some reason, I was promoted into that job.

[00:09:09] Lee: That wasn't your first job with BAS. You had worked for BAS before?

Beer: Yes. After the year in Australia, I had applied to do another year. I had done 12 months on board the ship and that was the end of my contract. I had applied to carry on for another 6 months. I was enjoying myself but they thought that I ought to go back and get my Ticket...my next Certificate of Competency. So I did that and, on reflection, when I was back taking my examinations, I realised that navigationally, and as far as my career was concerned, it wasn't a particularly challenging job. It was enjoyable but it wasn't challenging. That is when I started looking for something else.

[00:10:00] Lee: It was career building...

Beer: It was. It was looking for a challenge, especially as far as navigation and seamanship challenge. A friend of mine had joined the *Bransfield* as Third Officer and I was interested in what he had to say. It was through him and his introduction that I was interviewed aboard the *Bransfield* and given the job.

[00:10:30] Lee: Can you remember the interview?

Beer: I can. It was with Tom Woodfield and it was in the dry dock, well it wasn't a dry dock, it was a ship-yard in Southampton. It lasted about half-an-hour or so. It was just a chat. I can't remember exactly what he asked me.

[00:10:54] Lee: It was already in the bag?

Beer: I think so. There wasn't a great deal of competition. It was quite difficult to find officers. British Officers, and that was the time, just before the promotion was becoming quite easy. So I joined as Third Officer in 1972.

[00:11:17] Lee: When they asked you why do you want this job, to go to the Antarctic, what was your likely reply?

Beer: The likely reply was to have been...it might seem a bit trite maybe...the challenge. Especially the difficulty with navigation...and the experience of working in ice. So that was all quite a genuine desire. I thought it was quite an exciting prospect at that time.

[00:11:46] Lee: So you did almost 20 years.

Beer: I did 22 years before leaving for a job ashore. I did one voyage 1972 to 1973 as Third Officer, a full eight month voyage, and then another eight month voyage I was Second Officer. Then I was promoted to Chief Officer. In 1974...I was Chief Officer at the age of 25.

[00:12:17] Lee: Chief Officer is second in command to the Captain?

Beer: Yes.

[00:12:23] Lee: There you stayed for a while.

Beer: I stayed as Chief Officer until 1988.

[00:12:27] Lee: You worked on both the *Biscoe* and the *Bransfield*?

Beer: I worked on the *Biscoe* for two years in the early 80s... 81 and 82, I think. Then I went back to the *Bransfield*. I think that was just to have a change. It wasn't at my request.

I actually had a year on the *Polarstern*, the German icebreaker in 1981. I think that is why I left the *Bransfield*. I was seconded to the *Polarstern* on its maiden voyage as the ice pilot, which was a really interesting voyage, because at that time it was a really modern...well brand new... powerful ship. Power that BAS ships could only dream of in terms of ice breaking and ice working capability. One of the challenges of that voyage was to test the specifications that the ship had been built to. We were actually searching ice to break, measuring it and to scientifically show that the ship was capable of doing what it was designed to do.

[00:13:55] Lee: So were you pushing it beyond its limits?

Beer: Pushing it right to its limits! It was designed actually to break two and a half metre thick ice with continuous ahead movement. It was almost impossible to find level ice of two to two and a half metre thickness. Inevitably in the Antarctic there are pressure ridges every few metres and you just couldn't find uniform thickness of ice.

[00:14:30] Lee: You were looking for a Torville and Dean and just couldn't find it. So what does an Ice Pilot do? I think I know but just...

Beer: Well the Captain of the ship had never been to the Antarctic before. He was German container ship captain from a company called Hapag Lloyd and Hapag Lloyd had got the contract to man and operate the ship, which was owned by the German Scientific Institute...well the German Government. So the Captain had never been south before. Actually, that is not true...he had done one voyage. He had been sent as an observer on another ship...it wasn't one of our ships... into the Antarctic for a month or two, the previous season. I think Dick Laws had offered to send one of our officers. Once again it could have been one of the Masters that went but for some reason I was selected to go and do it. It was a pretty tricky time because the Master, the Hapag Lloyd Master, didn't really want me. He didn't feel the need to have me. The Chief Scientist...it was a very autocratic chap who was well known to British Antarctic people...a very nice chap who was on the maiden voyage as well...he wanted me to satisfy probably insurance requirements and to make sure that the Master didn't do anything silly. So I had this fine line to tread between doing the job I was being paid to do on there and without upsetting one side or the other.

[00:16:27] Lee: Were there any flash points?

Beer: Not really. I think I managed it pretty well. There were a couple of times when I had to take the Master aside and give him some advice that he really didn't want. He was being slightly fool-hardy...he wasn't aware that he was taking risks but he really didn't understand, I think, how difficult the navigation was or the accuracy of the charts for a start. I remember one time that he had planned a course through an area, which had no soundings. He had assumed that because there were no soundings that it must be deep water. What it actually meant was that it hadn't been surveyed [Laughter].

[00:17:16] Lee: So he was actually taking the maps too literally?

Beer: Yes.

[00:17:20:] Lee: An ice pilot, presumably, spends most of his time avoiding ice, but you were actually looking for it?

Beer: On that occasion, yes. So we spent some time in the Weddell Sea looking for this uniform level ice. We found some in some bays but it wasn't really quite right. We went looking for heavy sea ice to see how well she preformed in those conditions. We ended up going into an area that I had never been into before or since with the British Antarctic Survey to the west of the Weddell Sea...the northwest of the Weddell Sea.

[00:18:04] Lee: So the *Polarstern* passed with flying colours?

Beer: Oh it did! It is still operational down there now, 28 years later. She is an absolutely superb ship.

[00:18:13] Lee: So your ambition was to make sure that the *James Clark Ross* passed with flying colours as well?

Beer: Yes it was. I hear from its present Masters reports and things...it has a good reputation. I feel that it has been a big success. Certainly my view, as Master on her for the first few voyages, it worked really well. All the reports from the scientific community were that it was a good ship.

[00:18:52] Lee: What did you gather from your time on the *Biscoe* and *Bransfield* that you felt equipped you to go into that meeting room with the builders, Swan Hunters and scientists to start mapping out this new ship?

Beer: I think that both the *Biscoe* and the *Bransfield* had really good aspects to them, and for BAS in particular were both extremely successful ships. I suppose that I am a bit of a Luddite in that the temptation might have been to go modern in every respect. There was certainly quite a demand for a cafeteria style eating mess rooms on board to cut down the barriers between officers and scientists and crewmembers. My experience was it was best to maintain...we actually did lower the barriers to some extent and make the divide a little less stringent...but nevertheless we tried to maintain certain standards on board with uniform and the standards of accommodation and fit-out. I have had some experience in visiting other ships, modern ships, where the living accommodation was really utilitarian, had no style. I didn't think that that was appropriate for the British Antarctic Survey. So from the experience of nearly 16-17 years on *Bransfield* and *Biscoe*, I rather liked the idea of reproducing a *Bransfield* and *Biscoe* but with modern furniture and equipment and the best possible scientific fit-out. The best possible bridge design and equipment and everything rock solid really so it would last 20 to 30 years. Of course there were consultants, naval architects, that were brought in that did a lot of the detail, almost all of the design work. I worked with them for 1 year, almost 18 months, before the first steel plate was laid.

[00:21:49] Lee: Were there things that your time on the *Biscoe* and *Bransfield* made you think 'no way am I having this on the new ship!' Were there failings on those ships that you were determined not to replicate?

Beer: I don't think that there were failings in that respect. The big failure of *Bransfield* was her manoeuvrability and the fact that she was completely underpowered for the task that she was given. We knew we needed a highly manoeuvrable and very powerful...the highest power that we could realistically achieve. As you go up in power, the expense of the fuel consumption goes up and it becomes uneconomic. So we had to draw a line. We needed a manoeuvrable powerful ship much more so than the *Bransfield* and of course the *Biscoe* was even worse. She couldn't even sniff ice and she would get stuck.

[00:22:49] Lee: So there are bow and stern thrusters on the...

Beer: on the *James Clark Ross* yes!

[00:22:57] Lee: On your insistence?



