NATIONAL LIFE STORIES

AN ORAL HISTORY OF BRITISH SCIENCE

Roy Gibson

Interviewed by Thomas Lean

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This is an interview with Roy Gibson conducted on 21st May 2010. Roy, as I’ve mentioned before, just to start off with I’d like to talk a bit about your childhood.

When were you born?

I was born on 4th July 1924 in Manchester … much to the alarm of my father who was an ardent Yorkshire man, but I think he forgave my mother later.

[Laughs] How did you come to be born in Manchester?

Erm, she declined his offer to move to the village where he was born and brought up and so out of love for her he came to the city, but he was a farmer’s boy and not a – not a city man, and she was typically city. So I grew up with these two influences …

What did your father actually do?

Well, eventually he – he became a tram driver and a bus driver but he’d been very badly wounded in the war and after a few – a few years the strain of driving during the war in the blackout was too much for him and, er, so he had to have a quieter job which they found for him in the offices there. But he died quite young, he died when I was 27, 28.

When was he born?

I suppose it must have been 1894 or something. He was late 50s when he died but he’d been blown up in the war, the whole of the section was blown up, and he was the only one who survived. The others had been killed but he was very badly shell shocked.

Did he ever talk about his war experiences with you?
Oh, yes, yes, but always with a – a humoristic touch, never the grimmer side. I remember him saying that the worst experience he had was with French baguettes, and I didn’t understand why and he said the military weren’t allowed to buy in civilian shops so when they bought a baguette they had to stick it down their trousers and when it came straight out of the oven it was a challenging experience to get it back to the camp.

[Laughs] How did he meet your mother?

He was at a staging camp outside Manchester, Heaton Park, and I suppose she was trawling for good looking young men and he was doing the inverse. But they were very happy together and very conciliatory and I have no recollection of any tensions or trouble in the family. But no brothers and sisters.

What did your mother do?

My mother was … well, a minor accountant I suppose. She used to do the books for – for companies or small companies, do the balance sheets and this kind of thing. She had a very nice handwriting and figures and was impeccable in everything that she – she did. She was very – for the time very well educated, culturally as well, whereas my father was a typical country boy; could read and write but didn’t do much of either.

You mentioned your mother was educated, did she go to university or –?

No, no – no, no. No, I think she … she lost her both her mother and father within a few months of each other and so she was put out to work and she – but she worked in a company, the Prudential Insurance company, and it’s still making the headlines. And there she got a very good practical education in accounting which stood her in good stead afterwards.

What sort of things interested your mother?
She was interested in people and in making sure that they got the best that was available to them with the amount of money that they had. She – she was a great – she was very thrifty and used to help people, as I say, to get the most out of things and help them not to get in debt and she was very active with people, in a nice sort of way, not a domineering way.

Was that a result of her work or was it something she did as well as?

No, she did it privately but I think again – she was always surprised how uneducated people were about figures and they had a – a wage of two pound a week but they never seemed to work it out so that they only spent two pounds a week, they … but she was not very religious but used to go to church a little bit but not very much, but she was a very good, kind person.

[06:30]

What are your parents’ names? Sorry, I haven’t asked you yet.

My father’s Fred, he comes from a family where the tradition is that the boy has a name of only one syllable, so he’s Fred and not Frederick. His father was Tom and not Thomas, I’m Roy, my son is Paul, his son is Fred [laughs]. It’s a curious tradition. And my mother was Jessie, Jessie Taylor.

Hmm. When was she born?

She was born a couple of years after my father, I think 1898, around that – around the turn of the century.

What sort of background was she from?

Her father was a greengrocer in Manchester, in Cheetham Hill – is that right, yes, Cheetham Hill but, as I say, they died when she was fourteen or fifteen, something like that. But they were very musical, mother – her mother played the piano quite
well apparently and my mother did actually as well, from ear, but she could play almost any tune straight away when she’d heard it, she was very – very good and sang very well.

_And she went to church, did she sing in the choir?

No, she was against everything that was too organised, she would sing in the – in the congregation but not in the choir. My father always used to say that his religion, he was a Calithumpian and unfortunately there wasn’t a Calithumpian church in the neighbourhood of where we lived, which explained why he didn’t go to church, and people were fifty per cent believing him, fifty per cent not. [both laugh]

_I’m not familiar with Calithumpianism._

No, no, quite, it doesn’t exist.

_Oh, right [both laugh]. Did you go to church yourself as a child?_

[09:15]

A little bit, mainly under pressure from – from my mother, and joining the lifeguards and things like this. But interrupted by the way and in … just after the war started in 1939 the school was evacuated to Lytham St Anne’s and we were – we’d already lost a lot of the upper sixth form who were eighteen, and many of them went into the air force or the army. So the lower sixth form of which there were only I think six of us at the time, were evacuated and we really – we didn’t get any teaching ourselves because many of the teachers had been called up and we were roped in to give lessons in the subjects that we were the most capable in, just to keep the kids happy. Either that or filling sandbags.

_What did you teach yourself?_
French and German and geography. Oh, I say teach, it was really keeping them afloat and keeping their interests up. And the kids were very good and there was a lot of help from the – from the students themselves, they all realised that it was an extraordinary situation and so they – they cooperated very well indeed. I don’t remember any nastiness at all. But I got fed up with it after a few weeks, after a few months, ‘cause I wasn’t getting anywhere and, er, I was head boy at the time, which at the age of fifteen and a half is a bit much.

*What did the head boys’ teachings consist of? I was a prefect so I can’t imagine what it was like being higher up.*

I was a prefect when I was thirteen and a half and – I was two years ahead in school, and so I had two years as a prefect and then with all these people filing off to the military then I became *de facto* the head boy. Oh, it was really trying to speak up to the teachers to tell them what was going on, because we had the children farmed out all over Lytham St Anne’s. When we arrived we were an enormous crocodile with a teacher in the front and the man from the municipality with a list, and we went from house to house. He knocked on the door and somebody came out and said, ‘Are you Mrs Biggins?’ ‘Yes,’ ‘Well, you’re getting one.’ ‘You’re with Mrs Biggins. Mrs Biggins has got … what’s your name son?’ And then we went off to the next house all the way down the front at Lytham St Anne’s. Then I got landed with a very salty ex-sea captain who had a beautiful villa with a little turret made in the shape inside of the captain’s bridge with all the things that he missed staring out over the, er, golf links at St Anne’s. And he was not at all pleased at having two snotty little boys lodging with him, he made it very clear the house was completely out of bounds for us except to use the stairs to go up to one of the bedrooms where we were lunched and to go into the servants’ quarters at the back where we could take our meals with Bessie, who was a sweet girl, but he was a bastard, a real … he had no, no sense of what it was all about, he was just fully annoyed that his lifestyle was being interrupted. He used to insist that we didn’t go to school until we’d done all the washing up and cleaned the – everything in the little dining room which was also Bessie’s sitting room, and then we were allowed to go to school.
I took my revenge in a, you know, quiet way after we’d been there for a few weeks. He came into the sitting room and said, ‘Mr X has just telephoned, he can’t make it tonight for bridge’, he said, ‘Oh, then that’ll be one less for dinner, yes,’ and he means no bridge, so Bessie with whom I talked a lot in the evenings said, ‘Well, he plays bridge’ pointing to me. He said, ‘Oh, yes, but we play real bridge’ and she said, ‘Why, I think he plays quite well.’ He looked at me and said, ‘Well, I suppose we could give it a try’ and we did. And I’d been taught by a member of the north of England team, in fact I was his partner when I was twelve and I used to play in little matches in Manchester against Bury and this kind of thing and very minor league bridge, but a hell of a lot better than most family bridge. So he started off by saying to the other gentleman, who was a visitor, ‘Well, we’ll play for a penny a hundred.’ So we really took him to the cleaners in about three hours and at the end of this he had the gall to say, ‘Of course there’s no money for you, children shouldn’t play for money’ [both laugh]. So after a few months I thought this was enough and against the wishes both of my parents and of the head, I came back to Manchester. It seemed a bit silly sitting out there in Bessie’s sitting room, putting up with the atmosphere that there was, not getting any teaching and a war going on, I thought I might be able to help.

