

## DAVE ROWLEY

Edited transcript of interview with Dave Rowley [Pilot, 1969 to 1974] conducted at his home in South Wonston by Jack Tolson on 6th May, 2010. BAS archives AD6/24/71. Transcribed by Allan Wearden in May, 2018.

[Part 1 0:00:00] Tolson: Dave could you first of all tell me a little bit more of your own family background and where you were brought up, siblings and parents and, first of all, your actual date of birth?

Rowley: Sure. I was born on Christmas Eve, December 24th, 1937 in Blackpool at (I believe) it was at Devonshire Road nursing home in Blackpool. My mother was a nurse and my father was a welder, just ordinary working class family, and I had three brothers, one older two younger than me, and went to school at the local infant-cum-primary-cum-secondary modern school. Left Blackpool at the age of 11 and my parents moved down to Portsmouth, and I always thought it was because they felt so much shame at me failing the 11+ examination! Anyway we ended up in Portsmouth and that's where I did my secondary modern school up until the age of 15, that was at Francis Summer View Secondary Modern School in Southsea. We moved to Havant from where I started my first couple of jobs down at Portsmouth airport, as a general dogsbody, hangar sweeper (!) for a company called Hancock Aviation which is still there. Portsmouth airport now is an industrial estate, but it was quite a busy little grass field, did charter flying down to the Channel Islands for all the companies in Portsmouth, things like that. Anyway I worked on Tiger Moths and Austers and Miles Magisters and that kind of thing for a couple of years, and then I got my National Service call up papers when I was 18 and ended up in the Air Force having wanted to go in the Navy! But they saw that I had been messing around with aeroplanes and decided that yeah, the Air Force was the thing. I went in as a trainee aircraft fitter, did a couple of years in the UK, working mainly on maintenance units on things like Meteors and Vampires, Canberra bombers, ended up at Colerne number 39 maintenance unit I think it was in Wiltshire. And then I was - as an aside it was there that I had my first experience of Antarctic aviation, because Squadron Leader John Lewis flew this brightly coloured orange Otter into Colerne for a few modifications, prior to the Trans-Antarctic Expedition! So I ended up helping to fit a drift sight and do various modifications to the aircraft, and that was, I didn't have any ambitions or thoughts of ending up in the Antarctic eventually, but that was 1957 and through no fault of my own and just pure chance fate led me to joining the Antarctic survey in '69!

[Part 1 0:04:49] Tolson: You did your National Service and during the National Service whilst you were out in the Far East, you took up flying?

Rowley: Yeah, I was posted to Singapore which is shortly after I signed on for another three years as a regular airman, went to Singapore and again posted to a maintenance unit at RAF Seletar at Singapore. We had to put our names down for Wednesday afternoon sports, afternoons you had to nominate which sport you were going to play every Wednesday

afternoon, and I didn't really fancy sport so I told the powers that be that I was going to learn to fly! And they accepted that as a *bona fide* Wednesday activity, so of course having stated that I had to go and do it. So I beetled down to the Singapore Flying Club at the then international airport at Paya Lebar and walked into the flying club, and I had heard actually they did reduced rates for non-commissioned servicemen. So I went in there and got a trial lesson, 15 minutes in a Tiger Moth with a chap called John Wagstaff who was a rubber planter and a part time flying instructor, lovely old gent, and to cut a long story short I learnt to fly on this Tiger Moth and managed to fly myself around Malaya, and was fortunate enough to get a lot of part time, or free, flights doing pleasure flights for people that had just wandered into the flying club who wanted to have a look round Singapore. And the flying club kindly let me take people round Singapore 15 minutes at a time for the paying public! You didn't have to have a commercial pilot's licence, the potential passenger was signed up as temporary club members, that got around the commercial aspect of things, so I managed to knock up quite a lot of flying doing that, before I eventually came home for demob in 1960. By that time I had a couple of hundred hours' flying under my belt which was the minimum required for a commercial pilot's licence, went for a medical before taking up study seriously for the commercial pilot's licence, failed the medical on eyesight(!) so that put the kibosh on that for a while. Anyway went on to do a couple of jobs in civvy street working for Dan Air and various people as a mechanic, found it very cold, low paid, uncomfortable going backwards and forwards to work on a Vespa scooter in the middle of winter!

[Part 1 0:08:45] Rowley: Happened to see an advert for the Shell Tankers junior engineers in the *Telegraph* 'Situations Vacant' and fired off a letter of application, and to my amazement got an interview and went down to Shell Centre in London and did the interview and they took me on as a trainee junior engineer! Went off to sea for ten months on the *Haustellum* 18000 ton Shell tanker, got back to Singapore did a bit more flying at the flying club, and anyway that went on, made lots of money, at least to me it was at that time as 5th engineer, came out and on an extended short leave decided that I was going to have a go at becoming a flying instructor! So went along to Elstree Flying School who were advertising flying instructor courses at the time - this was 1965 - and did a fulltime course with my ill-gotten gains from Shell. It was a six weeks' course, and to my amazement came out after six weeks as an assistant flying instructor, which was a kind of, you're under observation before you could, you had to do six months or something as an assistant flying instructor and then you became a full flying instructor after another test. This was all on private pilot's licence because in those days, so long as you were only instructing flying club members you didn't require a commercial. Anyway during this time - incidentally I ended up flying at the club in Elstree where I took the course - phoned up the powers that be in the Merchant Navy and said 'I'm not coming back!', and well, just never looked from there flying wise. Whilst I was working at Elstree Flying Club, I discovered that the Civil Aviation Authority had lowered their eyesight standards to the extent that you could wear glasses! As long as your eyesight was correctable to 6/6 you could qualify medically for a commercial pilot's licence, so I went on to do the commercial pilot's licence at Elstree which was very handy, because alongside the flying club they had a commercial pilot training school! So I had all the tools and books and everything there at hand so I gained my commercial pilot's licence! From there to

Goodwood where I set up the Goodwood Flying Club along with two colleagues from Elstree, working for the then Duke of Richmond, and that was 1968. Summer of 1969 I happened to come across an advertisement in the *Telegraph* again for the pilot requirement for the British Antarctic Survey! And I thought, 'God that sounds interesting', so I banged off a letter to Gillingham Road and to my amazement got an interview in the summer of '69.

[Part 1 0:13:21] Tolson: Can you recall who was on your interview board?

Rowley: Yeah, never forget it! It was Bunny Fuchs, Derek Gipps, Bill Sloman and Eric Salmon and it was a pretty daunting set up really. Gillingham Road was a lovely terraced office, Victorian style office, it was an office complex anyhow, and I think the Antarctic Survey was on the second or third floor, can't remember now. But I remember sitting there anyway in the corridor outside the interview room, with secretaries going backwards and forwards with sheets of paper and all sorts of FID gear in their arms and all very strange. And I was sitting there with about, I don't know, with another other dozen pilots awaiting interview. There was airline pilots, out of work airline pilots, bush pilots all sorts, RAF pilots, ex-RAF just having come out of the RAF, but all sorts there. We didn't say much to each other funnily enough, I sat there reading a paper. It went on and on waiting, people were going in having their interviews coming out and I was the last one in, right at the end of the afternoon! And anyway in I went, there were the four eminent people were sitting there, behind this huge oak desk looking very imposing and I of course recognized Fuchs from the IGY from the press and pictures at the time. The first thing he asked was that, or he said, was 'There's a map of the Antarctic there on the wall can you point out where the British operate?' So I walked over and took a guess and pointed at the opposite side of the Antarctic to our sector, and there were a few eyebrows sort of hitting the ceiling and I knew then that I'd made a big, you know, put my foot in it! So anyway nothing was said and I sat down and asked me lots of questions about my background, I just reiterated really - funnily enough education qualifications and all that sort of thing didn't come into it, which I fully expected - I was fully expecting with my education background to have been rejected out of hand really, but they seemed more interested in my Singapore and Malaya flying experiences. I told them quite truthfully that I used to fly into a lot of very tight jungle air strips, they were really emergency strips that had been cut out of the jungle and just did it for the fun of it really! And anyway I must have come across....I mean I got chosen that's the main thing, much to my amazement again!

[Part 1 0:17:26] Tolson: You were the first civilian pilot to be selected?

Rowley: Yeah. It was said on the interview quite sort of bluntly that they had a lot in the last few years in the air operations down south, they'd had a few unfortunate instances with the RAF personnel not fitting in, wanting to carry on the officer status kind of thing, which just like oil and water on base, the main thing was needing to fit in. They'd lost a couple of aeroplanes due to, there was a bit of a gung ho it seemed attitude with the RAF pilots on occasions, anyway it was starting to cost the Survey a lot of money in lost aeroplanes! So what with that and the personality conflicts type issues the powers that be decided to try a civilian for a change on a one year contract, under very close observation by all at

headquarters and base commander down south! So I was taken on for a trial period of a year, again, well from my point of view, anybody with a bit of fire in their belly it was just, to me it was heaven, absolute heaven! Being told to go over to Canada pick up an aeroplane and fly it halfway across the world to the Antarctic!

[Part 1 0:19:45] Tolson: That in itself is an adventure and a story that of flying a plane from Toronto through North America, South America finally all the way to the southern tip of South America across the Drake Passage, you went across to Canada, take me through the whole series of events, what type of plane were you picking up and who were you doing this journey with?