Beer: I was pushing an open door. I wouldn't have had any disagreement on that. Bow thrusters are needed for positioning for scientific work rather than for manoeuvring alongside for cargo work alongside a jetty. Also, although we didn't have dynamic positioning when the ship was built, it was always an aspiration that it would be retrofitted at a later date. You would have needed the stern thrusters in order to achieve dynamic positioning.

[00:23:38] Lee: Were there things from your year on the *Polarstern* that you made a note of that you would bring up at these planning meetings?

Beer: Probably. *Polarstern* was a very powerful, manoeuvrable ship. I have a feeling that there were some particular things that I brought from *Polarstern* but I can't honestly remember what they were now.

[00:24:04] Lee: Were you listened to?

Beer: Yes. Oh yes. Without a doubt. It was from Swan Hunters' point of view, the builders, a real tonic to have one of the operators...I was the team for the first few months before finally the Chief Engineer joined me...but to have the final operator there, they really enjoyed that, and we were able to modify things even at a late stage. And they were willing to do that. They were a really good company, actually. It is very sad that, soon after the *James Clark Ross* they changed hands and went to the wall.

[00:24:46] Lee: You had to marry the requirements of seaman and scientist to be a really good boat from the seaman's point of view but also a particularly good boat from the scientist's point of view.

Beer: Yes.

[00:25:00] Lee: I can't believe that that did not require some compromises. Were there any tensions that had to be resolved?

Beer: There were. I chaired a meeting; well occasionally chaired a meeting with 32 odd scientists, representatives from the scientific community...the eventual user community. Of course, everybody had their big ideas about what they would like. It would have been impossible to fit all those things on. As it is, the criticism of the *James Clark Ross* might be that we tried to fit too much on. The engine spaces were very cramped only because the amount of auxiliary machinery, winches and things that we crammed into the small space. We would

have liked the *James Clark Ross* to have been bigger but the expense dictated that it couldn't grow more than the size that she ended up.

[00:26:06] Lee: She had to be quiet as well. How did you manage that?

Beer: We used naval expertise learnt building naval ships. Swan Hunters were well equipped to deal with that. When we took it out on the naval acoustic trial area up in the northwest of Scotland, she performed very well. That was the optimum time when we actually sailed on trials. The ship had just been built and was bound to get worse as the ship grew older and housekeeping on board could not have maintained the same standard of cleanliness. It would only need tools to be left lying around, that sort of thing, to drastically affect the acoustic signature of the ship. The engines had huge double rubber mountings and...it was an interesting challenge. The technical side of that was, of course, handled by consultants.

[00:27:28] Lee: Why were the scientists so desperate to have a quiet ship?

Beer: It was so they could tow acoustic arrays with hydrophones, and that there would be less interference so that they could listen to their own instruments. That was very important to them. That is not exaggerated I think because so much of the marine science at that stage was dependant on having good acoustic...being able to listen to the finer details of their...

[00:28:13] Lee: What were they listening to? Was it the bottom or to squids or to...

Beer: Both actually. On the marine biology side they would be listening for whales and...I don't know whether squids make a noise [Laughter]... The biggest push in that way was from the geophysicists. We had a multibeam echosounder on board which you could either tow, or the transducer, from the stern of the vessel. That was to get it away as far away from the ship as possible so that you would not get any interference. We also had the ability to use the transducer mounted in the hull of the vessel and that is when you need the low noise.

## Part 2

[Part 2 00:00:01] Lee: Were there scientific demands or requests that you couldn't accommodate? The ship had to come first.

Beer: There would have been. The problem was...there was just not enough room to fit a lot of the scientific requirement because...any decision whether a particular...the weight that should be given to a request for a particular fitment for a particular scientist was handled by other people rather than me. Those decisions were taken elsewhere. I was able to say as to whether it would fit or...if it were a question as to whether there was man-power on board or the technical ability on board to be able to operate and maintain the equipment then my opinion would come into that.

[00:01:05] Lee: So, as a sea captain at that table, your prime concern was the quality of the ship from the seaman's point of view.

Beer: Yes. To work it so that...we didn't have dynamic positioning but we needed to be able to maintain the vessel in a stationary position. So we had to have the navigational instrumentation that would tell us as accurately as possible what the position was so we could maintain it just on the basis of the positioning equipment. But we had to have good visibility from the Bridge over all the working areas. We had to have really good communications between the Bridge and any winch position. Down aft we had to have the manoeuvrability of the vessel to be able to maintain position even in the worst possible weather conditions. So those aspects of design were key to whether the ship would operate successfully in the Southern Ocean. If we hadn't have had the power that we did and the manoeuvrability that we did, the good sea-keeping that the ship had, then our weather window for doing most of the scientific operations would have been lower and it just would not have been as efficient. So all those things were vital for the ship to work in that environment.

[00:02:49] Lee: .The construction process fell behind schedule, and I wonder if that led to any compromises?

Beer: It didn't but not without a fight. It wasn't really the falling behind schedule so much as the fact that it was being launched by the Queen that had a role to play in that. This being agreed months and months beforehand they had a deadline that they could not miss. So there were sort of short cuts being attempted when the date was getting close to the launch date. But after that it was more the financial side rather than the time side. There were financial penalties for Swan Hunters if they were late. It was more that the cost of the vessel had...the actual build cost had far exceeded their expectations. They were losing money on it so

they were forced to try and cut corners. Then it was the vigilance of my team to try and spot where short cuts were being taken and to stop it so it became very tense at that...

[00:04:26] Lee: So it was cat and mouse?

Beer: Yes, it was a bit. But I will give Swan Hunter their due, they were very honest about it. They were caught between a rock and a hard place really. They wanted to produce the best possible ship, there is no doubt about it, and I think that to some extent they were victims of that policy. They did build a good ship and they didn't charge enough money for it in the first place.

[00:05:07] Lee: That contributed towards their...

Beer: I am sure it did. And it was followed by a Royal Fleet Auxiliary ship the *Fort George*, which was also similarly over budget, I think.

[00:05:24] Lee: Were you having to agree compromises, which went against your better judgement.

Beer: No!

[00:05:36] Lee: So you were never going to...

Beer: No. We had fights, discussions...but no we didn't compromise. As far as I can remember everything was built to specification. It was just that the care that was shown to begin with wasn't shown in those last few months because they were desperate to get the ship out, and not to incur any costs unnecessary through being late. So they were desperate to get it out of the yard. It was with fantastic relief that we eventually sailed it down the Tyne and out to sea.

[00:06:20] Lee: So you got to sea. How did you feel about it?

Beer: It was a fantastic feeling. Slightly marred by the...we had been out on sea-trials, presumably it must have been a month or two before hand, which was the first time the ship had actually put to sea. Because of the legal ownership situation, the Captain at that time was one of the Tyne pilots. I was just observing, because the ship was still owned by the shipyard at that stage, contractually. So it had been to sea, and I had experienced it, but in slightly odd circumstances. So yes, anyway, it slightly detracted from the fact that, when we put it out to sea that time

when we finally left the yard, it wasn't the first time that she had been to sea. Anyway it was terrific and the weather was really good. To have it out at sea and with just our own crew on board was a fantastic feeling. It just seemed to work very well indeed. The first voyage was just down to Portsmouth to get some aircraft fuel on board to eventually deliver to the Antarctic. So it was a straightforward passage down the east coast of England.

[00:08:03] Lee: As the ship came into more testing waters, how has it coped?

Beer: It has always proved its value. It has met its specification. It hasn't gone beyond its specification but it has always met it in every respect. We have had teething problems in the first year, well for several years actually, with the winches on board. But that had nothing to do with the ship builders. It was more because it was a very innovative design that hadn't been worked through properly. So we had problems with the winches that took up an inordinate amount of time. We also had, more worryingly, trouble with Engine Room pipe work on board that went on for a couple of years. The worst time was in the first season where we had some very worrying leaks in the Engine Room...yes. These are very big pipes, two feet in diameter that were leaking.

[00:09:18] Lee: That was corrosion, was it?

Beer: Yes. It was more erosion than corrosion. They were really high-tech pipes and sort of a bronze-alloy. I can't remember the alloy now. But they were high-tech, very thin walled pipes. The solution eventually was to put a glass liner inside all the pipes, which we did a couple of years later. Two years later when we had a refit down in Plymouth. All the Engine Room pipes went off and were coated with this sort of glass layer inside each pipe. That cured the problem as far as I understand.