_Sorry, who was Bessie?_

Bessie was the – the cook and the bottle washer in the house where we were, they had two servants, one lived in and one lived out. And Bessie was a local Lancashire girl, a good cook and very nice, warm hearted girl. So I arranged with my family to go back and got a job two days later with a marine insurance company, who were in dire straits because they’d lost three of their ten staff to the military, and I spent about – about a year with them I think. [Sneezes] Pardon me. Very interesting charting arrivals and departures of boats and cargoes and issuing insurances and it was – there was really more responsibility than a sixteen year old normally gets. And again, I was very lucky to have the office head, a lady, who was very kind and explained things to me and, er … I enjoyed being with them. But my father, he insisted that I sit the
municipal exam. Once a year there was a, or maybe there still is, an exam for posts in the Manchester municipality and so one morning we went to, I forget where it was now, Albert Hall or somewhere like that, and I had an exam all day and a few weeks later they announced the results and the first twenty or twenty-five I think were offered jobs. And I was offered a job in the – in the transport department which then, I don’t know if it still is, this was right on the middle of Piccadilly, fifty-five Piccadilly, opposite the bus station there. And I stayed there until I was eighteen and went into the – into the army.

_Hmm. What did your duties consist of at the transport department?_

Well, there again I was very lucky because of the absences of people and I was given a job with the records of all the staff and the system of controlling their misdemeanours and where they had to be hauled up to a certain level to be told off or to be interrogated and then this was all recorded in their dossiers. Hmmm … and my father at that time was one of the drivers and so I spent a few minutes looking at his records.

_[Laughs] What did you discover?_

Oh, nothing, he was exemplary, he … he thought life gave you duties and obligations and until you fulfilled all those you had no right for any kind of pleasure or … or, er, self indulgence but when you’d done those then you could look around and spread yourself out. It – it’s a pretty drastic philosophy [both laugh] but it – it makes you a lot of friends and very few enemies.

_Sounds quite strict. Was he strict as a father or –?_

Yes. Strict but no corporal punishment or anything, just, er … verbal disapproval I suppose is the way best of – and he would tell me, ‘I don’t like your attitude’ in relation to this or to that. And then he would tell me why and that was the end of that, and it was then up to me to – to alter it. And then every month when I came back
with my results, ‘Yes. And what was your position in the class?’ ‘I was second.’
‘Who was first?’ So never congratulations, no.

[21:05]

[Laughs] Which school were you at?

It was Chorlton High School in those days, I think it’s become Chorlton Grammar School now.

And this was your secondary school then or –?

Yes, yes, we – we used to live – before we moved to Chorlton we were in … it sounds funny but I think it was Fallowfield, yes, and I went to a school there, The Wilbraham – The Wilbraham School, Wilbraham Primary School, junior school. But I – as soon as I … as soon as I could I joined the Home Guard, I had to lie about my age, with the connivance of the enlisting officer, but it was very good because it meant I’d – I got free military training ‘cause most of the people who were organising it were ex-sergeants or ex-officers from the First World War, too old to go into the military and who’d got really good military training behind them. So I used to go about three nights a week for – for training, and this stood me in good stead when I went in the army.

Hmm. Was this when you were at Chorlton High School then or elsewhere?

This was when I was working, when I was sixteen, sixteen and a half. So for two years, between then and eighteen and when I went into the army. So that kept me off the streets.

But what does a Home Guard training session actually consist of?

Oh, weapons training, grenade training, physical exercises, unarmed combat. And then if – as things got worse, you know, Manchester was very badly bombed and so it
was decided that all the enterprises that had – that were in the centre of the town had to provide their own fire fighters and watchers to stop – a) stop fires and then stop potential looting afterwards. So one night a week I was there doing watch duty, but this was all good – good stuff and I felt it was a hell of a lot better than staying in Lytham St Anne’s.

How seriously did people in the Home Guard actually take it?

They took it very seriously. When we started, you know, in the unit I was in there were twenty-eight of us and we had one rifle, and the others had wooden rifles or sticks. But this soon improved and soon we all got our own rifle and … but it was all deadly serious, it was not at all playing. I mean discipline was quite strong, if you didn’t like it then get out but there was no messing about. And my future wife’s father was the local colonel for the – and he was a great disciplinarian, nearly put me off marrying my first wife he was so – he was really … but luckily I –

[Laughs] Could I ask who you were in the Home Guard with, was it mainly younger people like yourself or older?

A mixture. Well, they were either young like myself or they were people in their forties who had not been called up, but very good – a very good atmosphere and –

[Break in recording?]

Switched on, sorry, right it’s running again now.

[25:40]

Good. No, I was saying the atmosphere was very good and it wasn’t a bit like Dads’ Army, it was really very serious and well organised, and it was a whole lot better than just sitting around and waiting for the Germans to come.

Did you enjoy it?
Oh, yes, massively, yes.

Any parts in particular?

I used to give jujitsu and unarmed combat training to a group of – a group of girls, or ladies, in the transport office. They were conductresses and they were all … sure that the Germans were going to come and they were not going to be pushed around by any Germans, so I was asked if I would give a series of lessons to them and, er, unfortunately one of them was married to a journalist on the newspaper, was it the News Chronicle I think it was, some local evening paper. And before I knew it was I splashed over the pages of the – much to the embarrassment of everybody, including me. But that was the sort of atmosphere that – that there was. Very few people just sat back and said it’s going on as normal, they were all trying to either prepare themselves or – or at least keep themselves occupied, that was also a problem.

What do you think you learnt from being in the Home Guard?

I’m sorry?

What do you think you learnt from being in the Home Guard?

Well, I – when I volunteered so that when – on my eighteenth birthday was accepted and was sent to the training camp and really I’d done my basic training already, so I was very quickly shoved through that and found myself in, er, officer training school. So it – it helped me enormously and accelerated the passage.

Did you make any good friends in the Home Guard?

Yes, but none that lasted the war. The – the two people that I was closer were killed in the war, both were air force and both died before I came back from the Far East. But the municipality was very kind, they kept my job open when I volunteered and
when I came back after the war they would have given me my job back if I’d wanted it.

[29:00]

Can we talk a little bit more about your school days before we go any further? I’m interested in what your favourite subjects were when you were there.