Rowley: Yeah, I joined the Survey alongside Bert Conchie who was an RAF Flight Lieutenant, so it was his first trip south as well and there were two army mechanics from Middle Wallop, helicopter mechanics, but they did work on turbo engines. And the four of us went across together, myself and Bert Conchie, Ron Ward who was an army sergeant, and Dave Brown another army sergeant and we were put on the De Havilland Twin Otter conversion course which was two weeks in a classroom(!) and then ten hours' conversion training on the actual Twin Otter, on our own Twin Otter, by the De Havilland test pilots and demonstration pilots for the flying part of the conversion courses, and that was in November 1969. We basically were given a pile of money in travellers' cheques, sterling travellers' cheques, which were absolutely useless for what we were going to do, but anyway we'll get around to that! But the idea was to do the conversion course and then fly the aircraft south. There was the De Havilland Twin Otter (as the names implies, twin engines) DHC6, De Havilland Canada 6 dash 200 which was the designation really of the mark of the aircraft really the types of engine. As a matter of interest the engines were UCLPT 6's small turbine, they were turbo props and alongside the Twin Otter registration VPFAO was a single engine Beaver, but instead of the tradition radial single engine piston engine it had been fitted with a Twin Otter engine, PT6 turbo prop, and we used to call it the 'pocket rocket' because it just used to take off and climb vertically with nothing in it virtually(!) and it was a beautiful aeroplane. Anyway that was the DAC2 turbo Beaver, so I had a two hour conversion on that, a couple of hours or so on that practicing short takeoff and landing techniques - this was at Downsview by the way, which was the De Havilland complex in Ontario on the outskirts of Toronto. Anyway having done all the various qualifications and when the conversion team training pilots thought we were competent enough, we went off with ferry tanks - no we didn't!- no the first trip south we had to take both the aircraft down to Fort Lauderdale in Florida to be fitted with ferry tanks at a company called Red Aircraft in Fort Lauderdale that used to specialise in these ferry tanks. And so we set off to, Bert Conchie opted to fly the Beaver because he preferred to fly the Beaver, and he went along with Ron Ward one of the mechanics, me and Dave Brown flew the Twin Otter - no that's wrong!! - Bert went down with a ferry pilot - no that's wrong! Do you want to go back or shall I carry on?

[Part 1 0:25:34] Tolson: Yes, yes please.

Rowley: The....?

[Part 1 0:25:39] Tolson: The important thing is the epic of the journey I think!

Rowley: OK sorry, sorry OK! Well the Survey did employ a ferry pilot, Jim Avril and ex Air Force really rugged gritty sort of no nonsense bloke and he actually flew the Beaver down south. Myself, and Bert Conchie flew the Twin Otter down south, we flew, we didn't necessary fly together but we ended up in the same place every night and more or less took the same route south, the two aircraft. We started off from Toronto went across Lake Erie into the States and cleared customs at Rochester New York, cleared customs into the States. We went various stops *en-route* on to, we did about two night stops *en-route* down to Florida, got down to Red Aircraft in Fort Lauderdale, and when they started fitting the ferry tanks to the Twin Otter for the Caribbean and South American sections of the trip, my heart sank(!) because the ferry system was so bulky and complicated and antiquated - basically if you could imagine two 45 drums welded together end to end, and that constituted a tank! And you had two tiers one on top of the other with wooden brackets carved to the shape of the drums to fit on, so you had this in two tiers and then another two tiers so four of these double 45 gallon drums, 8 x 45 gallon drums in all if you like, all welded together tied down with steel cables! And fed, you had a cross feed section between the tanks and the whole thing fed into the belly tanks in the Otter by gravity, which were the main tanks in the Otter, the belly tanks! Anyway the whole thing was complicated, it was bulky, it was difficult to operate the ferry system, so the first thing - anyway we set off, the first stop from Florida was South Caicos in the Turks & Caicos Islands we landed there, a really completely no tourist had touched it in those days! It was a very basic tiny little airport with a bamboo and rattan type control tower and terminal building if you can call it a terminal building. A bloke called Snowdrop or Sunshine or something like that, Caribbean, big Caribbean chap very thick obviously Caribbean accent, offered to take us to the South Caicos hotel which was another bamboo and rattan type building, but anyway very pleasant. So old Snowdrop took us over the bumpy roads about a ten hour journey over these bumpy roads, in his Cadillac, about a 1935 Cadillac convertible with no exhaust pipe or silencer or anything(!) which was an epic journey in itself. And anyway spent a pleasant night there, old Snowdrop took us back to the airport 6 o'clock in the morning we aimed to get airborne. Of course no one was at the airport and we did refuel every night before going off to wherever we were going to spend the night, we would refuel so we were ready to go next morning and we would aim to get airborne before the sun got up, and mainly because of the weight of the aircraft filled up with ferry fuel to catch the best time for takeoff performance wise you when it was cooler.

[Part 1 0:30:52] So anyway 6 o'clock that following morning we went on to Trinidad Piarco where we spent another night, Piarco to Manaus in Brazil middle of the Amazon, that was again you didn't see a tourist whereas now Manaus is pretty popular tourist destination, it's full of skyscrapers and goodness knows what! But then it was a very much a single storey, flat, defunct rubber, centre of the rubber trade, Portuguese rubber trade in its time! Had a famous opera house which is now a big tourist attraction Caruso is supposed to have played there, and went around the opera house which was deserted. I am just saying this as a matter of interest because, as I say, tourists had never touched the place! The opera house was completely derelict, covered in and overgrown with vines and tropical fauna, it was just

something we didn't really realise how significant it would be in the tourist industry years later, we just took it in our stride really! We ended up in this hotel called the Amazonus, it was the main hotel in Manaus and it obviously and like the opera house had seen better days. It must have quite an imposing place at the time, lots of marble everywhere, marble columns and bed bugs and Christ knows what, and an overgrown stinking swimming pool(!) with the odd crocodile swimming round in it, which they ate, which the locals ate very tasty! And always remember there was this American female playing the piano, big fat American female playing the piano in the evenings and she was the, oh she was a dead ringer for Winifred Atwell! Anybody that remembered Winifred Atwell who was a very popular pianist in the '40s and '50s in the UK. But anyway this female had been there donkey's years she got stranded there in the 30's and she had been playing the piano ever since, trying to earn enough money to get a fare back to the States!!

[Part 1 0:34:08] So that was - anyway from Manaus we set off crack of dawn the next morning. Oh the other thing was, that we had quite a problem with Customs and Immigration in Central and South America because nobody spoke English, and we didn't speak Portuguese or Spanish and there was a lot of greasing of palms with American dollars! Customs and Immigration every official you spoke to a \$20 note would have to come out and you were then waved through! And we didn't have any aircraft documentation, legally you're supposed to carry a certificate of air worthiness and aircraft technical logs and all sorts of documentation, and we didn't have any documentation at all! And luckily we weren't asked for any until a couple of years later and embarrassingly we couldn't produce any for it. Anyway that's another story, a lot of greasing of palms with dollar notes went on it was all annated (sic), receipts had to be produced when we got back home! Anyway from Manaus we carried on down to Santa Cruz in Bolivia, another 10 hour flight, and well it was a repeat of Manaus actually, without the Amazon! Santa Cruz Bolivia, oh we were paying cash for fuel everywhere, can you imagine, cash for how many gallons of fuel I don't know? A 1000 gallons of fuel cash! Busy standing on the tarmac with the old bowser operator, he'd give you the bill \$300, \$500 American or whatever and there you'd be dishing out these \$50 notes to this bowser man, who couldn't speak English but his eyes got wider and wider as you, and if you didn't have enough in your hand, you'd have to go to your back pocket and take another wad out! And we were sure we were going to get waylaid and robbed, but it never happened amazingly! Anyway from Santa Cruz Bolivia we went down to Mendoza in Argentina at the foot of the Andes where we spent another night. The Argentinians - in fact everywhere we went - were very interested in the aircraft and the Victor Romeo designation on the registration, Victor Romeo being the Falkland Islands. The registration of the aircraft was - no, sorry! - Victor Papa, it was VPFAO for the Twin Otter for the registration and VPFAM was the Beaver's registration, and the Argentineans recognised the VP straight away as Falkland Islands so there was lots of, but there was no antagonism then back in the '60s.

[Part 1 0:38:07] But they did always refer to the Malvinas which is a new word to me, and it took me quite a bit of conversation to realise what they were talking about(!), when they mentioned Malvinas. Anyway I remember we flew into Mendoza it was quite hazy, with a slight high overcast and very hot and I knew we were quite close to the Andes. We were

certainly flying over the Andes foothills as we progressed south but I didn't realise how close and how spectacular it was, till the next morning when we got out of the hotel and of course the first thing you do if you're going to fly is look to the sky, and I remember getting out of the hotel and looking up, and the overcast is still there and it wasn't until I got to the airport and got a clear view and we were looking at the peaks of the Andes, way up and really spectacular! Anyway off we went from Mendoza Argentina to San Carlos de Bariloche which is actually up in the Andes, the airport was, the airport altitude was about two and half thousand feet surrounded by jagged peaks, very spectacular. It was at two and half thousand feet in a valley, well virtually a valley, nestling in all the jagged peaks! And it was like a microcosm of Bavaria the architecture and half the population were German, and not too long after the war, and the hotel that we booked into it was run by Germans or it could have been Austrians.

[Part 1 0:40:31] Tolson: I'm going to have to cut you there Dave to change the first tape!

Rowley: OK!

[Part 1 0:40:36] Tolson: Tape 2 with Dave Rowley and we are on our way down through South Americas and we had just stopped for a night at a German/Austrian hotel high in the Andes.