[00:10:08] Lee: These were pipes that carry sea water for cooling the engines?

Beer: Yes: Massive, two feet in diameter pipes some of them, and they carry huge volumes of sea water, and some of the problems were before the sea valves so there was potential for disaster. In fact, a similar problem to that that the HMS *Endurance* has suffered this year in the Antarctic. They have had a flooded Engine Room because of a failure in that system.

[00:10:44] Lee: Were you nervous?

Beer: I have to confess to being nervous at one stage. I think the *Bransfield* had trouble and it was the *Bransfield* and the *James Clark Ross* both working in the Antarctic that year, and I think it must have been the second voyage of the *James Clark Ross* because that is when the pipe work problems really manifested themselves. We had been asked to go to the rescue of the *Bransfield*, because the *Bransfield* had had its propulsion motor burn out. We charged down...it was a good excuse to use the full power of the *James Clark Ross*. There were few occasions in the first two or three years, either for medical emergencies or because of rescuing the *Bransfield*, that we were able to put the engines at full speed. There must have been high fuel prices I think, because there were economies and strict instructions not to use full power. Anyway we went to the rescue of the *Bransfield* in the Weddell Sea, arrived at the *Bransfield* position and we were just about to prepare to tow her, which had never been done before. We had spent the best part of a day communicating between the ships trying to dream up a way that we could achieve this successfully and tow the *Bransfield* out of the pack ice that she was in and up to Stanley and beyond. We chased down there...we were off South Georgia and we had to break off from a scientific program, I think, and it would have been four or five days steaming. We got to the position of the *Bransfield* and were just manoeuvring to go alongside when we heard that they had fixed their propulsion motors. We then escorted the *Bransfield* up to the Falkland Islands. But it was during that voyage, escorting the *Bransfield*, that we had a particularly bad leak. We were unable to do anything about it and really, where as we were there to escort the *Bransfield* up to the Falkland Islands, I was particularly glad to get to the Falkland Islands and to get our own repairs done.

[00:13:29] Lee: The *Bransfield* was almost escorting you!

Beer: Well I don't think that they knew about it! Well, they would have done...we would have told them. We still had power, low power, if I remember rightly. I remember being particularly worried because there was very little that we could do about it at that stage. We had stemmed the inflow of water as much as possible but it was the worry that if it had got just a little bit worse or another pipe went, then we would have been in serious trouble.

[00:14:08] Lee: Your 'Plan B' was already in use, was it?

Beer: Yes it was [joint laughter]

[00:14:13] Lee: You seemed to have been having quite a bit of teething trouble with silly things like the anemometer and the spare part arriving, which is the wrong part and searchlights failing, and winches failing and the deck lifting...very frustrating?

Beer: Well...I don't think so. Any new ship...it is a tremendously complex bit of kit, so you are bound to get a certain amount of problems. The decking was very disappointing because a lot of effort had gone into getting that right. That is typical of my 20 years experience in the Antarctica, there is always something going wrong. You will always have to 'make do', and generally you can 'made do' without a problem. I think, looking back on it, the worse thing about the *James Clark Ross* was actually the windows. We had specified that, taking the experience from the *Bransfield* there should be brass windows bolted on to the steel superstructure. That was the way the *Bransfield* had been built and the windows had lasted at the time 20 years and they had really worked well. Swan Hunters were very reluctant to put brass windows in. I thought that it was because they were trying to save money and because it was much more labour intensive to put in brass windows. So we insisted on brass windows and they went ahead and did them, but they have been a real problem ever since. I think that it is because the steel superstructure is not of the same thickness as *Bransfield's*, the same strength. Because of that, the superstructure moves and you get rust appearing between the edges of the steel and it is constantly running with rust. So they are a real maintenance problem. So that was a mistake. We should have gone for steel framed windows that Swan Hunters suggested.

[00:16:58] Lee: I have read somewhere that when the seas were rough, she had a habit of slipping back down the wave, off the back of the wave. I am paraphrasing what you wrote but... She would shudder because as she went over the wave the stern would dip down a bit into the back of the wave.

Beer: I don't remember that but I am sure that that is true. It is not that unusual for ships like that, but it sounds as though we must have been taking in water over the stern.

[00:17:27] Lee: You mention that two or three times.

Beer: Yes. That maybe the case because she had a low exposed stern deck for deploying scientific equipment. So that may very well have been the case that we slipped back and dug the stern in. But I was never really

very nervous about the stability and sea-worthiness of *James Clark Ross*. I suppose I had seen pretty well every plate being welded together. I had seen the care going into the design. I was confident that she could withstand anything that could be thrown at her down there. That wasn't necessary true of the *Bransfield*, which had given me cause for concern on many occasions because she rolled really badly...very violently. It was very uncomfortable on board the *Bransfield* very frequently in bad weather through really excessive rolling. At those times you do wonder when the seas are just absolutely enormous, much higher than the bridge, especially at night when you can't really see them properly. You can just sense these huge seas and the ship is rolling badly. Things are crashing around all over the place inevitably. You do wonder whether the naval architects had done their sums correctly and it will stay afloat. You can't communicate that fear, that worry, to others on board. You just try and pretend that you are as confident as can be.

[00:19:22] Lee: There is a word that you use quite a lot in those Master's, the Annual Reports, which is 'unfortunately'. [Joint laughter]. Did you feel that you had 'misfortune'?

Beer: No! The winches were a constant problem. When the pipework problems started to materialise, then that was a worry. I suppose that you tend to think that you are responsible to some extent. This is a ship that you have had more to do with the design than anybody else and it is not, in a couple of respects at least, going according to plan. Maybe that is why the word 'unfortunately' crept in.

[00:20:23] Lee: The usual procedure for minor details...the anchor being bent or poor mooring lines or the eye on a mooring line being the wrong kind... There was one instance when you were dropping a hook over the side of a boat to pick up a tender or a Humber...and it caught under the handle of the Humber and turfed everything out into the water...

Beer: That was a quite worrying time...

[00:20:52] Lee: Describe what happened.

Beer: We were at Signy Island. As usual, wherever we were working, whether on *Biscoe*, *Bransfield* or *James Clark Ross*, we always seemed to be working in marginal conditions. You would often get to a Base and it would be unworkable. So you would wait until it was just workable and then you would go and... The circumstances at Signy Island were, I believe... We had had a successful day or a couple of days of cargo work



and it was virtually the last boat. It must have been the last boat of the last season because we were taking out the aquaria from the Base. We used to bring the aquaria on board and put them into our own fridges to take live fish back to Cambridge. There was one of the aquaria in this inflatable boat with one of my officers and a crewmember. The conditions had blown up. We had had decent weather. We had got most of the job done and you get to the last boat due. Decisions as to whether you are going to go with the last boat...one more because then you can get on with the voyage...get off and get on with the next task. It was the last boat and the weather had got up and the coxswain of the boat was not that experienced. This was his first voyage down there. Anyway, one of the grab handles of the boat caught under the ladder... No the hook caught one of the grab handles on the side of the boat. Tipped the aquarium in the water, tipped the two guys into the water, turned the boat upside down and the boat drifted away. Fortunately there was a ladder over the side. It was the only boat in the water because the other boat had just been recovered. You are always vulnerable when you have got the second one home and there is still one in the water. That was the case this time. The boat drifted away. The aquarium had gone to the seabed. The two guys were able to climb up the ladder, fortunately.

[00:23:39] Lee: How did the scientist feel about losing their specimens?

Beer: They are always very pragmatic. Of course it is upsetting. It would have been upsetting for some because it would have been important to somebody's research. But it was only one of about four or five. So it wasn't a total loss. If my memory serves me correctly, we were able to get more samples out from the shore, and so supplement the stock that we already had on board. I never heard that it was a disaster from anybody. I am afraid that these things happen in the Antarctic to some extent and at least it was an accident. On one of my first voyages on the *Bransfield*, there was a load of samples thrown over the side. It happened just as the ship was closing on the UK coast after an eight month voyage to the Antarctic. Actually, it must have been in the Tropics on the way north. Some crewmembers were upset because they weren't allowed to store some beer in a freezer or a fridge which they had been allowed to do previously. Some scientists had stopped them from doing it and one night some samples were thrown over the side. That was the basis for two people's PhDs. They had been two years in the Antarctic collecting these samples and it was an absolute disgrace and a disaster for those guys.