I was interested in languages and geography and history, but apparently I was good in physics and mathematics and so I was under constant pressure from masters to continue with maths and chemistry and physics, all of which I loathed at the time. But of course I left, hmmm, before I’d even done A levels because when I came back to Manchester there was no school so I went straight into – the school was still evacuated so I went straight into – into work and I picked up then in the evening by going to the Manchester technical college and was taking subjects like transport law and statistics and things that were of general – general use. I suppose basically my resentment at the time was that the class distinction was so strong that a boy from Chorlton High School had very little chance of getting any of the openings that were being offered. For example, the – there was an announcement that they wished to recruit, I think it was 200, students with good knowledge of and facility for languages to learn Russian, Japanese and Chinese or – one of them, and they were to be taken down to London to Dulwich, I think Dulwich College, and I applied to my head and he said, you won’t have a chance because Chorlton High School doesn’t ring any bells with anybody. We didn’t even get a reply from the application, so we tried another one which was about a few weeks later, the same sort of thing, taking boys of sixteen and seventeen and training them up intensively for specialist commissions in the army, no reply. And I suppose this helped to push me off to say, well, if I can’t get anything then I’ll go out and do it myself [laughs].

What sort of school was Chorlton High then?

Well, it was a very good school but it wasn’t a public school and it wasn’t a grammar school. And according to the head if you were – in those days if you made an
application for that kind of a post you had to either come from Manchester Grammar or Hulme, Hulme Grammar. I don’t know whether Hulme Grammar still exists, it was a semi-private school with a very good reputation but ours was off the radar, yeah.

What social class would you position yourself in?

In those days?

Hmm.

Oh, working class. Oh, I didn’t have any complex about it [laughs]. I mean I wasn’t – I don’t want to give the idea that I was sullen and repressed and – but I could see that I wasn’t going to get anywhere.

Other than the school were there any other ways you could see that?

No, not really but of course the school was almost enough because when the school entered for such things as interschool chess competitions only Hulme Grammar and Manchester Grammar were accepted for the top league. Hmmm … the argument being that if you let people like Chorlton in then you have to let all the other high schools in, so we have to be very selective about the top league even though some of us played better chess than Manchester Grammar.

[34:00]

[Laughs] So you played chess as a child?

Yes, I – we had a – we had a family friend who had a chain of tobacconist shops and they were all run by very diligent people, including my aunt who ran one of them. And he had a wife who was a first grade nagger so he had no incentive to return home, so he amused himself and his first amusement was chess. So he went to a chess school and took chess lessons and then enrolled me as his partner, and he was
very intelligent. And I must have played with him from the age of about nine I suppose, until one day he came back and said, ‘Chess is over, it’s bridge now. I’m going into bridge.’ So this was the guy who again took me in hand and his partner was called up for the military and he enrolled me his partner to go round in tournaments. So at the age of thirteen, fourteen maybe, I would go round with him and he was extremely good, extremely good. But those contacts were very rich for me because it brought me in contact with a lot of people. In your tournament, a bridge tournament, you might meet forty or fifty people and that was all very stimulating, once they’d got over the sight of my bare knees in short trousers.

*How did they, you know, take to you as a fifteen year old or ten –?*

Oh, I had one who – one lady who said I refuse to play with a – with a child … but when the referee was called he ruled that there was no lower age limit in the tournament and if she didn’t play she would lose her marks, so she decided to play so I gave her the best of my knowledge by way of revenge [both laugh]. I’m not setting myself up as a world bridge expert but I played a – a reasonable game, you know.

*What about bridge did you enjoy?*

Well, curiously I suppose it’s the mathematics of it I was interested in the most [telephone interruption] only to say that –

*Let me put that back on – bridge.*

So I acquired from – from childhood Home Guard which took me into the army and gave me a good start there, and I acquired chess and bridge which – particularly bridge has been very fruitful for me. When we get to it I’ll explain what I mean by that.

*You mentioned these bridge tournaments, what sort of people did you meet there?*
Generally middle class professional class people, a lot of university lecturers, hmmm, very nice, very civilised.

Was this at an actual bridge club or …?

He – my partner belonged to a bridge club, in fact I think he was the president of it. And then they played between bridge clubs, so we would go to Liverpool or go to Bradford, places like this.

Did you have any other pastimes apart from bridge and chess when you were growing up?

No, bridge and chess and Home Guard I think [laughs]. And chasing girls of course.

[Laughs] Did you have many girlfriends?

Yes, yes, thankfully.

[Laughs] Any in particular who stand out in your memory?

Oh, yes, when I was evacuated she was evacuated at the same time the – the girls’ school, Levenshulme School, Levenshulme girls’ school, high school, were evacuated and ended up in a school just next to where we were, so contact was immediate and with one of these girls I had a very – a very pleasant, a very enriching almost platonic experience for two years, even after I came back, she was very – very pleasant.

What was her name if you don’t mind me asking?

Her name was Patricia Alberta Lee. Alberta because she was born in Canada.

What brought her to Manchester?
I suppose the family moved back to Manchester, she used to live in – in Didsbury.
Yes, I had my share, yes.

Hmm. *You mentioned you were good friends after you got back, was this from the war as well?*

Yes, yes. And my mother kept open house, which was a good thing. You could arrive at our house and even during the war there was something to eat, I mean with whatever we could manage to find. And my school companions were always welcome to come and you didn’t have to plan it a week ahead, you could just drop in.
This was well known. I think this is important to a boy, to a child, to have this atmosphere, I’ve always lived up – lived in an atmosphere where you don’t close the door on your house and keep everybody out, you – on the contrary you’re very happy when people come into it.

*Could you describe your home to me?*

Yes, home. Well, I suppose the one that made the most impression on me was when we lived in Heaton Moor. It was from 1938 and we had a semi-detached house which we shared with an aunt and her two children, they had half of the house, and my mother and father and I had the other half, and it had a little – little front garden and a large, long back garden in which my mother and father used to debate how much should be lawn and how much should be for vegetables. But then in the war the debate was over because we had to put a shelter there and we had to dig up all the priceless lawn and put an Anderson shelter in, which was a great enterprise.

Hmm. *On which sides were your parents in the vegetables versus lawn debate?*

Oh, my father vegetables. He couldn’t understand that people bought things in shops, you grow vegetables, you don’t buy them, so he would – when the plate was given to him he’d push the contents around a little bit and say, ‘Where did this come from?’
But he – he also had two allotments that were full of vegetables and we persuaded him to grow a few flowers but he was never very flower conscious.

*Is this the farming background, do you think?*

Oh, absolutely, yes. But the – the upshot was that even in the worst days of the war there were always vegetables, vegetables and … and chickens as well at one time. But my father was a very patriotic man and took to building the air raid shelter with typical zeal and fitted it with bunks so that both the families could – could fit in and, er, he would stand at the – at the entrance at the top of three steps and shake his fist at the bombers that were flying past and, er … worrying about lack of response. But what he didn’t know was there was – a mobile anti-aircraft gun had been moved into the area and it was just outside our front door and when it replied it threw him back into the shelter on top of the family. He was shouting, ‘If I could just get my hands on you’ and then there was this enormous explosion and father fell back on us all, laughing his head off. [both laugh]

*Couldn’t be too much of a problem. Can you describe your father to me?*

[45:20]

My father was about my height, thin, the same weight when he was eighteen as when he died, he never changed.