Rowley: Well the following morning usual routine up at the crack of dawn and we took off between 6 & 7 in the morning as usual, and at about 2000ft after takeoff, about 5000ft on the altimeter, all hell let loose in the cockpit because every warning light on the panel came on hooters, horns, God knows what and there was nowhere to do an emergency landing except to turn back to the airport! We didn't want to do one anyway, we were vastly overweight with ferry fuel and it wouldn't have been a good prospect to land with all that weight onboard, although it wasn't impossible, but anyways to cut a long story short Dave Brown the mechanic started pulling circuit breakers, the engines were going that was the main thing and everything seemed to be working - oil pressure seemed OK and fuel feed, and everything seemed normal, so Dave Brown pulled circuit breakers until the noise went away and we carried on. When we got to the other end we actually found it was main ski microswitch which had stuck in the wrong position. Anyway that was that and we carried on down to Punta Arenas which was our final stop over in Latin America, before the flight across Drake Passage to the Antarctic Peninsula. We booked into the hotel in Punta Arenas - just forget the name of it now, it doesn't matter anyway - and we ended up staying there about a week waiting for suitable weather for the Drake's Passage and at base T, our destination in the Antarctic.

[Part 1 0:43:29] Tolson: Before Dave, before we go on to the Antarctic section I think it would be just to clarify the return journey has to be made at the end of the Antarctic season?

Rowley: Yeah, that's right. I mean we could go on forever like this talking about the ferry flight alone and of course we did it for four years running, and at the end of the flying season of course we'd have to reinstall the ferry system into the aircraft down at Adelaide, tank them up, and take off for the ferry flight north at the end of the season. That was always a bit of an

epic getting airborne off snow, vastly overweight with ferry fuel for South America and Punta Arenas, it was a six hour flight, and we had to take quite a lot extra for reserves. But anyway the, as I say for four years we went backwards and forwards so we varied the route occasionally just for our own interest. BAS really just gave us a big load of money and said get the aircraft to the Antarctic! They didn't tell us what route to take or anything like that, so we varied it a little bit just to, for a bit of variety really! Anyway getting back to the first ferry flight we took off from Punta Arenas after about a week of daily weather reports from Port Stanley - I suppose I ought to explain really that we'd go along to the airport, the civil airport in Punta Arenas every morning, and we'd get up in the control tower and - was it Miriam? - who would, she spoke fluent Spanish and she would negotiate with air traffic control in Punta Arenas from the Falklands and, - excuse me! - and send weather scheds over the R/T so that was very useful. As I say for about a week the weather wasn't suitable for the ferry flight across so every morning we'd trog down to the airport, nothing doing! So we'd spend a day sight-seeing in Punta Arenas and the surrounding areas, very pleasant for a week, but we were believe me really keen to get going and we didn't really enjoy hotel life. But we finally got a good sched and a good weather report and we decided to go! The - incidentally I ought to say that we loaded up with a few crates of fresh vegetables and fruit, and a few tray of eggs, hens eggs for the Fids(!) which we found in subsequent years they really looked forward to - but anyway I forget the actual date now but sometime late November or could have been early December, we took off from Punta Arenas for the five hour trip across the Drake Passage to Anvers Island which was our first stop. And the main reason for going to Anvers we would, oh we had to pick up some personnel, I think we had to take a few Fids down to Adelaide Island I seem to remember.

[Part 1 0:48:01] Anyway Jim Avril the ferry pilot on the turbo Beaver was being dropped off at Anvers which was an American Antarctic base and he was being dropped off there, he was going to be shipped off back to South America to fly back home to the States, so that's what we did. The *John Biscoe*, the Survey's supply ship, was on its way across Drake Passage so that was useful because they could put their radio on carrier wave and we could use it as a beacon to get a good fix because as you imagine the upper winds were totally, we just had no clue whatsoever of what the upper winds were doing, so from a technical point of view basically we'd set a course south which really coincided with our compass heading, coincided with a line we drew on the map, we'd didn't allow for any drift or anything like that. We did, there was a radio beacon at.....on the tip of...on the southern tip of Latin America, Tierra del Fuego, Ushuaia I think the station was, a naval station. They had a radio beacon there that we could take back bearing off for about a couple of hundred miles then lost it, so we got a good idea of the wind effect for first couple of hundred miles and we just stuck with that until we picked up the *John Biscoe's* beacon to get a fix. And about an hour after that we got our first sight of the Antarctic on the horizon!

[Part 1 0:50:28] Tolson: Can I just stop you there Dave to check the colour balance. [Rowley: Yeah.] We're running again on tape 2. Dave we are approaching the Antarctic now you haven't seen the place before I don't know if your other pilots have?

Rowley: No!

[Part 1 0:50:51:] Tolson: You're completely out of your understanding, you haven't landed or taken off on snow before, what is going through your minds!?

Rowley: Well first of all the.....there was total...we had done an induction course at Cambridge along with a lot of new Fids, and we saw the occasional film about life on base and that kind of thing, but nothing can really prepare you for the first sightings, you've never seen anything like that in your life! Maybe pictures in books but I know from my own point of view the flight across Drake's Passage was, what was going through my mind all the time was what's the perspective going to be like for landing? How do you judge your height over snow? What's the surface? How do you tell what the surface is going to be like, soft, hard, sastrugi? And things like that are going through your mind all the time, of course subsequent trips it was old hat! But that really occupied my thought and of course the navigation was very basic, you're looking down at those white caps and think to yourself my God, you know if anything catastrophic happened like losing a couple of engines or even one engine, at the weight we were flying at, we are going to end up down in that!

[Part 1 0:52:54] So all this is going through your mind and then every little sort of change in engine note would bring you up and think 'God, lock on to the gauges the engine gauges and everything would be OK', but there is all that going on, and anyway as a matter of interest we flew across at 10,000ft which was a good altitude for economy, and we didn't have an oxygen supply system or anything like that so it was just breathing normal outside air at the outside air pressure, no pressurisation nothing like that, but 10,000ft perfectly acceptable, there are no fatigue problems or effects of lack of oxygen or anything like that. Anyway as I said shortly after making contact with the *Biscoe* and getting our fix about an hour after that I should think, this white slick appeared on our horizon which I thought was cloud, and of course after another hour it got a little more like, well not cloud. And after another hour little bits of definition started to appear and mountain peaks, and it was just an amazing feeling to see that for the first time! And of course every hour it got clearer and clearer and after about five and half hours of flying we were on it and circling Anvers Island or the American base at Anvers, they kindly marked the airstrip with oil drums and we made our first approach. It was a brilliant sunny day so the snow was absolutely dazzling and my fears of perspective and height judgment and all that just went out of the window, I was just so thrilled at my first prospective landing on snow! That did a normal approach and I didn't touchdown I trailed, well we did touchdown we trailed the skis on the snow for a few yards and took off again and went round flaps up, went round, did a circuit came in did a normal approach and landed. And it was just a huge thrill as you can imagine, it became old hat after a while! We were met by Fids, Americans and we dropped off Jim Avril, and Bert Conchie took over the controls of the Turbo Beaver for first time on his own, not...he'd taken turns at flying it on the ferry trip, but on his own in the cockpit without another pilot, just Ron Ward the mechanic. We didn't require refuelling, we still had plenty of fuel onboard from the ferry tanks and off we went to Adelaide Island which was the airbase, base T. The flight was an hour and a half, the takeoff from Anvers again was something we'd never experienced before but it was straightforward, it was nice smooth soft snow and just the smoothness of the takeoff run and

the landing run previously was quite amazing, without the rumble of wheels and that sort of thing!

[Part 1 0:57:52] Anyway we, oh well it was just awe inspiring the Peninsula on the left, on the portside, as we headed south. We got over the north end of Adelaide Island and we were trying to pick up this non directional beacon - the VHF radios were set up to send out a carrier wave for us, to lock on with the directional, with our radio beacon in the aircraft, a non-directional beacon, but we couldn't receive I should say. The Adelaide beacon was notoriously unreliable, we didn't really pick it up until we were almost on top of the base(!), and the base was immediately recognizable from the air. It was late afternoon I seemed to remember, and just the sight of the base was again was just indescribable really, the fact that we'd done that epic journey, to us at the time it was an epic journey, and got over Adelaide unscathed! And all we had to do from then on was to land the aircraft on the slightly sloping crevassed airstrip! The airstrip was about a mile up above the base, up on the piedmont, and the crevassing on the airstrip was quite notorious but the crevasses did run across rather than along the airstrip!

[Part 1 1:00:00] Again there was a line of empty oil drums to mark out the landing area and you had to keep to the landing area because the areas either side hadn't been probed at all, so you didn't know what the crevassing situation was! Anyway we again did a few circuits of Adelaide, got our bearings and the prevailing wind was from the north, we came round to land from the south over Avian Island and did a normal quite nondescript ordinary landing. We didn't really know where we were going to park the aircraft but there was a crashed remains of a single piston Otter up on the airstrip which was used as a caboose where the mechanics kept their tools in it in the fuselage, so this single Otter fuselage sort of became our focal point and we taxied over to that and parked up. And there was a couple of Fids up there to meet us and I thought 'That's strange I'm sure there's more than that on base'. It turned out to be the Base Commander Ian Willey and can't remember who the other one was, the radio operator I think it could have been, but anyway we shut the aircraft down, old Bert came and parked next to me with the Beaver, opened the doors and of course there was a lot of handshaking and back slapping and introductions, and then there was this sort of whooping noise and happened to look down towards the base, and all these Fids hurtling up towards us!