That was a really black point in my experience in BAS.

[00:26:23] Lee: In your final report you make a few recommendations... they are underlined in your report...particularly about loading and unloading at Bird Island. A couple of times you say 'I have mentioned this in previous reports and nothing is happening'. I just wondered if there was any sense of deaf ears being turned and whether that was a frustration for you. Were your underlinings always acted upon or were they some things happening several thousand miles away and ignored.

Beer: They were. There is always an unrealistic expectation that every thing that we might want, as the Masters of the BAS ships, that we should get. That is unrealistic because there are other factors that have to be borne in mind. That doesn't stop you trying to fight your corner and emphasise the need in every way you can. That is why, perhaps, the underlining is there rather than frustration. I had always got on well with people in the office. They understand that we have problems on the ships but I also understand that there are not unlimited resources to provide all the solutions that we want. Nevertheless Bird Island is fantastic from the scientific point of view and it is absolutely essential to have a Base there. But from a logistics supply point of view it is the worst place you could pick to have a Base. And that isn't just somebody thinking that this is hard work, it is actually dangerous. You are working in marginal conditions all the time. The marginal conditions off Bird Island have to be pretty risky. You are stretching a point really some times working there...dangerous from many respects. It is usually the swell alongside the ship when loading the cargo into the barges alongside. The cargo are usually big heavy loads swinging around. Inevitably people are in the barge...it used to be a wooden scow in the old days but now we have this sort of landing craft...but the people that have to unhook the loads can't move out of the way. There is no way to go. They would have to jump over the side to get away from a load that was swinging out of control. We have had to develop all sorts of techniques, which were peculiar to BAS really and to working at Bird Island to maintain stability of loads. Then you have the danger of people climbing out of boats on to ladders to climb up the sides of the ship. Then finally, the danger of lifting up boats with people in it, at the end of the day. So many times that happens in poor weather conditions. It is a real worry. It is probably the most worrying of times for the Master because you know that you are pushing the limit, really in order to get it done.

[00:30:14] Lee: Did you have any second line of recourse to HQ. You could write up your report, and if it didn't happen, could you go into someone's office and bang on the desk?

Beer: You could! I didn't ever need to do that, I don't think. Yes if the request to the immediate people that we communicated with in the office didn't lead to success, if we felt strongly enough we could go direct to the Director to put our views to him.

[00:30:50] Lee: But you never did that?

Beer: Never had to, no. [Laughter] I never felt strongly enough about it that it would be necessary.

[00:30:58] Lee: Compared to your day trips round Queensland and Barrier Reef, you were constantly dealing with new problems all the time, weren't you. Not only because it was a new ship and there were teething troubles, but also because it was the Antarctic, where the weather was so variable, the environment in which you were working was constantly changing.

Beer: Yes.

[00:31:20] Lee: What kind of long term effects did that have on your stamina, your...

Beer: I enjoyed it. I imagine that is what all my colleagues would say. That is why they do the job because of that variety that you get each day. The challenges that each day throws up that you have to meet in different ways, innovative ways in many cases. I felt being a Worcester cadet, I had been trained in seamanship and boat handling. I think that the boating skills that I had learnt at Worcester were really useful to me in BAS. But I felt that I was using everything that I had learnt. From a navigational point of view as well, you really have to use basic...you have to go back to basic methods of navigation on occasions in innovative ways to actually get positions...to know where you are so to be able to manoeuvre in tight places. So you would be stretched all the time. That wasn't a problem. That was the enjoyment of it.

[00:32:56] Lee: It didn't shorten your shelf life?

Beer: I don't think so. I think that I am the only Master who...Tom Woodfield actually left BAS in 1973 to come ashore to be a full time

Elder Brother of Trinity House...and after '73 I think that I am the only Master that ever left. I didn't leave because I didn't like the job. I left because I had three young children, a family. Also I had been supervising the *James Clark Ross* throughout its build, taking it to sea for three years. It was working well. I didn't know what else I could do to actually meet...to match...the enjoyment that I got out of all that. Also, the pressure on family...wife and three children...we were living in the wilds of Northumberland...didn't have any close family there. So it was pretty tough on occasions even if you are away for only 4 months at a time as we were. So that was all part of the equation...for the decision to come ashore.

[00:34:27] Lee: Difficult one?

Beer: Oh very difficult. My heart was, and always has been, with BAS really. But I came ashore to work for the Marine Accident Investigation Branch, which is in itself a very interesting job. A very privileged job because you get to speak to people who perhaps have just had the most dramatic event in their life and you have every weapon to try and encourage them to be as open with you as possible. It is all about seamanship and navigation, and rapport with other mariners. That is very close to my heart as well, so it was a really good job. But my heart actually remained with BAS. So much so, I had been ashore for about a year or two and I was in serious discussion with BAS whether to come back. Not as a Master but as a Superintendent ashore to look at the instigation of a safety management system.

[00:35:49] Lee: Did you feel that the diplomacy you may have learnt on board those Antarctic-going vessels was useful in dealing with people who had had...

Beer: Yes, I am sure that it did. It must be that... a skill that is useful and it is a skill that I do have. I presume that it must be a skill that I developed at BAS because you certainly need it there in dealing with scientists and visitors, Argentinians and all sorts of people.

[00:36:29] Lee: This is one question that most people would struggle to answer. Why was your heart with BAS. What is it about the Antarctic or working with the Antarctic as your backdrop that is so engaging?

Beer: I think it is... the environment is part of it, without a doubt, and my attraction to the scenery...the sheer grandeur and beauty. The Antarctic with the wild life as well...I could and did spend hours just standing on

the wing of the bridge looking out from the ship, landing on beaches and just enjoying the solitude and the fantastic scenery. It is really a special place. But I also think that it is also the camaraderie of working with people that also like that environment and like to go down there. I was really interested in the scientific work that the ship was doing as well. I am not a scientist and couldn't even pretend to offer anything to their programs but it was very rewarding to know more about what was going on on board the ship to be able to understand what the ultimate goal was, and how the ship's Master and ship's crew were contributing to that... the fact that you were part of this big family really. In the early days the excitement and the enthusiasm for the Antarctic came from the days, in the 1970s, when each voyage was an expedition. On the *Bransfield*, which was mainly a logistics support ship...it did very little scientific work from it, in fact no scientific work in the early days...it was just a logistic/support vessel. You took 60 odd recent graduates, most of them, from University, and some diesel mechanics and cooks and some others. All of the same age group...early 20s...and you took them out upon their big adventure. When the ship left Southampton, as it was in those days, all the families would be there. Dramatic goodbyes...these youngsters would be going off on their two years into the Antarctic, into the unknown. As the ships crew, you saw these young lads...they were all lads then...at that stage in their lives. You took them down. You saw them in the intervening year when they were on the Base. You were delivering their mail and their supplies, and eventually you brought them out. You could see the change that had occurred to them. You shared their excitement really and some responsibility for them because in those days the ships' Masters were the senior management representative. The Masters responsibilities weren't confined to the ship because they carried out inspections of the Bases so that if there were problems that needed BAS management to intervene, then the ships' Masters had to perform that role as well. So you were very much part of the whole exciting Antarctic scientific project. That was terrific for somebody who otherwise would be just driving cargo from one place to another.

[00:41:10] Lee: So it was the emotion?

Beer: I think so. I would say that it probably was. You described it as the backdrop of the Antarctic as well, and it was a really exciting place. Exciting from a professional point of view but also exciting from the fact that so many other people were excited by it, and you were there sharing it with them as well. So it was a really good place to work and grow up in. I was only 23 myself when I joined, a similar age to the scientists themselves.

### Part 3

[Part 3 00:00:13] Lee: What to you was the most interesting of the daily routine of a ship's Captain? What do you have to do? What do you enjoy...?