*How tall was that?*

I suppose about five foot ten and a half or five foot eleven, something like that, I’ve shrunk a bit. Straight. We never had enough money to dress well but he always looked – ‘cause he wore uniform a lot of the time as a bus driver but when he was in civil when he put his suit on he was – had the look of at least a bank manager. He was very – very kind with people and never criticised them, I never heard him say a bad word about anybody even though I knew the worst side of them and so did he, but he … he always used to say people who live in glass houses shouldn’t throw stones.
Although when he trotted that out we always used to say people who live in glass houses should undress in the dark, which he always thought was an apocryphal version of – of his aphorism. He was quite sporty, could run and good with bat and ball and cycling. Very good with his hands and a way with planting things so that it always looked as though it had been measured out millimetre by millimetre. When I planted it, it always looked as though a dog had been at it.

[Laughs] What other things interested him?

In later life he was a great reader, a history reader, who enjoyed friends, had two or three families with whom we were very close, and social evenings with – with cards and – but he wasn’t a drinker. A glass of beer at Christmas was about the limit. That was partly his – partly his nature and partly the fact we had no money. My mother was small and dumpy, smiling, always ready to smooth out differences … always welcoming. And as I said earlier, nothing but good memories.

You mentioned that she kept an open home.

Yes. My friends, my cousins’ friends who lived with us, they would always be in and out and – and there’d be orange squash or ginger beer or something for everybody.

Hmm. And you lived in the same house as your auntie and cousins?

Yes. She was the – she was my mother’s sister-in-law who had two children, a son who was a couple of years, three years, older than me, and he was in a reserved occupation, he was a – actually by training a motor mechanic but he was involved in munition work, and a daughter who was one year younger than me and they lived, as I say, in half of the house. But there was a good deal of osmosis between the two – the two families and we got on very well, and we couldn’t have afforded the house in where we were if we’d done it on our own.

Was money short when you were growing up?
I never noticed it being short but it must have been. My father was a great believer in paying for things and not taking credit, he wouldn’t buy anything on credit, ‘You want it, well then save up for it.’ And so you knew exactly where you were [laughs]. I wanted a bicycle, ‘Good, then we’ll look around for a second hand bicycle. Meanwhile this is the box for saving for …’ Whenever we got a bit of money, any of us, we’d put it in, so that’s the way I was brought up. Sounds a bit funny these days but …

[51:20]

Not at all. Did he have a large family?

My father had a sister and – and a brother and we used to visit. They lived in – in the East, what was the East Riding of Yorkshire, near Driffield. Well, the family such as is left, is still there. And my mother just had a sister who died during the war of leukaemia. But we used to go every – every year at least once for two weeks to – to the family in Yorkshire where we would be welcomed by his brother who would welcome Fred and his townie wife. [both laugh]

Was there much of a clash of cultures there?

No, it was more ribbing than anything, ‘cause my – my mother was – she could fit into any – any society and you could take her anywhere. I remember years later I’d come into France for the first time and sitting down at a table with four or five French ladies, only one of whom could speak English, and my mother was not at all fazed by it. She said what she wanted to say and she listened carefully and asked for translations and …

Did you see much of your grandparents? Well, you’ve mentioned that your mother’s grandparents died young.

Well, my mother’s grandparents died, my father – my father’s father, my grandfather, also died when he was five, but my father’s mother, my grandmother, I knew very
well. We used to see her, as I say, every – every year at least once for two weeks and
generally twice. She was a midwife and used to go round the area on her bicycle
delivering children all over the place. She was – she was as hard as nails. [Noise
outside] I’d better shut that door I think, hadn’t I? My grandmother –

Thank you. Who was a midwife.

Yes, she was a – she was a hard case. Of course she’d had – had it pretty tough life.
Her husband died very early on and left her alone, and in those days there was not
much, er, support but she – she managed very well. She was always very optimistic
but very strict, I can see where my father’s genes came from.

You mentioned genes there, what do you think you inherited from your father, if
anything?

From my father, yes. I think this calling a spade a spade I think is probably – I’ve
disliked always dissimulation or talking around things, you know, I like to get them
out on the table and my father was very much like that. And from my mother I think
I’ve got a lot of her … I accept much more. I don’t know whether it’s appropriate to
put this into the archives but I can take more shit than most people can and I – I’m
sure that was her philosophy. She didn’t react to everything and have to have the best
hand all the time, she would take it and take it until the right moment came and then
she would sometimes settle accounts in the most gentle way.

They sound like quite different people, your parents.

Oh, completely different, yes, yes. But they were very harmonious and they were –
oh, the occasional tiff but I never remember any – any rows or any – anything where
you had to be careful what you said to one because there was none of that at all. I
think they did me proud, yeah.

What do you think they wanted for you when you were growing up?
My father wanted me to have a good steady job with a pension … a good wife and several children and that I – for preference I should live in Yorkshire [laughs]. I would have disappointed – I remember when I was … when I went to Oxford I said to him as part of this – I’m going ahead but when I was going to Malaysia, or Malaya as it was then, I have to go to Oxford first. ‘Oxford? These southerners, you know’, he said ‘you have to be very careful with them, I’m very leery of them’ he used to say, ‘very leery.’ ‘Couldn’t you go to Manchester or somewhere like that? Sheffield’s got a good university’ I said, ‘Well, I’m not choosing, it’s – they’ve decided it. Some of us are going to Cambridge and some to Oxford.’ ‘Oh, God’, he said ‘there’s nothing to choose between them, they’re both down south.’ [both laugh]

An attitude I’m all too familiar with.

Yes? Does it still exist?

It still exists very much so.

Yes.

The friends I have from further north have it even stronger than the ones from –

Yes.

Having lived down south myself, you know, I have the opposite view of the north, so ...

Yes.

But was your father in favour of you going to Oxford?

Oh, yes, yes. And when I became – when I was commissioned as an officer I mean he was very proud, he would have died rather than say it but he was very pleased. Shall we …?
Shall we take a short break?

Yes, let’s call it a day and go and have some food.

Okay.

End of Track 1
Track 2

Right, so … this is an interview with Roy Gibson on 22nd May 2010. Roy, I was wondering if you could tell me a little bit about your friends when you were a child.

Yes. It’s all a bit dim really because friendships were badly interrupted by the war, so boys I was at school with that were my friends, both in the junior school and in senior school, I didn’t catch up with afterwards, so – but I had lots of friends in both schools but as I say the contact was interrupted. I moved away from Manchester, the war moved many of them away more permanently and so I just had no further contact with anybody I was at school with.

You’ve talked about chess and bridge before but I was wondering if you had any other toys and playthings.

Music. Behind me are about 500 CDs and things, all hours of the day and all hours of the night if necessary, it’s always been like that. The family was like that as well.

Playing or listening?

My mother played and my father in his own way enjoyed music.

What did your mother play?

Piano.

Musical at all yourself or not?

Only for my own enjoyment. Sang a lot, even in the army, yes.

[Laughs] Did you read at all?

Oh, yes, yes, I was always doing something.
And did you have any favourite sorts of books?

Yes, Eric Linklater, wrote a series of books in the early – early and mid ‘30s. He was the father of another Linklater who was a novelist whom I never read, but he was a very – a very interesting – for me, very interesting author. And I was passionately fond of Leslie Charteris and the – the Saint books. Also ‘cause I think he was a very clever writer.

Did your parents read much?

Both of them avid readers, yes. We had a ceremonial visit to the public library every week and in those days you could get I think four or five books per person. We came back with a basket of books for the week. And my father worked shift work, so sometimes he was there and sometimes he wasn’t there, but when he was there, a pipe and a book and that was all he required. [both laugh]

Did they read any newspapers?