[Part 1 1:02:15] A couple of Muskegs and Fids on foot and I thought 'My God, they're like a load of troglodytes', you know, hairy, smelly and covered in seal blubber, old seal blubber! And was the other thing that hit us when we opened the doors and got out the smell of seal, which was the main staple dog food while they were on base not working not out in the field, yeah the smell of seal was all consuming! Anyway all these Fids came hurling up from the base, not so much as a hello or handshake straight on the aircraft rummaging around, the eggs went out the, fresh veg went out and it was only until that was safely on its way down to the base, that they started saying 'Hello! My name's so and so', shaking hands, and that was our first experience of...civilisation there! Anyway we quickly established ourselves into base routine. The ferry tanks was, every time we went down south the first thing to do was put the ferry tanks in store, short storage, dismantle the ferry system and return the aircraft back to normal running with just the belly tanks, and that was the first day's work after we got down

there usually. Then we'd liaise with the Base Commander and get a work routine sorted out, priorities. The first priority was to always relieve Fossil Bluff a couple of a hundred miles south in George VI Sound, and Fossil Bluff always had a couple of years' spare rations on base and the first few flights involved restocking Fossil Bluff with fuel and food, dog food and man food. After that there were sledges out in the field already and we had to relieve the sledges, which was a huge adventure as you can imagine going to places where, well we had very rudimentary maps but coordinates, we used to go a lot on coordinates and just pick out sledging parties out in the field visually. So having got ourselves established on base anyway, and sorted the aircraft out and got a flying programme sorted the Fossil Bluff relief was followed by sledges out in the field resupplying, and then the next priority was depot laying then bottom of the list was scientific survey! But they didn't miss out, we used to combine a lot of field supply trips and depot laying trips with surveying, we used to combine the two, so that worked out OK.

[Part 1 1:06:08] Tolson: So you're, the first thing was to get field parties out into the field?

Rowley: They were already there!

[Part 1 1:06:15] Tolson: So they started their season before you arrived?

Rowley: Yeah, yeah most of them were from Stonington.

[Part 1 1:06:20] Tolson: Right.

Rowley: We used to have the occasional field party would set out at the end of the winter across the sea ice from Adelaide Island to the Peninsula.

[Part 1 1:06:31] Tolson: But in the late '60s and the '70s these field parties would all be moved around by dogs and sledges?

Rowley: Yeah, yeah and they did epic journeys, thousands of miles and it was all surveying, it was topographical and geological survey going on, and our job was to keep them supplied and when, we often pick up a sledging party in the field and do a quarter of an hour flight to another location and drop them off again if it was particularly bad terrain they had to cross, or if they just wanted to get into a work area more quickly! We'd often pick up a complete sledging party, sledge dog team, couple of Fids, a general - GA as we use to call them - the dog handler, and either a geologist or a glaciologist and as I say fly them to another location, because there were occasions where a fresh team had to be flown into the field from base during the summer. And the winter sledging parties would spend the whole summer out in the field, and we'd have to fly them back to the base at the end of the flying season.

[Part 1 1:08:27] Tolson: I'm intrigued here. You are in the Antarctic it's your first trip in ice, you're landing in what could be dangerous areas for an aircraft, OK there are scientists on the ground, and you're taking off again from that area to land them in some other region that nobody has any clue about. Again, what's going through your mind as a pilot?

Rowley: Just amazement and awe really! [laughter] I'm just amazed that here I was, not a very experienced pilot really by any means doing these amazing, having this lovely aeroplane to fly around as I liked really! No air traffic control, no rules no regulations, you'd take off and if you wanted to fly low you flew low if you wanted to go high you'd go high! You..it was just complete freedom, it's a pilots dream, it was just complete freedom and landing on, in areas that had never been visited before and don't, it takes a while to establish a bit of.....well to become comfortable with what you're doing there! It's, you're on, really subconsciously you're on your guard all the time, looking, always thinking about where would I put down if I had an emergency a fire or an engine failure, if I had to put down in an emergency, you're constantly looking at the surrounding areas for suitable landing places, every trip really! Even after my fourth year with the Survey it was still the same every trip, you always have this in the back of your mind what would you do in an emergency. That was the other thing, we had 200lbs of survival equipment in the rear hold in the Twin Otter and also in the Beaver, so we had a month's supply of man food and a pyramid tent and Tilley lamps and all that sort of thing, and so we were well equipped for having to sit it out until either the other aircraft came along to rescue us or sledging party or something like that. But just the sheer thrill of the job was just so unique, the scenery, just the brilliance of the blue of the sky and the...blackness of the exposed rock on the mountains the...contrast between the black rock and the brilliant white snow! And every takeoff and landing was unique and well it really took a couple of seasons, if you could call it comfortable, and feeling competent, feeling really competent and really knowing what you're doing in the job, took a couple of summer seasons really! And I feel that I really gave of my best really in my last couple of seasons with BAS, I knew the Peninsula like the back of my hand!

[Part 1 1:12:48] And Alexandra Island, and we gradually lowered the weather criterion, we wouldn't fly to begin with unless it was we used to call it 'dingle clear', clear blue sky not a cloud in the sky! And sometimes we'd hang around for a week, maybe a couple of weeks on the ground just mucking in with base life waiting for a good flying week, we'd get some bloody awful weather and being coastal we'd get a lot of wet weather, rain as well as snow, high winds of course and when we did fly we'd wait until it was absolutely beautiful dingle clear, and then we'd fly until we'd dropped! We'd just, we'd fly 24 hours no problem getting in as much as we could until you couldn't keep your eyes open anymore, you'd go to bed for a few hours get up and start again and as long as the weather held, just keep going! And we'd have two or three weeks of lovely good flying weather where you just had this routine of keeping going and I remember, a thing that sticks in my mind particularly was refuelling was always a bit of a chore, because the, we'd...the fuel supplies would come in 45 gallon drums by sea, and they would be humped up to the airstrip, and they would eventually get buried in snow so we'd have to dig them out! And then we had this wobble pump set up where you'd stick a stove pipe, get the cap off the tank and stick a stove pipe down into the tank and fuel hose up to the filler caps in the belly tanks, and just a normal petrol pump nozzle but then we had this wobble pump we used to operate to suck the fuel out of the drums into the aircraft. And it was especially at the end of a flying day in the early hours of the morning, the sun never set of course, but you would usually have a lovely red sky and it was cold, it was really cold! 2 or 3 o'clock in the morning at the end of a day's flying you're

absolutely knackered and dead on your feet, and then you had to have this two hour ritual of filling the aircraft for the following day's flying, and tying the aircraft down for the night or the day or the two weeks we were going to be stooped in for the weather! The tie downs were, we had empty fuel drums filled with water and buried six foot under the snow, we called them 'deadmen', and the picket ropes, the tie down ropes would be tied around the drums the drums covered over with six foot of snow and then you could anchor the aircraft to these, you'd have one on each wing one under the nose and one behind the tail and you could anchor and nothing would shift! You could have a 200 mile an hour blow and nothing would shift it, in fact the wings would probably stay there and fuselage would disappear over the horizon in a wind like that, but so that's how we would keep the aircraft safe when we weren't flying.

[Part 1 1:17:04] Tolson: Did you spend much time or any time in the tents out in the field parties, because perhaps you had to because you were trapped in?

Rowley: No, no I was very lucky. Bert did, the RAF chap, but I don't recall a time when I had to spend time in the field. It wouldn't have bothered me I would do it, would love to have done, but there was no way you could justify doing it just for the fun of it! But we did used to spend quite protracted periods on the ground in the field especially depot laying, you'd take a couple of tons of fuel, man food and dog food, and you'd find a suitable nunatak rock outcrop to lay a depot on and spend quite a few hours actually setting up this depot, obviously in the current work areas or prospective work areas for the sledges. And we'd spend many hours doing this just....the pilots, sometimes one of the mechanics would come along and a Fid from base to help humping, and it might be half a mile from the aircraft, because you couldn't get to close, these nunataks tend to go up quite steeply before you get the rock pinnacle appearing. And quite often you couldn't get all that close to the depot site so you had this quite long trek with a 55 lb box of man food on your shoulder or dog food, up on to the exposed rock and then we'd lash it altogether and we used to carry 24 foot bamboo poles with a pennant on top! We'd stick a bamboo pole down through the middle the cache of supplies and put guy ropes on it, and hope that it'd still be there, because you get really massive hoolies and katabatic winds and really strong blows out there! And you'd just hope you'd lashed it all down and the pole so it could be seen from a few miles away by a sledging party with the pennant on top, you just hoped it was guy roped sufficiently in the worst possible weather. So we did spend a lot of time out in the field at any one time, and again as season after season we got more confident. I remember there was a time, certainly in my last season down south, the glaciologists wanted a depot laying at the bottom of Alexandra Island, I forget the name of the glacier now.

[Part 1 1:20:53] Tolson: Dave I'm going to cut you at the end of tape 2.

DAVE ROWLEY PART 2.

[Part 2 0:00:00] Tolson: 1969/70 period this was very much a transition, smaller aircraft, you are the very early guys with the twin engine aeroplanes for BAS. What, why did this come about why did they change the size of the planes?

Rowley: OK right, yeah OK. Yes they operated BAS traditionally operated De Havilland piston Otters, a single engine aircraft big radial engine, very much in the De Havilland tradition. As a workhorse it was rugged and it was for a piston engine aircraft, it was a big aeroplane it could carry a good payload. And they were operated by seconded RAF pilots, the RAF pilots would be based at Deception Island, along with the aircraft Deception was a volcanic...created by a volcano and there was a hard airstrip at Deception with, there was a hangar the aircraft were hangared over winter and at the end of winter, the aircraft and mechanics would be flown down to Adelaide Island and they would operate for the summer out of Adelaide Island. And they would go back to Deception to overwinter again...carry out all the maintenance they needed etc. This carried on many years...BAS did acquire in 1967 I think it was, they did acquire a Pilatus Porter which was like the Turbo Beaver, it was a turbo prop single engine aircraft, Swiss built but unfortunately it crashed on takeoff piloted by Squadron Leader John Ayres on I think it was the...penultimate flight of the season. He landed near Fleming, at the top of Fleming Glacier area I think it was on the Peninsula. The idea was to fly this sledging party back to Fossil Bluff, no,no, back to Adelaide I think! He, it was quite sastrugied apparently, the takeoff was very rough and one of the main skis came adrift and the aircraft grounded and it was, it wasn't flyable it was badly, the aircraft was badly damaged! John Ayres - they had to unload the sledge and the dogs and John Ayres sledged back to Fossil Bluff with them and spent the winter there instead of going home by ship!