Beer: On the *James Clark Ross*, most of the time we were a scientific research platform. So the daily routine there was very much, when we were at sea and conducting scientific research, that of a manager going round and making sure that every part of the operation was working carefully and that people were happy. One of the things I like to think that I brought to the *James Clark Ross* was the feeling and sense that the crew were on this scientific research ship in order to supply a service to the customer, who was the scientist. That wasn't a totally alien concept to what had happened in BAS previously. I always felt that that was important for the *James Clark Ross* in particular because we had had overseas foreign scientific customers and this took a bit of getting through to the crew. It wasn't just a question of, when the scientist wanted something done...it wasn't just a question of them being awkward and annoying...but that they had every right to expect us to provide that service if we could. So daily routine was making sure that people were happy and content with the sort of service that the ship was giving to them...and also that the crew were also content and getting the satisfaction, that I hoped they would, from going a good job and doing a good job well. So I was manipulating people...man-management, I suppose...each and every day.

[00:02:39] Lee: I suggest that, to some, it was new thinking that science came first.

Beer: I think that that is true. I think it was to some on board.

[00:02:51] Lee: How did that manifest itself? Was there reluctance?

Beer: No, not a reluctance. BAS crews have always worked well with scientists but scientists are their own worst enemies, or had been in the past. They are very demanding and rather unsympathetic to the position of the crew on board. So there were fences to mend from both angles...both sides. The crew, I don't remember particularly a lot of friction in the past. I know from the crew's aspect that they found scientists irritating and they could have done without them, basically.

The alternative theory is that without the scientists they wouldn't be in a job. We would have no service to operate.

[00:03:52] Lee: Yes but you are a seaman with the British Antarctica Survey. Your job is to get the scientists their wooden huts on land and forget about them.

Beer: That is part of it and that may be where the mentality came from. The different passengers that we carry on board a ship like the *James Clark Ross* are in very different categories. The scientist that is going down has just left university and is going down to the Base for at least two years excitement and adventure is a different personality to the scientist who may be 10, 15 years older and is doing this for his living in a permanent job. They have to be treated somewhat differently.

[00:04:50] Lee: Did you have flash points there? I seem to recall that there was a possibility of this scientist not getting home for Christmas at one point because you were having to divert the ship for other purposes.

Beer: That is quite likely. I don't remember that specific...but that sort of thing happened on a number of occasions. It would have been an irritating trait being show by the scientist. The scientist could be equally bad at understanding and seeing things from the crew's point of view. I remember once, in particular, were we doing some scientific research off South Georgia, and there was an emergency, a 'mayday' call from a ship, a French Yacht. As seamen there was no question that we would respond to that call but the scientists at that time did not want to countenance it. They were so focussed on making the best of every hour in every 24 hours of every day that there was an argument about whether we could do that. In the end, in the particular case that I am thinking of, the 'mayday' was cancelled. It wasn't a false alarm but somebody else had responded and it was no longer something that we had to go to. The potential flash point was nullified by something that occurred outside the ship

[00:06:51] Lee: Was that an eye opener for you? Were you horrified by it?

Beer: Not horrified because there were certain scientists you would expect that off. Their blinkered approach and [their lack of – Transcriber] understanding that there are other responsibilities.

[00:07:16] Lee: There was a clash of cultures!

Beer: There was, yes! That is what had to be faced up to. That is what I was attempting to modify and make it work rather than have two different teams on board doing the same job but not really working together.

[00:07:43] Lee: So what were your tactics?

Beer: I spoke to the crew. I spoke to the crew and the officers on several occasions and explained what I wanted. The key person to that was the Chief Officer. The Chief Officer had to believe that we were there as a service provider and because of that we needed to speak to the scientific teams on board in a different way. Instead of waiting for them to ask us for things, we should be enquiring of them what they needed. I think that with he and I doing that, and with everyone understanding, there was a different management style on board. That seemed to work.

[00:08:45] Lee: There is quite a nice passage in one of your reports that says the scientists and the FIDS and the seamen all getting together to load and unload a Base. That was good for bonding and morale.

Beer: It was. That was one of the barriers that had to be taken down, because the scientists did not want to be called FIDS. You will be aware that the FIDS on board...the generic term for those that are going down to the Antarctic Bases...that we were carrying as passengers on board the ship down to the Antarctic Base were they would be doing their work...they had to work on board. They had to assist with the cargo work. They were part of the team which the ship's crew was also a component part - the big team. Scientists, when the *John Biscoe* became a science platform, because it had been just a logistics ship...when it became a scientific platform, the scientists...the true marine scientists disliked being called FIDS. There was an occasion in this dual role...on several occasions...where the fact that the scientists were also part of this big team called BAS had to be put to the test. That occurred where we visited a base where other BAS employees were existing and carrying out their own science, and labour was needed in order to transport goods ashore. Then the scientists did not want to be FIDS; did not want to be part of that. They did not feel that was in their job description to go down into the hold and help load cargo and transport it ashore. That was our labour force. That was the way that the Antarctic logistics works. The scientists or the FIDS provide the labour, the muscle, to be able to do that.

[00:11:24] Lee: So were you finding yourself having to put your foot down?



Beer: I had to. On that occasion and on a few occasions but it would have been with the Chief Scientists who were generally sympathetic. I seem to remember there were always one or two scientists who stuck out to make a point that it wasn't their role. I feel that generally people felt sorry for them because they had an opportunity to be part of this big exciting adventure. They chose to be just passengers at that time of the voyage.

[00:12:05] Lee: That making a major responsibility then would it, as ship's Captain?

Beer: I wouldn't want to blow it out of all proportion. It was a minor irritation really. Another minor irritation, along similar lines, was the constant difficulty with a few scientists to try and keep a sort of dress code in the dining room. You will be aware that the *James Clark Ross* has a combined dining room with the scientists and the officers and also a crew mess room. One of the conditions that I put forward for my part in not having separate dining facilities for the officers like we had had on the *Biscoe* and the *Bransfield* was that we would maintain standards, with steward service, and certainly as far as the officers were concerned, wearing uniform, which I felt was very important. A number of the scientists objected to having to wear a tie going into dinner, despite the fact that the steward would be dressed in his bow tie and be clean and tidy and be prepared to wait on them at table. So there were constant battles with certain scientists who wanted to stand up for their rights and not to wear a tie.

[00:13:43] Lee: So your general role on board the ship then was as much to do with the harmony amongst the humans as to getting the machinery in the right place. Let me rephrase that... As Captain were you delegating nearly all the mechanical functions?

Beer: Yes. The Chief Engineer looked after the smooth running of the Engine Room spaces and the winches on deck with the help of the Chief Officer. Yes, the technical running of the vessel, with the machinery including the winches on deck was the Chief Engineer's responsibility.

[00:14:31] Lee: The navigation and all that kind of stuff was done by others. What were you doing then?

Beer: The navigation still came under my remit. I like to think that I was orchestrating all of this, and making sure that it happened in a way that a

general manager would. There was an awful lot of paperwork, communications, meeting to be had, safety committee meetings and E-Mails, what-have-you, to answer. Refit lists to over-see the preparation of them. There was more than enough to fill more than the hours of every day.

[00:15:26] Lee: Who decided it was time to weigh anchor and move?

Beer: Me! Well yes that is true but all those decisions were mine on the ship. I would meet with the Chief Scientist several times a day, perhaps officially once a day but we would be talking several times each day. All this had to be co-ordinated. The reason that I would be weighing anchor would be in order to start a scientific programme. There would be no point in weighing anchor until the Chief Scientist was ready. In order to be ready the Chief Scientist would need the help of the crew in preparing the equipment and making ready for the start of the programme, or indeed to go to sea and getting everything secured on deck. It was co-ordinating all those things like a...

[00:16:26] Lee: You would make all the weather decisions?

Beer: Yes, without a doubt. Anything to do with safety would be my responsibility.

[00:16:40] Lee: You would also have the longer view then. You would make recommendations as to what would happen to the ship when she got back to Britain. What improvements to make for the next season, and all that sort of stuff as well.

Beer: Yes. Also coordinate the view of the other key players, including the Chief Scientist, Chief Officer, Chief Engineer.

[00:16:55] Lee: It says here, 'Typical day'... was there one?

Beer: No. Every day was different. I suppose the days at sea on the scientific programme could be fairly tedious...if nothing was going wrong! It could be fairly tedious for the Master. Normally, and especially during the logistics phases, everyday was full of challenges that needed to be met and overcome.

[00:17:33] Lee: How do you weigh up conditions? Is it purely experience, or are you these days in the 1990s more reliant on technology.