Yes, they were – they were both much too far to the right for me. My father was a real Conservative without knowing it and my mother was more liberal, but they weren’t political activists … but one would have expected them to have been trade unionists and taking an interest in left wing politics but they seemed to leave that to me.

Did you have an interest in politics when you were growing up at all?

Yes, yes, mainly to – to see what was going on and why we were in such a mess and why the war was considered to be inevitable. I think you had the choice in those days of either blindly accepting that that’s the way it was or poking around a little to find out what was behind it all, and I was lucky enough to have school masters who were … not politically active but politically aware. And so if you asked questions they
would take time out to explain things to you, particularly my German master who was
very pleased with my progress in German and used to help me a lot there.

[05:10]

Hmm. You’ve talked about being good at languages at school but I was wondering
when you realised that you were good at languages [laughs].

I suppose when I was about – well, when I went into high school when I was ten or
eleven and found that if I was told something then I could almost immediately
incorporate it and had a good memory for vocabulary. But it’s not a – I’m not a born
linguist, it’s more a matter of opportunity than anything. Since I’ve moved around a
lot I’ve been exposed to different languages and working in international
organisations. And my wife was a translator in five languages so … as I say it’s a
matter of opportunity there.

What were your other favourite subjects at school, was it history and geography?

History and geography and English language, English literature.

It’s interesting the fact that yesterday you mentioned that you were good at maths and
physics as well.

Yes, and detested both of them. [both laugh]

What about them didn’t you like?

They were too cold blooded I think for me, I – I didn’t like the inevitability of
calculus and … but I appeared to get good results but not with any enthusiasm,
whereas with English language or French or German I could always come out with
very good marks. But my maths and my physics teachers were very insistent and so I
didn’t really have much choice. They were probably – when I came to work in, for
example in the Atomic Energy Authority, the physics was very useful as a background then.

_How did you do at school overall?_

Oh, I was always either first or second in the – in the exams, preferably for peace at home to have the first.

_Laughs_ I think we’ve talked a little bit about what you did immediately after school. _How did you come to join the army?_

[08:00]

Well, I – in this juvenile way I decided if there was a war then you either went and did something or you stayed at home and did what you could, and I decided I would join up as soon as I could. So in those days you could volunteer before you were eighteen and then it took effect on your eighteenth birthday and you presented yourself and were whisked off. And that’s what I did, I was – I’d had some tests before – before I was eighteen to see if I was fit and reasonably intelligent and they posted me to Royal Signals. But first I had six weeks of basic training but as I said this was a cake walk for me ’cause I’d already done it, so I found myself already ahead of the game compared with most of them. I don’t say that in any boastful way but it was – it made life easier, people who were trying to adopt a new attitude of finding themselves in the army and without a clue which end of the rifle was – they must have had it quite – quite hard whereas for me it was just a continuation of what I’d been doing for the last two years. And then, as I say, we had tests during the first – the first few weeks and I was selected for officer school after about six months I think, something like that. So I had then six – six months of telecommunications and training and then went into the signals officer training in Catterick, which my father was very pleased about; must be good because it’s in Yorkshire. And I passed out or graduated, whatever you call it, after about a year there.

_So you had technical training in the signals corps as well?_
Yes, yes, and radio and telegraphy and wireless communications. I was never very good at it but I managed to get through. Then we had a month of commando training, most of it in the Lake District, Ullswater, and dragging a Bren gun uphill and things like that, which widens one’s aspect of life.

Was commando training standard for the signals corps?

It was a period where it had been decided somewhere in the war office that officers were coming out of officer training school too much as they had done in peace time, they were very good officers and they had very good knowledge, theoretical of this and that, but they’d never really suffered and it was decided to add a month to our course where we would be duly initiated, hmmm, taken out at night in little boats on Ullswater and tossed into the water and told the shore is in that direction and things like that. Spend a night on the mountains with just what you had in your sack and dropped off a lorry miles from nowhere and told to walk home, this kind of thing. It was … a mind broadening experience, yeah.

How did you feel about it at the time?

Oh, well, you know, at that age you – what was I, nineteen, it didn’t really make much difference. I wasn’t all that fit, I mean I wasn’t a sporty type but I’d eaten well and was strong enough, it didn’t really worry me. And folk were good, they were very – it was a good – a good spirit.

[13:00]

And then as I passed out there we had another series of exams and I was posted into the cipher side, I don’t know whether it was because I was reasonably good at languages or whether I was pretty awful at technical things but four of us from a hundred were put into what they called the cipher group. And I went down to London and to Bletchley Park for cipher training for a couple of months and – and then was shipped off to India. Got on the boat, a P&O liner, with God knows how many
thousands of people, troops. It had been converted into a troop ship but we were quite privileged because we had no – we weren’t responsible for any soldiers. Most of the officers there had got responsibility for twenty or thirty soldiers but we were a little group of specialists and we had no – no other ranks with us. And I was collared on the first day before we’d even left Glasgow in port by a group of colonels who wanted a fourth for bridge and I, er, was invited or ordered, whichever you prefer, to attend, and I did so on the understanding that I could continue to study Urdu, because I knew by then I was going to India and that I’d be going to the headquarters in Delhi and I didn’t want to arrive without a knowledge of Urdu. So I’d – because I’d guessed what had happened, I’d bought a couple of books, so I negotiated with these elderly colonels that I would play but only if I could have the same time to read my books, which they thought was a bit pretentious, which it probably was, but they agreed. And they were the sort of people who were – discussed every hand afterwards for five minutes, so that gave me plenty of time to read, and because there was a shortage of tables somebody had to go down every morning about half past seven and bag a table for the – for the day. And then we’d play bridge from about eight o’clock in the morning until about eight o’clock at night, breaking off for – for a meal, one at a time, so that we didn’t lose the table [laughs]. They insisted on playing for money and since I hadn’t – I was a poor second lieutenant but they didn’t seem to worry about that, but I was very glad at the end because after six weeks I made a year’s salary and I arrived in Bombay with a packet of notes. So it was a very – a very interesting experience. They played well but they played family bridge and as I’ve said earlier I’d been brought up in a very hard school a little – playing a little bit better than family bridge but regularly and so it was like playing in the casino, you know. At the end of the day the casino – the house wins, and at the end of the day the guy who keeps to the rules and doesn’t make many mistakes, he wins too. So they were very happy about it, and used to rib me about learning Urdu but they were very good.

[17:25]

How did you take to officer training as a person from a working class background?
There were a lot of us, it was a … it was a strange mixture. I remember being in a meeting when we were very nearly through officer school and the colonel in charge of the – of the training unit was obviously a noble or near noble family and he was giving us a pep talk during which he said, ‘And I know that all of you come from a background where your mother every Sunday morning would take eggs down to the poor of the village’ and we looked at each other and thought. So we didn’t say anything and he said, ‘And then perhaps to vary things she’d take a few flowers from the bottom of the garden’ and the little Scot next to me said, ‘I could spit to the end of our garden’ [laughs]. It was this curious mixture of the assumption that things were exactly as they used to be, whereas he had in front of him thirty morons of varying backgrounds but very few from any – from any comfort. But it – I mean it worked out – there were one or two people who’d had a better – a better go of it but … it was very interesting. The people were very indulgent at that time because of the war, you got the occasional sadist who dropped grenades too near to you to give you a shock and this kind of thing but on the whole people were very good.