[Part 2 0:03:35] And then subsequently one of the Twin Otters, sorry one of the piston Otters crashed above Stonington, they lost another piston Otter on another occasion I can't recall what the occasion was. But during this period the Twin Otter was being developed and it was really just made for the job. Like the piston Otter it was rugged, powerful and carried a good load and it was built for bush operations! In Northern Canada all that range of aircraft were built for rough airstrips and unprepared strips, and when they developed this ski system for the Twin Otter whereby the skis could, you kept the wheels but the skis could retract above the wheels so that you could land on tarmac strips as well as snow. And the Survey researched all this and decided that the Twin Otter was a good replacement for the piston Otter, and having had the experience versatility of the easy operation of the Pilatus Porter the turbo prop it just became a natural transition to go for the Twin Otter, which again luckily for me just coincided with my joining the Survey! But really the piston Otters were, it was real pioneer flying - being piston operating on petrol they were susceptible to cold, extreme cold and I remember being told that the starting procedure in cold conditions, when the aircraft had been standing and the engine was cold was to actually dilute the fuel in the sump of the piston engine with petrol to let it turn over easier with the viscosity of the oil, and as the engine warmed up the petrol would evaporate off and when it was warm away you go! So pretty lengthy drawn out procedure to can get the thing fired up and flying, whereas with these turbines you just climbed in started the engine and took off! You didn't, you need a

very short warm up period, by the time you taxied out to your takeoff point you had your operating temperature, and it just went there was just no hassle attached to it at all and the engines were lighter and more powerful, more reliable!

[Part 2 0:07:07] We only had one engine failure in my period when I was taxiing out at Fossil Bluff with Charles Swithinbank on board, very eminent glaciologist, and me and Charles were doing the season's radio echo sounding programme over the Peninsula and Alexandra Island I think, mainly Alexandra Island. At that time we were actually living at Fossil Bluff which was a three man base hut, very small, nestled at the foot of the mountains on George VI Sound. And Charles Swithinbank pioneered this method of measuring the depth of ice over bedrock by using what was really a glorified radio altimeter. They discovered that the radio altimeter was not reliable over snow, and if you were trying to determine the height of the aircraft over the surface the radio altimeter wasn't that good, because of the radar signals would penetrate the snow and not give you an accurate reflection from the surface to give you your height. Anyway Charles Swithinbank and his team put this -fault if you like - of the radar altimeter over snow to work knowing that they could adapt it, or they could adapt the theory to reflecting bedrock and snow surface at the same time! And therefore you would get a constant as you flew over, as you flew over the snow you could get this constant readout of the bedrock and the surface of the snow, and that was Charles and his radio echo sounding programme were, really some of the biggest flying programme in fact! We spent hours and hours, oh the only requirement really to get the best readings was to fly at 30 foot over the surface! So being a bit of a low flying enthusiast, Charles tentatively asked me one day on base at Adelaide when we first met up, he was explaining this radio echo sounding equipment and how it works and he said 'Dave what do you feel about low flying'? And I said 'I love it'! And he said 'Well to get the best result from this we really need to keep a constant 30 foot'? Well what he didn't say was we'd be going up mountains and down mountain and round really sort of undulating terrain and having to keep a constant 30 foot, no matter what the terrain you were flying over! Anyway we decided to have a go and Charles was much relieved when I showed a bit of enthusiasm for it, and we spent many, many hours. Charles was an absolute ace navigator, he did all the navigation all I did was fly the aeroplane!

[Part 2 0:11:15] And try to keep it 30 foot, and part of that was judged by, if you could see the aircraft's shadow because we were always flying in clear, sunny weather, if you could see the aircraft's shadow out of the corner of your eye if it got smaller you knew you were getting a bit high if it got too large you knew you were about to touchdown!! And so I think on this occasion we were doing a few traverses on Alexandra Island, and we got out to Charcot Island I remember and we had...just started to taxi out from Fossil Bluff on one of these epic - we used to go for hours by the way, we'd do about, I think the longest flight we did was five or six hours something like that, constant low flying, very tiring but extremely enjoyable! But on one occasion we were actually taxiing out of Fossil Bluff to take off, no, no, we weren't just starting up, I beg your pardon! We were starting up the port engine and there was a loud clunk and a shudder9!), and looked out with the starter switch still engaged, and looked out and the propeller was stationary so I thought 'Better stop this straight away shut the engine down'. And it transpired that the gear box had seized up, which if we'd just got

airborne would have been, we were just lucky it happened on start up! In fact if it had happened while the aircraft was going at full power it would have ripped the engine out of the aircraft I should think, it would have been pretty serious!

[Part 2 0:13:25] Anyway that put paid to the programme, but we had a new engine flown down from Canada and Bert Conchie flew the new engine down in the turbo Beaver, and we set up a kind of canvas wind-break around the port engine, round the port wing, and Jock Brown and Rob Campbell-Lent one of our subsequent air mechanics, did a marvellous job of taking the old engine out and putting the new engine in, and away we went again! But anyhow getting back to the radio echo sounding, we did many, many hours and Charles did a, well I'm sure he was very pleased with the results that we got from the couple of seasons that we did, as I say hours on end contour flying we got into some quite tricky situations. On one occasion we, there was quite a wind and we got to the lee of a rock outcrop nunatak and we must have got into the roll on the leeward side of the nunatak and we hit this turbulence at the 30 foot, can you imagine!? And it...it we left our seats although we were strapped in, we left our seats and there was a hell of a bang as a...huge battery back in the fuselage left its mountings and went up and came down again! The...in fact it was so bad that I climbed temporarily, we sat there and got our breath back and looked at each other and talked that was too close for comfort! But we did have, there were occasions where if you started to go uphill and you had to be pretty aware of the fact you're going to run out of power at some stage, as it got steeper and steeper uphill climb and have to do a U-turn or get out of the situation, things like that. There was a place called Spartan Cwm just north of a glacier north of Fossil Bluff where Charles set up a temporary base and we flew all these hut sections into Spartan Cwm and the idea was a couple of glaciologists were going to be stationed there, semi-permanently to measure the flow of the glacier. And again, it was a one way in and one way out situation, you had to land about 45% uphill half way up the glacier, and the landing technique was to fly level and about 20 foot above the surface you'd bring the nose up to fly actually uphill, and reduce the power as you made contact with the surface!

[Part 2 0:17:16] Tolson: Was this something you just learnt as you went along?

Rowley: Yeah, well you thought it through and 'How am I going to do it?', and yeah nobody was there, there was nothing in the text books or flying manuals or anything, you just had to make it up as you went along and use your imagination! And what we'd do is make sure before we stopped, especially in soft snow as it usually was in that location, before you stopped you had enough impetus to turn the aircraft sideways on to the slope so that you could get away downhill again, to takeoff downhill! Because if you came to a standstill pointing uphill you just wouldn't have enough power to taxi the aircraft, to turn it to point downhill for takeoff so you had to be a few steps ahead of the situation all the time! The radio echo sounding, I saw the results a map of the runs we'd done and the Peninsula was absolutely crisscrossed. When I saw it I was just amazed that we'd done that much that distance, that mileage, crisscrossing the Peninsula! The other aspect of radio echo sounding was, Charles would, being a private pilot, would like to have a go at the controls himself and so when we'd finished with the low flying bit on our way back to base or whatever, Charles would fly the aircraft and I remember on one occasion we were at about 6000 feet I think,

and he said 'What happens if an engine stops?', and I said 'I'll show you Charles!' I said 'Are you ready?', he said 'Yeah', and I reached up and pulled the power lever back, on the port engine I think it was, it doesn't matter which but I said 'Just keep the aircraft straight and keep it flying'. And as the port engine wound down, you get this asymmetric effect and the old aircraft started to turn to port and it started to turn a bit more steeply and more steeply, we were eventually into spiral dive and I said 'I think I better take control Charles!' and he was looking a bit surprised, I wouldn't say he'd gone white, but he was certainly surprised. Anyway we got back on to a level keel, he said 'Good grief I had no idea what to do', I said 'Well you wouldn't you know!' and I had to explain it all to him eventually. But anyway he was a very competent Twin Otter pilot -I shouldn't really, I would have never have said this while I was with the Survey I would have probably got the sack!

[Part 2 0:20:34] Anyway that was that. The other scientific programme was involved mainly gravity readings in various locations and the geologists would have their gravimeter about, piece of equipment [Dave shows with his arms something about 18 inches square] that they could carry around with them, and there were many occasions where we'd go, we'd fly from base or either pick the geologists up from their sledging party in the field. And we'd do 15 minute hops just take off, they'd say where they wanted to go and take several gravimeter readings within a three or four hour period and it would have been a week's sledging to them to get that amount of gravimeter readings over that amount of area! As I've already previously mentioned sledging parties would sometimes want to be relocated for convenience and time saving, and at the end of the season, and we would have to fly them back to base, that was our last job, our last big job, the sledge, Nansen sledge, nine dogs, two, a geologist or glaciologist and his dog handler would all be loaded on to the aircraft with all their equipment, tents and field equipment all be loaded on to the aircraft. The dogs would be, the sledge would fit down the centre of the aircraft, we had folding seats which folded up against the sides so that was no problem we had a clear floor, the dogs would be tied to either side of the sledge and of course there'd be the eventually the inevitable fights probably caused by the inherit fear of the dogs as to what was happening! And there would be quite a lot of blood spread around the aircraft sometimes, and fur and faeces and God knows what! So there was always a major cleaning operation afterwards but it was just great, it was great flying. And there was one occasion again where for a dog called Mavis I'm pretty sure the name was, Mavis got loose and on this occasion for some reason I was on my own, and we'd got this dog team and sledge for what reason I don't know. Anyway Mavis got loose and by the time we got back to Adelaide all the upholstery had been ripped off one side of the aircraft a door, she'd tried to claw her way through the passenger door! And the door was covered in blood from her paws where she'd been tearing at the door anyway she was none the worse for wear for it.