Beer: You use technology but you use experience as well. It wouldn't matter what experience you had on ships, you wouldn't be able to take a ship into the Antarctic safely without some experience of the environment and the problems that the Antarctic throws at you. It is a combination of what you have seen before, what you have learned from other people, your peers, and what technology can do to help you make those decisions, especially if you are working ice. Technology these days is an essential tool to do it efficiently... satellite imagery and perhaps... on the *Polarstern*, it would be the use of helicopters to fly ahead of the ship to try and find where the weakest spots are. One challenge on the *James Clark Ross*, which I thoroughly enjoyed, was a scientific cruise with Nick Owens, who is now the Director of BAS. He was the Principal Scientist. The task was to go into the ice and to get stuck, basically. To get as far into the ice as possible until the ship could go no further. To get stuck, then to drift with that ice and as the ice melted back during the summer to stay in that position in the ice and carry out scientific monitoring experiments. Normally you are trying to avoid ice and certainly try not to get stuck. This was the opposite, trying to find ice that was thick enough to actually get stuck for a month or so.

[00:19:56] Lee: How did navigation change in your 20-odd years with BAS?

Beer: Tremendously, as it did on the maritime world generally. In 1972 there was no satellite navigation at all so everything was done by sextant and traditional methods. Even on one of my first voyages possibly, probably my first voyage to the Antarctic, we attempted... because we had heard that in the lower, the southern end of the Weddell Sea, a large iceberg had broken off during the early spring... and we thought that we could get the record of the furthest south a ship had ever gone. This is only possible in one area of the Ross Sea and it is feasible in the Weddell Sea as well. So we thought we would go down... we had some time to kill, I think, because we were waiting for something on the Base at Halley. We went as far south as we could and we were convinced on our dead-reckoning position that we were the furthest south but in order to claim this record for the Guinness Book of Records, we had to obtain a position by sextant/altitude. We were surrounded by ice cliff so we had no horizon. I remember, as I was the navigator, being tasked with going down and taking a sight of the sun, reflected in water with antifreeze in it. So I took a bucket of water and it was the angle between the surface of water in the bucket and the sun that we actually calculated at noon, and

we got the latitude. Unfortunately the Guinness Book of Records did not accept the method. Anyway, the navigation was very traditional...

[00:22:00] Lee: What was the biggest leap forward?

Beer: Satellite navigation. Some of us diehards kept the sextant going for several years, making sure that that the satellite navigation was correct. In the end we realised that it was a lost cause and satellite navigation was far more accurate than our sextants. So we chucked the sextants away. Then with the satellite navigation, over the years the satellite navigation became much more reliable and accurate until electronic charts appeared on the *James Clark Ross* and so from that point of view you knew where you were at the time. Prior to the really reliable satellite navigation there were days when you really didn't know where you were. You were perhaps working ice in cloudy conditions and there was no chance of sights of the stars or the sun for days. You are zig-zagging through ice, and your dead reckoning position could be way, way out. So it was a big change to satellite navigation and then GPS... where you know where you are.

[00:23:33] Lee: And in your time?

Beer: Yes. GPS

[00:23:36] Lee: Where you also getting electronic information, before the end of your time, about ice conditions, ice floes, conditions of ice?

Beer: No. The weather information in the Antarctic has always been pretty average. You could depend on a low coming through the Drake Passage, once every two or three days. You didn't need a forecast to tell you that that was going to happen or what the effect it would have on your ship depending where you were in relation to the Drake Passage. That was one certainty about it...the weather generally. But once you had got down the Antarctic Peninsula, because there were no recording stations out to the west where the weather was coming from, it was very difficult to estimate. Also the local effects were so dramatic on the Antarctic Peninsula that they often were far more influential on the ship than the weather system that happened to be around at the time.

[00:24:48] Lee: Do you think that all this technology advancement has reduced risk taking or increased risk taking because you had a greater confidence in what was out there?

Beer: I have never actually thought about this, but I would say that risk taking has probably decreased. That is not because of the technology. I think that it is more that peoples' perception of risk taking has changed. The Health and Safety Legislation has made people much more aware of what is acceptable and what is not acceptable. So I would say that it is far safer place now, but that probably not just the technology, but also the state of mind as well...less risks are taken. [Laughter].

[00:25:51] Lee: Did you enjoy the...I mean to work in ice...again you build up a background of experience...were you ever surprised?

Beer: We were constantly...really because it was very unpredictable. We had information from the Americans, especially the American Ice Reports, but they were usually taken from satellite imagery. The forecasts were formed from satellite imagery. When you came down to it, what you were interested in on the ship was what was quarter- or half-a-mile around you. If you were stuck in ice or surrounded by particularly thick ice you were interested in your immediate vicinity. On that scale, the American forecasts were not of any use at all. You could see some times from the fax reports and maps where ice was and how thick and concentrated the ice was. It looked good on paper but in practise, when you actually got there it didn't look like that at all. You could see sometimes apparently great lumps of open water that you were sitting in, and you knew that it wasn't open water but this satellite imagery had somehow...it was incorrect and unreliable. So you had to work more on your own gut feeling and experience in making your way down to Halley Bay, or making your way down to Rothera in the early part of the season. You could look at what the weather had been like from the bases' weather forecasts over the previous few days and get a judgement on how tight the ice would be pressed up against the coast of Adelaide Island. If you got stuck, or nearly stuck, you constantly worried about the wind direction and other factors...currents that might be affecting the drift of the ice. The most dangerous time was when you got stuck in brash ice, which is usually the ice that we seemed to get stuck in there. We called it porridge because it clung to the ship. The friction effect was so great that you just could not move occasionally. It closed around you and you couldn't move. Eventually if it tightened up, you couldn't move backwards or forwards. Eventually the wind would ease, the tide would change, and this whole sheet of ice that you were stuck in would be moving. It would be taking you where it wanted and you would have no control over it. It would flow over rocks and reefs where you would ground. So some of the most worrying times were in that area off the southwest of Adelaide Island where you were threading between reefs

and the main part of the island. Where in the early part of the season especially you encountered this sort of porridge. That was particularly bad. The *Bransfield* was stuck there several times, badly and we were only saved from going over this particular reef because the flow took us by a grounded iceberg. We were able to nip in behind the grounded iceberg and then sit in lee of the iceberg and the ice streamed past. The *Biscoe* you probably know about. They were not so lucky. They were in exactly the same position on another occasion, and they had to abandon ship. The *Polarstern* came to their rescue. The whole crew walked off the *Biscoe* across this compacted brash ice, boarded the *Polarstern* and went up to the American base at Anvers Island – Palmer Station. They came back about two or three days later, expecting to find the ship marooned on this reef, only to find that the ice had virtually disappeared and the ship was safely anchored there. They got back on board, started the engines and continued on their way. [Laughter].

[00:31:08] Lee: Jack Tolson asked me to ask you if you were lucky to be alive! What was he referring to?

Beer: I don't know what Jack would be referring to there. There were a number of occasions where it was pretty hairy. I think that probably the most dangerous one was at Halley Bay, when we were struggling to do the major relief of the base. I think it may even have been a rebuild year, the first rebuild of Halley Bay... the Base that I was involved in. It may have been 1973. There were not very satisfactory ice conditions for cargo work. We were eventually forced to go along an ice cliff and to discharge cargo up on the ice cliff. We had finished the cargo operations completely over a period of two or three weeks. We had managed to get all the cargo off in different locations as the ice broke back. We had to keep repositioning the ship until we eventually ended up by this ice shelf, which was about 40ft to 50ft high. We had got the last of the cargo away and within an hour of the cargo work completing, and all the people normally associated with unhooking the loads from the ship and loading up the sledges by hand and lashing them down...probably 10 or more people FIDs and crew...within an hour of that finishing, the edge of the ice collapsed onto the ship. Probably 3 or 4 metres of the ice edge broke back, fell on the ship, crashed all the bulwark rails. Fortunately nobody was hurt at all. We could have had 10 or more people die and me being one of them, because I had been working out there. That was about the third occasion on that cargo relief were we had had pretty dicey occasions with ice breaking back. We had been working on bay ice...at Halley the base is built where it is because there are some natural indentations in the ice edge, which allows sea ice to form and a ramp to form at its head so

you can drive vehicles up from the sea ice up on to the ice shelf. If you get there at the right time, then that is fine. But if you get there too late in a particular season and the sea ice is gone then all you have got is the snow ramp to go alongside. If that breaks back there is no warning. It breaks into very small lumps that roll over and disappear. Any body or any thing on the ice at that stage is lost. We had had one occasion were that had broken back on the ramp. There was no ramp left. Again no one was hurt. It happened in the middle of the night and no one was working at the time. It was this second time that we went alongside the ice cliff that it actually caused quite a bit of damage on the ship. We were all out there with pickaxes and shovels trying to... because the ship had a 5 – 10 degree list... trying to break the ice and shovel it over board.