What does officer training actually consist of?

Well, in my case it was in two parts. There was theory and practice of telecommunications under wartime conditions, all kinds of communications from local platoon communications between platoons right up to battalion, regiment, division and then along lines of communication which have their own problems in those days, there was that side of it. Then there was the general regimental side of how to deal with – with people, with men, with those below and those up, and what was the role of non-commissioned officers and things like this. I remember the – the regimental sergeant major, a wonderful moustache reaching nearly to his ears, who stood in front of us when we arrived and said, ‘You’re officer cadets, sir. I’m sir to you sir, and you’re sir to me sir, and don’t you bloody well forget it sir’ [laughs]. And that was about the size of it, yeah, you just had to mind your Ps and Qs but in theory you were slightly a cut above the – the other ranks. You wore a white ribbon round your hat which marked you out as an officer cadet, not without some ribbing from the others but it was generally very good natured.
Where did you actually do your training?

All in Catterick apart from the commando which was in the Lake District. And we used to go out on a lot of practical exercises, three of you would go out in a – in a wireless van in one direction and another would go in another direction and then you were given frequencies and had to set up communications. I remember we … we abused the right to drive around by going to Headley cricket ground and watching a cricket match ‘cause we’d found extension leads so that we could sit and communicate and pass our phoney messages and watch Sutcliffe knock a few sixes, it was a curious mix between very strict discipline and then a certain amount of – if you used your initiative, a certain amount of liberty.

Could you describe the place you actually did your training to me?

Well, it was part of the big Catterick’s barracks which was a signals headquarters for – for years back. A series of about ten or fifteen large, quite modern by – by those days’ standards, I suppose built in the early ‘30s but about fifteen large blocks containing maybe a thousand people in each block and then training grounds around an enormous area. I think there were two or three of these and one block had been turned over for officer training, the others were for signals, technical training and things, and we used their laboratories and test types and this kind of thing. And then there was a big motor park where we learnt to – to drive and ride everything from motorcycles to small tanks, which was interesting in its own way.

So they taught you to drive a tank as well.

Yes. Well, a little, yes, a little tank with a – not a steering wheel but motors on the two sets of wheels and, er, so we had to drive – well, first of all, 500cc VSA motorbikes being taught to us by the Belle Vue track team who were dressed up as sergeants but were really still hell bent motorcyclists. They had no idea whatsoever of teaching, their idea was you sat across this enormous thing and they bellowed out
along a row of ten of us, ‘You switch it on like this, you kick start it’ and of course the bloody thing started straight away, ‘and you let the gear in.’ And we went off and sort of six out of ten fell off and we started again and four out of ten fell off until finally all ten managed to stay on, that was considered to be the best way of learning. We did the same with 1500 weight trucks, 3 ton trucks, and then finally the – the little armoured car. That was great fun.

*How were the technical parts of this course taught?*

They had a good reputation of teaching in the signals because they – they had a grade which was called instrument mechanic. They were people who had obviously come from some technical school in the civil life and their pay was enormous yet they were not sergeants or sergeant majors but they were instrument specialists, and I think they got as much as a sergeant or even a staff sergeant because of their training, and many of them had been teachers in – in high schools and grammar schools around the country. It was a very civilised teaching.

*Were they practical courses or theoretical?*

Yes, yes, theory and practice and then building your own radio and then passing out by going through a long shed on the left and right of which were radios and equipment that didn’t work and you had to say why it didn’t work and then move on to the next one and hand your paper in. I think there was a good deal of collusion amongst examinees but we managed to get through it. But that was – that was very well organised and then we did operator training for Morse, which amused my father because he’d been a wireless operator during the – the First World War.

[27:00]

*How did you parents feel about what you were doing?*

My father was a mixture of pride and apprehension after what had happened to him, having been blown up and – but he was very supportive and when they passed out he
insisted that he and mother would come and see me although it must have cost an arm and a leg in those days to – to go from Manchester to Catterick and stay a night in a pub there.

Hmm. How did they feel about you becoming an officer?

Yeah, they – they were never terribly class conscious, my parents, they – I was never brought up to consider the class of people. In some – some of my friends they had a sort of inverted snobbery that they preferred to go with people they knew had been brought up the same way as they had in the same circumstances and I – I didn’t have this at all because of my parents and some of my – my parents’ friends were obviously in a different social class but it wasn’t – wasn’t talked about, it wasn’t a subject of conversation. I think this helped me enormously because I had no … no worries about talking to officers or anybody. I mean not in an arrogant way but provided you observed the rituals there was no reason why you shouldn’t speak to them the same as you speak to everybody else. And this seemed to go down quite well with everybody. I nearly ruined my – my chances of becoming an officer in the last board that I had, it was chaired by a colonel and there were four or five field officers there and the colonel asked me what I was doing presently in the evenings apart from Home Guard, and I told him I was studying English dialect and was very interested in a Professor Sweet who was analysing dialect and trying to see how the dialects have merged over the – over the years. He was financed strangely enough by Bernard Shaw who put a lot of money into, and left some in his Will actually, to tidying up the spelling of the British language. It was fought out of court later by his – those who should inherit – inherit his money but he was very interested in it. So the colonel said, ‘Well, if that’s what you’ve been doing where do I come from? What’s my accent like?’ So I said, ‘Well, I think you come from somewhere around Nottingham originally but you’ve been to a …’ and then the fatal word slipped, I said minor public school, but we just put a gloss on it but the Nottingham comes through quite often. So all the others except the colonel sniggered a little bit behind their hands and there was a deafly silence for a minute or two while the old boy found his equilibrium and he said, ‘Yes, yes, well, I think that’s all we need to say’ [laughs]. It turned out afterwards that one of the other officers afterwards told me that he was
Clark of Clark’s the shoes man, and he was nice enough, he took it very well, but it was really a – because I was used to talking to people and not really worrying too much about my Ps and Qs that I nearly ruined my chances, but they were – they were good sports.

[31:45]

‘Cause you mentioned as well you did cipher training at Bletchley.

Yes, there and in London, yes, but not the kind of things that Turing was doing, mine was just ciphering and deciphering and understanding how the machines worked if they were – if they broke down and how you mended them. And then the second part was on cipher security and breaking – breaking into messages that had been badly sent by our own people. People get tired and make stupid mistakes and in those days it wasn’t easy to go back and get a second sending of it, which anyway might have been a bit dangerous from a security point of view. So we had a – quite a long course on really breaking through your own ciphers to remedy the mistakes, which was very interesting, rather like three dimensional crossword puzzles. That was very interesting, I enjoyed that.

Who were you taught by at Bletchley, was it army people as well or civilians?

And civil, a lot of university professors … but they were very, very well organised and … I mean you had the feeling that it was – you were getting something out of it. Some army courses I think were run of the mill and just to put a tick in the box but they – they were very – very good and discipline was practically zero. You just attended the course and then there was a big mess, food was reasonably good and plenty of – plenty of places to sit down and read, it was all very civilised. And then I had a couple of days’ leave I think from there and then went on the train up to Glasgow and got on the boat.