[Part 2 0:24:25] Tolson: How did you used to deal with dog fights going on?

Rowley: Ah well the best thing we could do really was to turn the aircraft heating up full and their tongues would start to hang out, and they'd start to pant overheat and that'd take their minds off it! But you did hear all this panting, as I say their tongues would be touching the floor and that just took their minds off it really! But as I say it didn't always work but that

was one of our, well our only way we could calm them down actually. Oh there was this one occasion taking this sledge out of the field and the -no, no it wasn't - anyway visiting a sledging party, and I started taxiing out and a Fid came running around at the front of the aircraft, waving his arms madly and anyway I stopped and opened the window and said 'What's up?', and said 'A dog!' So I got out and went down the back and there's this dog tied to the ski, one of them had temporarily tied a dog to the blooming port ski, just to, while he was loading, unloading or whatever it was we were doing but I nearly took off with this dog tied to the ski!! We did, I mean it was a serious job and it was fraught with potential hazards and as I've already said you've really got to be ten steps ahead of the situation really, and you'd really and think well ahead! And being very spacial awareness was, and I don't think was a term that had been invented then certainly applied being aware of the surroundings constantly, but there was lots of fun attached to it as well.

[Part 2 0:26:54] Tolson: You did I think possibly the first journey to Halley is that correct?

Rowley: Yeah, yeah.

[Part 2 0:27:02] Tolson: To pick up your boss?

Rowley: That's correct. Sir Vivian was, had gone to Halley on the *Bransfield* and we were asked if we could over there to pick up him and his entourage, Vivian Fuchs and Derek Gipps and a couple of others, I can't remember now who, I think it was, it doesn't matter, but anyway we had to fit the ferry systems. By then we had two Twin Otters, we traded the Turbo Beaver in for a second Twin Otter. I think this must have been, I think it was my last trip south [note: second to last trip south]. But me and Bert Conchie each took an Otter over to Halley from Adelaide Island across the Peninsula and over the Weddell Sea, to pick up Sir Vivian and Derek Gipps, and so we had a very - I wouldn't say uneventful flight - uneventful as such from my point of view anyway as the navigation turned out spot on! I don't know how, it was the old technique of just drawing a line on the, we had these American US global navigation charts and just drew a line from Adelaide to Halley, we couldn't work out any, there was no drift information or anything so your compass course was your track! And it worked out amazingly well, all I can think is that there were quite high winds en-route and I can think is that the winds switched around and cancelled each other out! Of course over the Weddell Sea you hadn't got a clue where you were, five hour flight something like that landed at Halley which then they were building a new base, the old base was well below the surface and collapsing under the weight of snow and this new tubular corrugated iron base, well corrugated iron with base huts inside it was being built. And Sir Vivian had gone there to have a look at the progress etc and we did a couple of flights from Halley actually down to the Theron Mountains, and really it looking at the area where Sir Vivian had been active on his Trans-Antarctic Expedition. I seem to remember we took Captain Woodfield on trip with Sir Vivian and possibly his wife, who had with him, Woodfield's wife at the time, I can't remember for sure, but anyway it was going to be a few days at Fossil Bluff, and I heard that Sir Vivian wanted to do a trip to Shackleton base, his old Shackleton base and, which was a day's sailing from Fossil Bluff. [note: He meant Halley!] And I was fortunately asked if I would go along, so left the aircraft, don't think Bert Conchie was interested he was more

interested in the base life, not that I wasn't! But anyway I did a very pleasant journey on the *Bransfield* and saw Shackleton base, which was absolutely amazing because it had been unoccupied since IGY and it was buried up to the roof in snow, and half full of snow inside, but yeah that was a really good trip.

[Part 2 0:31:47] And then the idea was to fly Sir Vivian and Derek Gipps back to Adelaide Island, so Vivian chose to fly with me and probably wanting to see what this new fangled civilian pilot was like, and Derek Gipps went with Bert Conchie, and with the ferry fuel and everything, there was soft snow at Halley although it was like a billiard table, and unlimited takeoff run, I think we found ourselves getting up, with ferry fuel the weight of the aircraft our takeoff speed was about, quite low about 60 knots something like that with the appropriate flap settings, and anyway it fell to me to do the first takeoff with Sir Vivian, and we went barrelling along until we hit our terminal velocity of 50 knots and need a few more knots to get airborne and just couldn't get the nose off the ground, stick hard back just couldn't the nose off the ground! So after about half a mile we gave up taxied back along our ski tracks to form a bit of a harder surface and had another go, still no joy and had about four attempts I think! And then Bert said 'I'll have a go'! So good old Bert off he goes, but he sussed out while I was trying to get airborne that the best way to do it was get all the weight aft, so at least you could get the nose off the ground and there was enough lift and get you airborne, so anyway he got airborne on the first attempt I think it was9!) and which made me feel very sheepish. And Sir Vivian didn't comment except after I'd asked him to go aft and sit in what is, in a civilian version of an airline version of the Twin Otter would be the loo at the back of the aircraft where we had all our emergency equipment, and Sir Vivian and Dave Brown the mechanic went back, sat in the aft hold baggage hold, with this survival equipment and it worked a treat, we got airborne and off we went. About halfway across Marguerite Bay, 10,000 feet, we're droning along and think the conversation had dried up by then, Sir Vivian pulled an apple out of his pocket and he said 'Would anyone like an apple?' and it went, snatched it out of his hand I think it was the last apple in the Antarctic [laughter] and obviously *ex-Bransfield*, and poor old Vivian was left looking at his empty hand, by which time the apple had been devoured, by me and Dave Brown! Anyway we made landfall over Larsen Ice Shelf dead on track which was great relief for me having the Director onboard! I didn't want to make a mess of it and I was fully expecting to make landfall sort of one end of the Larsen or the other, either would be acceptable to me but I don't know what Sir Vivian would have thought, but we were dead on track and landed at Adelaide Island and in his subsequent book *Of Ice and Men* he documented all this in great detail, and he, I think he was quite pleased with my efforts on that flight!

[Part 2 0:36:06] Tolson: And you were really the first of the commercial men, [Rowley: yeah] and so you had done something right?

Rowley: That's right, absolutely! And from there he did a tour of the bases, Stonington and Fossil Bluff and had some very pleasant flights with the Director. Whether that's got anything to do with it or not, I don't know, but after Sir Vivian retired in '74 coinciding with my leaving the Survey, the British Antarctic Survey ingratiated (sic)the Fuchs Medal which you have probably heard of. And for some reason I was nominated for the Fuchs Medal after

Sir Vivian was awarded the first one and I got the second one! Went up to Cambridge for the presentation at Lensfield Road, Scott Polar Research Institute, shortly after that. Oh the other thing about my job was every summer, come back home ferry the aircraft back to De Havilland where they'd be looked after and serviced and ready for the next season. I'd fly home, get home in April usually and I'd go down to Goodwood, the company I worked for before joining the Survey, and an instructor all summer. Except one summer they decided to send me to Greenland to demonstrate our Twin Otter because De Havilland didn't have a demonstrator available, so they borrowed our Twin Otter and I went over to Greenland to demonstrate it to Greenland Air, the civil airline there. And what was I going to say? Oh yes I had to write a report of the season's work and... where our money went on the flight south and north so everything had to be accounted for!

[Part 2 0:38:33] Tolson: This is tape 4 with Dave Rowley. Dave we were talking about end of season you came back to the UK and then you had write up your report, very briefly tell me what sort of thing you had to include?

Rowley: Yeah, well we had the wad of tax payers' money for the ferry flights and that all had to be accounted for in detail, receipts had to be included and everything. It was little bit different with the backhanders that we gave to the officials at the airports through Latin America of course! But the flying season was all...what we achieved, the amount of fuel that we used, any technical problems with the aircraft and recommendations of any modifications to the aircraft at De Havilland during their winter layover in De Havilland, and just generally we itemised the amount of flying involved with Fossil Bluff relief, sledge relief and scientific flights and that was basically it really. I used to come home and write it all out longhand, Delise (my wife) would type it out nicely and take it up to Gillingham Street, whether it was ever filed or whether it's still in existence but I used to produce one those half inch thick reports at the end of every flying season.

[Part 2 0:40:31] Tolson: Then in '74 at the end of your time with BAS you decided to move on, but you were very instrumental in perhaps in your persuasion of the type of new pilot who should come along?

Rowley: Yeah.

[Part 2 0:40:46] Tolson: You were on the board interviewing all those new pilots, tell me about some of the characters and the one that won the day.