[00:35:33] Lee: When you got back to your cabin, what was going through your mind?

Beer: As ship's crew you do not think about it until afterwards. You go back to your cabin... it is all done. You have probably been working out there for several hours getting all this ice off the deck. You just think that you have had a lucky escape, I suppose. You are generally very nervous about it but fortunately we did not have any more cargo to work there.

[00:36:12] Lee: The one thing about that incident, as I understand it, is that there was no way you could have predicted it.

Beer: No. You couldn't prevent it. The only way you could have prevented it was not being there in the first place. It is one of those questions that Masters of BAS ships are asking continuously because it is easy to say no 'I am not going to do that job that particular relief' or 'I am going to stop that relief. I am not going to allow that boat to go away because in my estimation it is too dangerous'. If you took that too far then you would never get the work done. You would be the safest Master alive but you would be unemployed, probably. There was one particular ship's Master that was more cautious than others...and you have to respect him for it because he had his views and he stuck by them...and he did the job...but it generally took him a lot longer because he would make the ship wait around longer until the right weather came along. It is usually weather dependant. Working boats in poor weather or committing the vessel to ice... those are the big decisions the Master was making if not on a daily basis then a weekly basis down in the Antarctic.

[00:37:47] Lee: So there was a lot of agonizing involved?

Beer: Yes: A lot of decisions to be made and then once you had made a decision you are committed to it. You have got to get on with it and make the best of it.

[00:38:04] Lee: Committee decisions or Captain's decisions?

Beer: Captain's decisions! If you are working boats I would talk to the Mate. I would definitely talk to the person who was actually going to do the job. But ultimately it has to be the Captain's decision whether the boat goes or whether we commit the ship to ice.

[00:38:32] Lee: Do you remember ever having a sinking feeling where you had made the decision to go ahead with the operation and part way through wishing you hadn't.

Beer: Oh definitely...at Bird Island several occasions! I remember one time in particular when we had...because it was too dangerous to get people out of the landing craft on to the vertical ladder to climb up the ship's side...the weather had deteriorated so rapidly...to lift the whole landing craft with everybody in it...we had about 20 people in it. The light was fading. Normally in these very hairy times at Bird Island we were late in the season when you were trying to do the final relief, picking up the rubbish and that sort of thing from the base in March. We had to pick up the landing craft with 20 or more people in it. It was dodgy really. The alternative when I thought about it afterwards was to say 'you go back into Bird Island and stay there'. The likelihood would have been they would have been there for 2 or 3 days before we would have been able to come back. The weather was blowing up and it was pretty well forecasted and I blame myself for making the decision in the first place. I have to say that I was really nervous about that. My heart was in my mouth when we were lifting up this boat...I was standing on the Bridge watching it...I wasn't actually doing it...because had something gone wrong all those people would have been dead. If one of the strops we were lifting the boat with, had parted or something with the extra strain. I forget the weight of the boat itself but you are talking about 12 tons or so plus all the people and then this jerk as the crane started to take the weight. Then the weight would fall away and you get a sudden tension on the line. The system had not been tested with those sorts of conditions in mind. If something had gone wrong then we would have had a major disaster on our hands. I would have been blamed. I know that at the time...that was one of a number of occasions like that...but at the time you just...the adrenalin is flowing and you just get on with it. You are making sure that it is done...and I am making the



decision that they weren't going to climb up the ladders because I think that that would have been too dangerous. This, to me, was a safer way of doing it, yet it had its own inherent risk. I would have still had a zodiac in the water at that stage but a zodiac and 20 people...they wouldn't have been able to do anything. They may have been able to pick up 2 or 3 people out of the water but that is all. Anyway you just get on with it. You try to make it as safe as possible and of course it all works out. Nobody is hurt and actually they thought that it was all exciting! [Chuckles]. Sometimes when I think back on it now, with the knowledge that I have as an accident investigator...where I have investigated similar sort of disasters of similar magnitude...and I have seen what it has done to that Master that has been involved, and his sanity and his career...I think that 'there but for the Grace of God go I'. I think that that has helped me in the rôle of Accident Investigator because I can't afford to be too judgemental. I know that it could so easily be me half the time. Sometimes people are more reckless but often accidents are just the sort of things that could so easily have happened in the Antarctic.

[00:43:23] Lee: I asked you earlier whether you thought that Antarctic Captains had a shorter shelf life? Perhaps the question should be 'Do they burn out faster than Captains that are not in...?' Because being in the Antarctic is a constant challenge.

Beer: I don't think so. The Masters of modern container ships or oil tankers have their own problems... quite different problems and they are really stressful. Commercial pressures, social pressure with multinational crews and pressure all associated with the commercial side and the fact that you are arriving at 2-oclock in the morning, you are working cargo straight away and you are out again four hours later. You have got umpteen stresses on you so I actually think that though the Antarctic BAS Master has his exciting moments in many respects it is less stressful.

[00:44:45] Lee: Did you ever get yourself embroiled in any international political issues.

Beer: Not personally. Before the Falklands and post-Falklands we always, if we could, we would visit bases rather than go past a base in the Antarctic. In the '70s rather than sail past an Argentinian Base we would generally stop, send in a boat, perhaps take in some chocolate...something as a gift...and say 'Hello'. There was a time when the Argentinians especially would ask you for your passport when you got ashore. You would usually get over that with a little bit of banter and usually have a drink with them. There was a lot of alcohol in the

Antarctic in the 1970s and 80s to some extent and the ships drank their fair share I think as well.

[00:45:51] Lee: I am supposed to ask you about memorable characters. One name has already cropped up – Tom Woodfield.

Beer: Tom Woodfield, yes.

[00:45:59] Lee: Jack Tolson told me to talk to about that. He obviously had a regard for you as a potential sea captain. I wonder how you felt about him?

Beer: I am full of admiration for Tom Woodfield...I am full of admiration for the BAS Masters that I have actually sailed with.

[00:46:16] Lee: Why is Tom memorable?

Beer: Tom was the Master of the old school. He was a stickler for discipline, for routines, for accuracy and he would not let any form of slackness escape or go by. He would pick you up and be thoroughly annoying and irritating but it is exactly what a junior officer needs! I am not talking about BAS ships now but in my present job I see so many ships...modern ships...where that doesn't exist. That is exactly what those ships need in order to operate more efficiently and effectively. Tom was good in that respect. He fought the cause of the ships' crews well with the office. He was tremendously knowledgeable about the Antarctic geography and working ice. Surveying. Just the sort of person that is easy to respect really.

[00:47:44] Lee: He was 'old school' and you were 'new school'. Is that fair to say?

Beer: I think that at that time I...He was what you would call 'old school' but typical of Masters that I had sailed with. I think he stood out because of his experience in the Antarctic and when you go down there...when I went down as a 23 year old Third Mate, I knew nothing compared to Tom Woodfield. I would have had my Chief Officers' Certificate of Competency and I had had the experience in the South Pacific with Port Line, but I knew nothing about ice navigation in the Antarctic and the work of the British Antarctic Survey. I learnt a lot, a hell of a lot, from Tom Woodfield. There was also on that ship on my first voyage Chris Elliott and Stuart Lawrence. Stuart Lawrence was the First Officer and Chris Elliott was the Second Officer for a while. Stuart

had probably 3 or 4 years experience at that time, and Chris probably had 5 or 6 years experience. So one way or another, for me it couldn't have been better with all that experience to draw on, and an exciting voyage as well. We had a...I think that was the voyage where the ice cliffs collapsed...it was either that or the next one.

[00:49:34] Lee: Are there other characters who spring to mind?