So then you spent, was it six weeks the voyage you said?
Yes. We went out first to – in the direction of Halifax in Canada which seemed a bloody funny way to go to India to me but we were meeting up with convoys. Apparently in those days you went in the opposite direction to meet up with a convoy and then you – they decided on the route for the convoy, and we were the first convoy to go through the Mediterranean instead of going around South Africa. We went to Gibraltar and then through – which was quite – quite an experience. We were attacked several times by – by subs and one or two air warnings, they sank a little ship in the convoy but we got no information about it, they didn’t tell us anything accept when we had to put our lifejackets on. But you could tell from the thumping on the – on the hull that they were dropping depth charges into the water and you could feel the shock. But I mean apart from that it was – there was nothing going on.

*When exactly was this?*

I suppose it must have been end of ‘43. [Noise interruption].

*Are we recording this actually? Put that back on.*

We went to Malta and there was an air raid on Malta while we there, it was getting a lot of stick at that time. And then we progressed further to Alexandria and through the Suez Canal and on to Bombay, but all that was very – very calm. And down the Red Sea, and there were a lot of troops there in Egypt at the time and the favourite cry as we went along, ‘You’re going the wrong way’ [laughs] which was true.

[36:35]

*So how – what was your first sighting of India?*

Hmmm, it was very strange really, it was Bombay and we were allowed – because we, as I said earlier, we had no responsibilities on the boat so we were allowed off the first day in Bombay and I felt really at home, partly because I spoke quite reasonable Urdu and you could – I could easily get by. But the whole atmosphere just – I just felt it was home from home for me. I can’t really explain why but I was always at home
in India. And then we were let off the – off the boat formally and put in the hands of
the transit people and shipped off to – well, two of us went to Delhi and two went
straight over to Calcutta and to the front and both of them were killed within – within
weeks. But the two of us who went to Delhi, we – we were put in the – in the
headquarters which was the old secretariat building in Delhi, next to the Viceroy’s
palace which was then inhabited by Mountbatten who’d come out as supremo to the
forces. So I was privy then to the – the massive disagreements that went on between
the old Indian army generals who were there and the young Mountbatten who’d been
sent out to tell them to get a move on. They were – most of the generals like
Auchinleck and … Wavell was there for a time when I was there. I mean they – they
were brought up on Greek poetry and riding down the – the mall reading a book in the
morning and this kind of polo in the afternoon and … and Mountbatten’s approach
was quite different. And I was posted to Mountbatten’s cipher group, about six of us I
think, I was the new boy, er, and it was quite obvious that something had to give. The
Indian army generals thought in terms of during the monsoon you don’t fight, you
regroup and you polish your buttons and wait for the monsoon to pass and then you –
you start again, whereas Mountbatten, ‘I don’t give a bugger about the monsoon.
We’re going to do it …’ I forget when, I think March it was, and a lot of shaking
heads.

[40:00]

And so one day I came in and the head of cipher said to me, ‘We’re off,’ and I said,
‘Where are we going?’ ‘Well, I’m not allowed to tell you but it’s Ceylon and you’re
off tomorrow morning.’ So by then I’d inherited a group, a mixed group of Brits and
a few Indian soldiers, and we moved down with cipher equipment and books and
machinery and took the train down from Delhi right through Madras and down on the
ferry over to Ceylon, on the train up to Kandy and there in the Botanical Gardens
hastily erected headquarters had been built for – for Mountbatten and we had a cipher
office there.

How was Mountbatten to work for?
Oh, he was very stimulating, very stimulating. He, erm, worked all the hours that God sent and would – with his understandable weakness for the ladies he was always surrounded by officers from the WRENs in the navy who were, besides their other undoubted qualities, were excellent stenographers and – and they would take dictation from him and then he would – they would give us the transcripts that we would put into various grades of cipher according to who it was destined for. And then some of us had particular correspondence, you – only one person was allowed to correspond with that other person, so we – we saw a lot of very interesting traffic, particularly to keep him informed about the opening of the second front and this kind of thing. We used to get regular reports on that but it was so broken up that none of us had got the complete picture. Hmmm …

*Could you talk to each other about it at all or was it all –?*

We had a discipline and we were lodged and we messed quite apart from everybody else to reduce the temptation to talk about things.

*What did social life consist of in India?*

Well, in India not very much really. You could go down to Delhi and eat cream cakes and hear the palm court orchestra, but we worked shifts so that is not good for a social life. We worked nine hours off and then nine hours on and so on. One thing it taught me was that day and night are really the same thing, you know, if you’ve got time off and it’s dark then you sleep, if you’ve got time off and it’s light then you go out and do something but you don’t – you lose all sense, or I lost all sense, of well, it’s seven o’clock and therefore I must have tea, I – it completely … ruined that for me for life. It was a very great advantage later on in life ‘cause it never worried me, somebody said well, now you sleep for two hours, well I’d sleep for two hours, and I can still do it. The … but it was very relaxing.

[44:20]
I wasn’t very long in Delhi, I don’t know, three months or something like that I suppose, and then went down to Ceylon where we were much better organised and there was much more to do. And since I had responsibility for a small group I was more occupied in keeping them occupied and used to [coughs], pardon me, lead walks around the tea plantations and this kind of thing, take people to a tea factory to see how tea was made and rubber plantations, there was plenty to do. And the boys were good and the Indian soldiers liked it because we all went out together and the Brits tried to teach them more English and I could communicate in Urdu with them, it was good. And we … we worked quite hard, it was … but it was very rewarding and Mountbatten was a fantastic person and I – I ran up against him later, and his wife, and he remembered without any prompting at all, it was very strange.

How did you find pre-independence India? It’s not long before partition is it?

Yes, there was a – I mean a very obvious quit India campaign but it was, for my eyes – of course I didn’t see very much of it. It was very low key, the ordinary people were very friendly and there was no – no visible animosity. I got tired of, after about – I forget, about a year I suppose it was in Ceylon, and I told the officer I would like to go and see what was happening nearer the front so they moved me to Burma, to a cipher unit in – it’s on the island of Akyab which is about halfway down the Burmese coast towards Rangoon, which was a cultural shock after – after Ceylon but I used – and then I – they used to fly me back in a little plane to Calcutta for a week or two and then back again down to Akyab. That was good ‘cause you could buy gin in Calcutta and a case of twelve bottles just fitted under the passenger seat in the little aircraft.

You mentioned it was a culture shock being in Burma compared to Ceylon, can you describe that please?

Well, Akyab is, or at least was, the centre of one of the more primitive ethnic groups in Burma. They were called Mugs and never had any access to language at all and they were very, very reclusive although I tried to make contact. We did some bartering trying to persuade them of the charms of tinned pilchards in order to get some eggs but this in contrast to – and there was absolutely nothing, it was just marsh
land, mangrove swamps, a little village, and then the – the rough shacks that we’d
built. Whereas in Ceylon you’d walk down the road and find an ice cream shop with
an electric fan going, it was – or a cinema even. And when we were in Ceylon we
produced our own show for the troops, for about a hundred of us. I mean it was a
different life all together but in Akyab it was – there was absolutely rigorously
nothing. But we – we moved on from there on a ship down to Rangoon where we
were expecting that the Japanese would be but by the time we disembarked there were
no Japanese left, they’d all moved on to Malaysia.