Rowley: Yeah, well of course it's a completely civilian operation now. I left the Survey in spring 1974 and I was succeeded by Giles Kershaw who another civilian, I was invited to sit on his interview board, well not him in particular but the pilots who were being interviewed at the time. And of course Giles was killed subsequently in the Antarctic after a very auspicious career and he, I feel a little bit...you know I was partly to fault for his demise if you like. But he must have gone as he wanted to and from that point of view, but he was a wonderful pilot! But the point is that he was a young lad and I mean I was in my 30's when I joined the Survey and one of the questions that kept coming up on my interview was 'Will you fit in with all the youngsters on base?' Well I didn't have any problem with that, Giles

didn't have that problem he was quite a few years younger than me but I remember on the interview board, he was... he was of a bit of a rogue and a bit of a character, Giles, and he always had a sort of the remnants of a smile on his face during the interview and..I think the, I forget the other members of the interview board, I'm sure it was Derek Gipps and Eric Salmon and Bill Sloman maybe, Paul Whiteman one of the logistics chaps was there, but they were all against taking him on! And I persuaded them, the rest of the interview board, that he was the chap, but we discussed it and I...thought that I had lost the augment actually, but I said 'He's a bloke that's going to fit in down south and he's going to be a good chap to employ and he's going to be a good pilot. He's got his head screwed on!' As an aside he had a very deep tan and he'd been swanning around in the south of France, flying an executive aeroplane with some rich chap down, some rich chap flying this bloke's airplane in the south of France, and Giles had a very big tan and I forget who said at the moment, 'I believe he was born in India', and it was hinted that he might not fit being an ethnic, might not fit in so well! And he gave a belly laugh, you imagine on an interview for that kind of job, he lent back and gave this belly laugh and he said, 'I was born in India to English parents but I'm as white as you are, I've just a nice tan that's all!' [laughter] Anyway Giles as he turned out he gained, if he'd have been here now he should have been doing this interview, because he achieved a lot more than I did, and he became far more experienced than I did, and Charles Swithinbank can't say enough about Giles! They inaugurated the blue ice airstrips, landings big transport aircraft on wheels on blue ice and he, old Giles did all sorts of initiative things, worked with the Americans a lot and he was a legend really! And he would have been, nobody knows how he would have carried on, he'd have been a legend in his time but he was tragically killed in this autogyro accident down south, and anyway...I'm just proud I chose the right bloke for the job to succeed me!

[Part 2 0:46:08] Tolson: You did choose the right bloke, what did you see that all the others didn't see?

Rowley: I think his... I knew that he would be, he'd didn't have much time for rules and regulations the same as myself, and it was obvious that he loved flying, and he would fit in with anybody. I mean base life you can't put yourself above anybody else, you can't say 'Oh I'm a pilot I'm not going to chop seal up', or 'I'm not going to cook', or 'I'm not going to scrub the base out'! When you're not involved in your own discipline you've just got to become another base member, you go on the duty cook roster, you go on the seal chop roster, you go on the seal shoot roster and you know you've just got to muck in and be a base member! In fact you dress just the same - we had old khaki BD's and scotch plaid shirts, heavy duty woollen shirts, and we all grew beards and we all got smelly! Because we used to get melt water in, we used to cut ice blocks for melt water stick them in a big copper tank and that became the base water supply, and the ships would appear at the beginning of the season you'd be involved in the unloading the ships. You'll be taking all the fuel drums up to the airstrip and doing base maintenance, just any chore that was going you were expected to muck in and you're just one of the base members! 'Course when it came to having to do your job that took priority and as I said earlier when we had a good spell of flying weather, the flying became the priority of the whole base, it was an air base specifically and that was

the priority. All the base mucked in then supplying the airstrip, and keeping the airstrip running and taking supplies up to the airstrip and helping to refuel the aircraft. So it was all very, everybody welded in and helped with everybody else's job and that's what I loved about it!

[Part 2 0:49:06] Tolson: You were by this stage married to Delise who is your wife still?

Rowley: Amazingly yeah!

[Part 2 0:49:17] Tolson: And so that was obviously one of the reasons why you had to leave the Antarctic?

Rowley: Well we.

[Part 2 0:49:23] Tolson: She sent you down a curry kit so I gather.

Rowley: Oh yeah.

[Part 2 0:49:30] Tell me a little bit about the curry kit? [Rowley: Oh yeah].

Rowley: That was good, we used to get these parcels from home, thanks to the *Bransfield* and the *Biscoe* and this...big heavy parcel arrived for me, and 'What could this be?' Opened it up and it was all these curry spices and a curry kit as I say with a book of instructions and recipes, and this became the hit of the base when I was duty cook, well not only when I was duty cook, Allan Wearden who was one of the cooks we had down south I think he had a go with this, but of course we only had dehydrated and canned meat and that kind of thing, but we did used to supplement it with the odd seal steak or we took seal for the dogs! And it's a shame not to have a choice bit of steak off the back you know, and at it was gorgeous and the occasional penguin. Again, I think if I was still working for the Survey it would have been a bit, not political really to mention it to anybody in the Survey, but the occasional penguin would get the baseball bat treatment, and end up as a curry!! And so we did, yeah, we had seal curry and penguin curry and the odd skua curry and it was all very nice, but yes this curry kit went down, it went down a bomb! Talking about seal actually I was almost physically sick on my first seal chop, but at the end of my service with BAS I could single handed skin a seal in about quarter of an hour, very easy once you've got the technique and slit it down middle and get all the steaming guts out, and skin it and chop it up! And we used to feed the dogs as a matter of interest, not that I was a doggy man, didn't know a lot about it but we used to feed them two kilos of seal every two days in one meal, a big chunk! And that stopped them getting too fat and while they were spanned out up on the piedmont above the base, when they weren't working. And yeah I got pretty good at that but we used to have 'smoko', about 4 o'clock in the afternoon everybody would pile into the hut if they weren't doing anything else obviously and we'd be sitting around the table and there was one day, it was shortly after I got down there one season one December, and they had to cut the seal up in the winter because it was frozen solid that you'd use a chainsaw and one of the, I think it was a meteorologist, and he was sitting round the table and said, 'I can't get rid of the smell of seal'! And he was going on for weeks about this smell of seal and of course we all stank of it anyway! But he said it was really worrying him, it was overpowering. Anyway one

'smoko' he was sitting there and he did this enormous sneeze and this big lump of blubber landed smack in the middle of the table out of his left nostril!! And it had been stuck up there from this chainsaw from mid-winter! But anyway yeah that was base life and we all mucked in and there was hairy moments when, I certainly remember one blow it was pitch black and daytime but seemed pitch black anyway, a hell of a hooley, and I just wanted for my own peace of mind to see that the aircraft were still there up on the piedmont. So the base commander, I think it was Ian Willey or no, maybe it was Richy Hesbrook the next base commander, said 'Come on then let's', and we got in a muskeg and went up in this bloody hooley, nobody wanted to go outside and we got up to the airstrip and sure enough there were the aircraft sitting there on, tied down, on their deadmen and with the snow up to the, sort of halfway up the fuselage really snowed it but at least you knew they weren't going to go anywhere! Because there had been stories of, I think there was one incident where an aircraft got very badly damaged during a blow on its tie down points. Yeah I think base life actually was...from my point of view absolutely brilliant I just loved it, and Bert Conchie the last RAF pilot that the Survey employed just fitted in beautifully. I mean if all his predecessors had been the same, the same character and...he was a handyman and he fixed things. He created for instance a melt pool up on the piedmont and laid out this black plastic just to use as cover really for equipment, laid out this black plastic sheeting on the snow and of course it melted in with the heat, the sun, and it became a permanent pool above the base, and he ran this black rubber hose down from the melt pool up on the piedmont down to base and we had permanent running water, in our last couple of seasons down there. Brilliant bloke!

[Part 2 0:56:19] Tolson: What would you be able to summon up as your magic moments in Antarctica, what is there any single thing that really strikes as your greatest memory, your happiest memory, or was it just the everlasting memories?

Rowley: Oh there are so many, flying with Charles was just brilliant because didn't have to do anything just fly the airplane! And as I say I loved this, the challenge of keeping it this constant 30 foot above the surface no matter whether you're going up down, and then no matter what it was, the challenge I just loved that, I could sit there and I could do it for hours, you'd end up tired after a few hours of it, but it was just so satisfying you got a sense of achievement! But other than that, other than just being there the camaraderie, everybody would do anything for anybody and the Fids were, although in the sense of humour and total incompetence sometimes! I mean I remember once during one of our intensive flying periods I decided to go down to the base for a bite to eat and a cup of tea, and it was only about five minutes down the hill in the Muskeg and I left the Fids to load up the aircraft, it was one of the early flights I think it was a Fossil Bluff flight.

[Part 2 0:58:05] And we had piles and piles of, well a whole season's supply of, just come off the ship up at the airstrip on Nansen sledges waiting to go to the aircraft, and there must have been a dozen Fids up there and met men, the cook and various people and I said 'You lot load the aircraft up and I'll go and have a quick bite to eat and a cup of tea!', and I got back to the airstrip half an hour later and they were all standing there, sitting on the fuel drums smoking and having big smiles on their faces and I looked at the aircraft and I thought 'There's something not right there', and I realised that the belly was just about touching the snow, and

I looked in and they'd just filled every nook and cranny! They must have got about six tons, we used to take two tons, yeah, and there was plenty of space left, because it was all pretty high density stuff, man food and dog food and bags of coal, stuff like that, and they just filled every nook & cranny floor to ceiling forward to aft, forward bulkhead to aft bulkhead and there must have been about six tons of stuff on! And they just couldn't understand why I had to take it all off, or two thirds of it, things like that where it wasn't their fault they weren't bloody load controllers or anything like that, but it was just so amusing at the time! But another thing that really sticks in my mind is...the depot laying and we used to get to these little rock outcrops right up on the Plateau. And you'd have the Eternity Mountains over to the east, you have Alexandra Island to the west and the Peninsula, mountains of the Peninsula to the north you'd be in the middle of this vast snow field with a nunatak and the aircraft parked there, you'd spend a couple of hours humping stuff up to create this depot, and you'd stand on top of this nunatak and looking at the tiny airplane about half a mile away, and think 'God, I did that, I brought all that gear, yeah, and I'm going to fly it back to Canada', and it was just an amazing feeling! And there had been occasions where I've landed in the field completely on my own for one reason or another and, completely against the rules, shut the engines down and got out and just walked until the aircraft is just a spec in the distance, beautiful clear blue, brilliant day and just marvelled at being there on my own! Nobody else in hundreds of miles, and totally against the rules - shouldn't have done it, but I did it! And would never have dared reiterate that kind of, I would have been out on my ear I should think straight away. Anyway, but so many brilliant aspects to the job and I think personally that I had the best of the last of the old way of doing things, thunder buckets no flushing toilets, no computers. One cook, often the cook was out in the field doing a jolly, a sledging jolly, so everybody would have to muck in and do their own cooking, and it was just unique!