Beer: Stuart Lawrence, everybody would say that.

[00:49:41] Lee: What was it about him?

Beer: He was just a bubbly character who was always getting into trouble with the office, back in Britain. He was just fun to be around. I served with him for 15 years probably. I was his Chief Officer and he and I, I think, were a good partnership. He took the risks and I tempered them somewhat. [Laughter]. I thoroughly enjoyed sailing with Stuart, as I enjoyed sailing with everybody else as well, but Stuart was good fun and a really good BAS Master. Not as technically good as Tom Woodfield but in every other respect...nothing was ever too much trouble for him. He would always try his hardest to get the job done for the FIDS. He was a *Bransfield* man so it was FIDS rather than scientists. We didn't have scientists on board the *Bransfield*. They were all FIDS. It was an expedition and Stuart would do his utmost to get the job done for them. We all went along with that and did the same. It was a very successful ship in getting the job done. Good job satisfaction, high morale came along with that.

[00:51:38] Lee: On the *James Clark Ross* you had an officer called Donnelly who had to go because he was dying. What do you recall about that?

Beer: He was my Chief Engineer. He stood by the ship with me in South Shields and sailing with me for the first two years of the ship's life. He was a very good friend of mine. He was slowly getting more ill. We had a doctor on board. We had an experienced doctor on board, probably the most experienced BAS doctor, and he couldn't get to the bottom of it. With the benefit of hindsight, I should have made sure that he was put off the ship and sent home, or sent to hospital earlier. With the benefit of hindsight there were enough indications there to show that that would have been a sensible course of action. John [Donnelly] didn't want that. In fact he was adamant that that he didn't want that. The doctor didn't support that either. I suppose that I wasn't as strong enough character to

insist on it. I think Tom Woodfield might have done. But I wasn't, and that was the wrong decision. That was the sad point of 22 years with the British Antarctic Survey. When we did get him ashore in Stanley...at that time I didn't think that it was life threatening. I knew he was ill...but I didn't think that it was life threatening...in hospital and they started doing tests on him, and the prognosis was pretty poor. It was around Christmas time, I remember as well. I won't go into the whole thing but I had a few days where I was pulling every string that I possibly could to get him transferred to Montevideo...to get him flown on a special medical flight up to Montevideo. In the end it took me phoning the Head of the Forces in the Falklands about eleven-o'clock, midnight on Christmas Eve. Getting him out of bed to make it happen. And getting contacts in Aberdeen, Nelson Norman, who has worked with BAS and was, as I found out afterwards, [REDACTED]

[REDACTED] He got 'on board' and we were able to persuade the authorities in Stanley to fly him up there. At least then his wife was able to fly out and they were able to have a couple of days together before he finally succumbed to his illness.

[00:55:27] Lee: What was the problem?

Beer: I don't know but I suspect [REDACTED] There wasn't a certainty but he had had a fall off the roof of his house, and I think and his wife agreed with me, that it was from that time that his personality had changed. It had occurred while we were standing by the building of the ship. His character had changed. Looking back on it, you could almost see a gradual decline from that time.

[00:56:20] Lee: Couple of further questions of a different nature to finish off. I hear that you are an artist. Tell me about your artistic prowess.

Beer: I really enjoyed David Smith's company, the artist that we took down south for a couple of years. He took me under his wing and encouraged me to paint. I watched him for many hours on the Bridge doing his watercolours. I enjoyed doing that as well.

[00:56:59] Lee: No previous experience?

Beer: No.

[03:57:03] Lee: So you started in the Antarctic? Using lots of 'white' presumably?

Beer: That is one thing that David taught me. To see the colours and things where one might see different shades of white or grey or blue. You could also put in purples and yellows and oranges and things, and make the whole thing more interesting from a colour point of view and also bring it also all to life.

[00:57:34] Lee: What was the spark, Nick? You saw his work and thought 'I can do that'?

Beer: No. I have to say the spark if there was one was just admiring...I saw his work and admired it. I saw him doing actually...creating this and admired the way he would...and surprised at the techniques and the colours and things that he was using. I saw the weakness of photographs. I had taken quite reasonable photographs over the years but these paintings captured the Antarctic for me far more than any photograph could. I wanted to try and emulate that. I actually learnt that I could...I was never anything like as good as David...but I could produce pretty reasonable picture. A number of people actually liked them. There was one, very disappointing to me, and remained disappointing, that the Senior FID on board one trip was really desperate to get to hang in their own 'Senior FIDery. They had their own 'Senior FIDery' or common room, which permanent BAS employees used to have as their recreation room. They wanted something to hang on the wall and they asked me to do something. You can't just do something like that. They took a mere sketch that I had done, and the next thing I knew it was framed and up on the wall. I hated it! [Laughter].

[00:59:49] Lee: You should never judge your own work! What were you doing? Standing on ice floes or something with an easel?

Beer: Often on the wing of the Bridge. I have got a photograph of David and I actually on the sea ice at Halley Bay with the ship that was discharging. He did an oil painting of the ship and I was about 30 metres away at another easel, doing an oil painting of the ship. I was doing oils there but normally I would use watercolours. I am not particularly good and since leaving BAS, I have done very little. It is something that I mean to do, to pick up again when I retire.

[01:00:43] Lee: Did you detect in your time in the Antarctic anything beyond the visual beauty? Was there something about the Antarctic something more spiritual than that visual beauty?

Beer: There may have been. There is nothing that I have identified. There is no doubt about it that the Antarctic holds a very special place in my memory. Certainly for those 22 years are at the centre of my life. I loved being down there, and when I left I...I can't say that I couldn't wait to be back down there again but there were elements of it that I couldn't wait to return to. But of course, it was very nice to return to the wife and children as well. Yes, it is a very special place.

The End

## Highlights

- Part 1 00:00:27: Choosing career at age of 13 years  
00:03:05: Apprenticeship with Port Line  
00:05:03: Junior Officer on Cruise ship in South Pacific  
00:07:55: First Captaincy; supervising the build of RRS *James Clark Ross*  
00:10:30: Recruitment into BAS  
00:11:17: Brief resume of BAS career  
00:12:27: Ice Pilot on *Polarstern*  
00:14:30: Role of Ice Pilot  
00:18:52: Influence on the design of RRS *James Clark Ross*  
00:21:49: Limitations of RRS *John Biscoe* and RRS *Bransfield*  
00:24:04: Good relationship with Swan Hunter  
00:26:06: How RRS *James Clark Ross* was made acoustically quiet  
00:27:28: Why there was a need for an acoustically quiet ship
- Part 2 00:02:49: Rush to meet deadline of launch date set by The Queen  
00:08:03: Teething problems during first few years of service  
00:10:44: Engine cooling system breakdown whilst rushing to the rescue of RRS *Bransfield*  
00:14:13: Further teething troubles  
00:20:52: Capsizing of a Humber at Signy Island  
00:26:22: Difficulties of relieving Bird Island  
00:31:20: Enjoyment of the challenges of working in the Antarctic  
00:32:56: Reasons for leaving BAS employment  
00:34:27: Employment with Marine Accident Investigation Branch  
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- Part 3 00:00:13: Daily routine as Captain of the RRS *James Clark Ross*  
00:02:51: Crew-Scientist relationship on the RRS *James Clark Ross*  
00:07:43: How crew-scientist relations were improved  
00:12:05: Maintaining standards in the Ward Room  
00:13:43: Roles of Chief Engineer and Captain on the RRS *James Clark Ross*  
00:17:33: Use of experience v technology in assessing safe working conditions  
00:19:56: Changes in navigation aids during Beer's career  
00:24:48: Influence of Health and Safety Legislation

00:25:5: Problems of working in ice and the unreliability of satellite imagery. RRS *John Biscoe* and RRS *Bransfield*'s encounters with 'porridge ice'

00:31:08: Ice Shelf collapsing onto and damaging RRS *Bransfield* at Halley

00:38:32: Near-accident at Bird Island

00:43:23: Pressure on all marine captains

00:44:45: Relationships with Argentinians

00:46:16: Respect for Captain Tom Woodfield

00:49:34: Respect for Captain Stuart Lawrence

00:51:38: Death of RRS *James Clark Ross* Chief Engineer

00:56:20: Influence of the artist David Smith