[Part 2 1:02:24] Oh....Jacques Cousteau came down in *Calypso* one season and I took him for an ice recce and his son...anyway doesn't matter now his name his slipped my memory now, [note: It was Phillip] and we went on the *Calypso* and saw his diving machines and had a bite to eat there and met his wife and his two sons, and I've still got a little brooch that he gave me, a *Calypso* brooch. I mean went on the *Endurance* ,had dinner with Captain Buchanan and his officers, went on the *Piloto Pardo* had dinner aboard there with the Chilean crew, the *Bransfield* of course, took Captain Woodfield flying too, Captain Cole, John Cole on recce trips and it was just so unique! And you just never match it in the flying, as a flying career. I'd have probably have still been there if I could have gone on the Civil Service pension list or something, but I knew that I got married after my first season down south and I did four subsequent seasons, and my wife by then was saying 'It's the Antarctic Survey or me!', and I had to sort of buckle down and get a proper job!

[Part 2 1:04:26] Tolson: And that proper job became what, with whom?

Rowley: Well I got poached from the Survey by a chap called Bill Bryce, an Australian, who had set up an airline in Plymouth, Plymouth Municipal Airport, with a Twin Otter - he bought the first Twin Otter to operate in the UK, and he needed somebody. I was the only, thanks to the Survey I was only bloke in the UK with a Twin Otter on my licence issued by the CAA, the Civil Aircraft Authority! So I was already leaving the Survey and Bill Bryce had got to

know this. The Survey used to use, well I suppose he found out through De Havilland really that I was about to leave and he sent a telex south, when I was down there on my last season asking me if I'd like to join him to set up this Twin Otter operation in Plymouth? Which I subsequently I did, I stayed with him a year and trained up six of his pilots. I had to get my CAA training captain's certificate or endorsement, trained up Bill Bryce's pilots and then I left to go with British Midland flying Viscounts who I spent 21 years with, and I retired at the age of 60. Should have retired at 55 but I persuaded them to keep me on for another five years and I went flew Viscounts and then went on to DC9s, Twin jets, then ended up on Fokker 100s which are a glass cockpit, brand new technology, all computerised, did my last couple of years on that. And except for a little bit of gliding haven't flown since really, just enjoyed 13 years of retirement up to now!

[Part 2 1:06:46] Tolson: Without BAS you would have been a totally different man?

Rowley: Absolutely, absolutely. Well I would have continued my flying career but it would have been very dull! And well, I mean my time with BAS ended nicely when having I told them I was going to resign I've still got the letter from Bill Sloman saying that 'They reluctantly accept my resignation', and that was from Gillingham Street headed notepaper, handwritten(!), and followed by another Gillingham notepaper headed note from Sir Vivian to say 'Dave I'm happy to tell you, that you've been nominated for the Fuchs medal'! The Fuchs medal! I don't really, I had heard that it was being inaugurated but why it came to me I don't know! There are thousands of Fids or hundreds of Fids far more deserving than me of course, and lots have had it since but mine was rather special, it was a silver one as opposed to bronze, Sir Vivian's was gold I believe, yeah!

[Part 2 1:08:20] Tolson: Dave Rowley, thank you very, very much indeed!

Rowley: A pleasure!

The following are some photographs that Dave shows to Jack, and I will transcribe the best I can:

Rowley: [Photo of plane over glacier] Yeah, that's taken from the right hand seat, Charles have been sitting there I think it appeared in one of his books actually? I wish I could remember which glacier it was, he will probably remind me anyhow!

Rowley: [Photo of an iceberg] This was taken on a seal shoot, just in the rowing boat, well it had an outboard motor on the back, and we were just going around the ice floes looking for seals.

Rowley: [Photo of the RRS *Bransfield*] And got a shot of the *Bransfield* when it was a fairly new ship, bit out of focus I'm afraid! Did a few circuits around it there is probably some sailor onboard taking a few shots of me at the same time!

Rowley: [Photo of Adelaide base] This was Base T taken late December I think it was or it could have been mid December, with could be the *Biscoe* or the *Bransfield* there in the background in the distance.

Rowley: [Photo In the mountains with person in the shot] This one was depot laying in the Eternity range near Mount Andrew Jackson.

[Part 2 1:09:51] Tolson: Do you remember who the character is in the picture?

Rowley: Yeah, I've got a feeling that it's one of the air mechanics a chap called Alec...a chap called Alec Simon I think, but I'm not sure to be honest. But that was about 6000ft up on the Plateau, the Larsen Ice Shelf under cloud in the distance early hours of the morning, must have been 2 or 3 o'clock in the morning, one of our extended flying periods!

Rowley: [Photo of a group around the TAE aircraft] And this little gem here that was me in Air Force in 1957 when Sir Vivian's Trans-Antarctic Expedition piston Otter came in to number 49, I think it's 49MU or 39MU [note: it was 39] RAF Colerne in Wiltshire. It was a special installation squadron and we used to do specialist installation work, and I'm standing there, in fact that's our little team here and I'm standing there by the Trans-Antarctic piston Otter, flown in by John Lewis who gave us a little talk about the proposed Trans-Antarctic Expedition and the role of the aircraft, and at that time, 1957, I just had no idea whatsoever that (a) I'd become a pilot and (b) I'd end up working for the Survey!

[Part 2 1:11:37] Tolson: Can you just point to yourself again, just point to where you are?

Rowley: [Points to the one on the end of the line on the left] Here just there, this end.

[Part 2 1:11:45] Tolson: You're the last person?

Rowley: Extreme left, yeah lovely aeroplane! Rest of the hangars full of Canberras, they just come back from the Christmas Island Atomic bomb trials, these Canberras had been flying through the atomic cloud to get atmospheric samples, I never know whether if they were still radioactive!

[All the following reading from his actual flying log in the Antarctic]:

Rowley: Actually this is interesting, Fossil Bluff to Mount Castro took off at 15.40 landed at 16.55, 1 hour 15 flight VPFAO and diverted from sledge Sierra to sledge Tango due to weather.

[Part 2 1:12:40] Tolson: OK.

Rowley: [Note: He seems to repeat the last piece for some reason!] Here's a typical flight, Fossil Bluff to Mount Castro, Graham Land, took off 15.40 landed 16.55 - that's GMT of course. 1 hour 15. Diverted from sledge Sierra to sledge Tango due to weather with 2000lb depot laying supplies! 17 boxes of nutty 5 boxes of man food 2 jerry cans of paraffin, and here we go look? Stonington to Adelaide 30 minutes, 9 dogs, 1 sledge, 2 Fids from sledge Tango to Stonington. So obviously I've picked up this sledge in the field taking it to Stonington and then on to Adelaide. Flights: Sledge and equipment 9 dogs, 4 Fids to Stonington - that was from Mount Castro, Mount Castro to Stonington a 45 minute flight,

sledge and equipment 9 dogs, 4 Fids. Adelaide- Fossil Bluff typical flying time 1 hour 50, 1 Fid, oh ice recce, did an ice recce it must have been for one of the ships! [All finished off with a photo saying Dave Rowley's Antarctic memories].

Some interesting clips:

[Part 1 0:04:49] Learning to fly at the Singapore flying club in a Tiger Moth, whilst an air mechanic in the RAF!

[Part 1 0:08:45] Working for Shell oil tankers as a junior engineer!

[Part 1 0:13:21] The interview to join BAS as their first civilian pilot!

[Part 1 0:19:45] The Twin Otter training at De Havilland in Canada!

[Part 1 0:25:39] The fitting of the ferry flight fuel tank and then the epic flight south via South America!

[Part 1 0:50:51] The first sighting of the Antarctic after leaving South America!

[Part 2 0:00:00] Why BAS changed to turbo prop aircraft, and then using just Twin Otters as their only aircraft.

[Part 2 0:07:07] The Radio Echo Sounding programme with Charles Swithinbank and lots of low flying!

[Part 2 0:17:16] Stopping an engine at 6000ft on the Twin Otter!

[Part 2 0:24:25] How to deal with dog fights on the Twin Otter flights!

[Part 2 0:31:47] Leaving Halley for the return flight to Adelaide Island and problems with takeoff!

[Part 2 0:40:46] The interview of his replacement with BAS, Giles Kershaw!

[Part 2 0:49:30] The infamous curry kit sent to Dave by his wife and its uses!

[Part 2 1:02:24] The visit of Jacques Cousteau and his ship *Calypso*!

[Part 2 1:06:46] Being awarded the second only Fuchs Medal!

[Part 2 1:09:51] The visit of the TAE piston Otter to RAF Colerne for modification work in 1957 and a photograph.