[49:45]

Well, one of the things that we saw when we were there was the opening of the prison
camps, it was … literally a shocking experience finding the – ‘cause it was all hands
to the pump. We had to go and try and sort them out and find out what kind of
medical aid they needed and who was strong enough to be sent up the lines or onto the
boat that we’d just come on. And there were all sorts; there were Dutch planters and
English planters, Brit civil servants, ordinary military prisoners of war, although not
many – many of them. Most of them had been sent up north to the Siam railway, but
they were all in a dreadful state and we had strict orders not to give them any alcohol
because they – it would have been too much for them but we – we were looking after
them for two or three weeks until the medical caught up with us and then took them
over, but they’d had a hell of a time. Women as well, a few kiddies that had been
born in – during the imprisonment. It left me, I’m bound to say, with a very strong
anti-Japanese feeling for – for many years. It’s long since gone, I’ve got many
Japanese friends and I work regularly in Japan but at the time I couldn’t understand
the – the naked brutality of it. But then we moved down also to – from Burma on a
ship down to Malaysia, to Port Swetnam, and once again the Japanese had left so we
arrived and took over buildings and things and not a Japanese in sight. So this time
we went down – went down by train to Singapore and there there were a lot of
Japanese who’d been taken prisoner. We did a few interrogations on their cipher
people, looked at their cipher equipment and this kind of thing, and then the – I was
there for the signing of the peace agreement in Singapore.
How did you feel when that happened?

Well, it had been more or less inevitable for several months and in my job I was privy to more information than most people so it was pretty obvious that it was going to – going to happen. Whether it would happen with a bloody great bang or with a whimper was anybody’s guess but I was sitting on messages from Churchill to Mountbatten and Mountbatten to Churchill, and so they didn’t mince words between them. Hmmm … all spiced with messages from people like Noel Coward who were coming out to – to entertain the troops, it was a mixture of light hearted tomfoolery and really serious business.

Can you give me some flavour of the Churchill-Mountbatten communications?

Oh, it was very open, upfront and ‘this is what I need and if I don’t get it then you know whose fault it’s going to be’. And ‘we know each other well enough for me to be able to’ – I mean it was – it wasn’t a dear sir and your obedient servant, it was quite – quite the opposite. But I mean it was not exclusively on that but I had some – some visibility of that.

[54:35]

And then in Ceylon some exposure to the local Sinhalese freedom movement, which I saw more of than the Indian and some of my friends who were recommended to me from – from officer friends were in fact president and vice-president of the free Ceylon movement and I used to go to their house and eat with them and his father, the – Koenneman’s father was the lord chief justice of Ceylon, so it was a bit of an ambiguous situation. He was one of the leading civil servants and – and his son was the president of the free Ceylon party or whatever they called it, but they were charming people and –

Sorry, who exactly is this?
His name was Koen – Koennemara, originally Portuguese but mixed so they – they considered themselves Sinhalese, and he was the lord chief justice. He used to go between Columbo and Kandy, so when he came up to Kandy and I was there we’d see him and have dinner with him. It was all very – very civilised and – they were both from Oxford, both his father and son.

*So the war ended and what did you do then?*

Well, I was in – in Singapore and we were, as I said, picking up the pieces and – and then a message came there saying that Captain Gibson, because of his knowledge of German, should fly back as soon as possible to the UK. And I boggled a bit at this ‘because of his knowledge’ of German because the opportunity to speak German over the previous two and a half years had not been all that many, I would have been much happier if they’d said Urdu. But within 48 hours I found myself on a York transport plane flying home.

*Oh, they flew you home rather than shipping you out?*

Yeah. And we were in Singapore, we stopped in Columbo, we stopped in the Gulf somewhere, we stopped in Cairo, we stopped in Malta, and then we made – from Malta we made it all the way home. And the – the rush had been because they needed somebody for army headquarters in Germany, in occupied Germany, and a new system of coding, decoding, had been developed which we didn’t have in the Far East so I had a – a crash course for two weeks in London learning how to use this new apparatus and then went to Vienna to the headquarters of the army there and had some interaction with some Austrian officers who’d been in the German cipher group trying to learn a little bit more about cipher security and that kind of thing, and then moved to Badenhausen near Hanover.

*What were your impressions of Germany immediately after the war?*

Well, it was pretty terrible in Hanover. You could see from one side of Hanover to the other, it was just flattened. People were living really on the margins, doubled up,
trebled up, quadrupled up in such houses as remained and, er … food was very scarce.
And I had a bit of contact with German people because of speaking German and I
never – funnily enough, never had the same aversion to Germans after the war as I – I
don’t doubt that their camps were just as terrible as the Japanese but I wasn’t exposed
to them personally as I had been with the Japanese camps, plus the fact I’d always had
a good regard for – for Germans, German literature, German music, I was much more
attuned to it. So there I was – oh, I met a lot of Germans and in a quiet way had a
little social life with them, which was not encouraged.

No?

I mean it wasn’t forbidden but it wasn’t encouraged and I think I was looked on as a
bit of an oddball, particularly coming back from the Far East where … for my mind
the attitude of troops in the Far East was quite different to the attitude in a British
soldier in Germany. Hmmm … and black marketing seemed to be the main
occupation. I remember I was orderly officer and went around with the sergeant
major and looking in the barracks, came to a room and said ‘What’s in here?’ ‘Oh,
that’s not to be opened’ ‘Oh, I’m very sorry, I need to have it opened.’ Had it opened
and on one side were Leica cameras in a kind of rack and on the side there were
cigarettes, coffee, tobacco, and this was the – the staging post and you – you came in
there and you drew your ration of cigarettes and you went out and bartered it for
whatever you wanted and came back and put it in with your label on, on the rack. I
was really appalled by this.

What did you do?

Well, I reported it and was told by the colonel that I had twenty-four hours to
withdraw my report, and when I declined and so they were forced to – so then the
military police were brought in and the cameras were confiscated and, er, I took a jeep
out the – the next day and the brakes had been sabotaged and I was thrown out of the
jeep onto the autobahn and badly injured my left leg. It was never really … proved
that it was sabotage but – well, I was a reasonable driver and I knew – I’d even been
at one stage in India on a two week driving and maintenance course so I wasn’t likely
to do anything stupid with a jeep, but that’s the way it was.

[1:04:00]

But Badenhausen where we were was a spa and that one thing that had survived all
the war was the spa buildings in the spa, so I had ten days of glorious lounging about
in spa waters and – oh, it soon – it soon passed over but it was – the whole
atmosphere was … funnily enough we had more discipline, more day to day
discipline in the Far East than there was in … in the cipher office for example we had
quite a lot of women officers who had come and I remember one evening I was in
church of a shift, it was a big, a big office, I suppose there must have been about
twenty or so people on the shift, and a sergeant major came in and – who was not on
the shift and he was drunk and started to mess about with one of the lady officers.
And … I was appalled because nobody seemed to – they all thought it was not very
good but nobody thought it was contrary to military discipline and I had the man
arrested, er, and everybody thought this was terribly strange, ‘Good God, you’ve
arrested …? Do you realise he might lose his rank?’ Lose his balls as far as I’m
concerned, don’t come in my cipher office and do that kind of thing. So I think to say
I didn’t fit in would be an understatement, and I’m not claiming that I was right, I
mean I don’t know where right is on those kind of things. You make your own
judgement and that’s the way it is and I thought it was scandalous.

Were there any other differences you noticed between troops in the Far East and
troops in Europe? You mentioned the difference in mindset which I’ve seen elements
of but –

Yeah, well, they were obviously more prepared to live on the country rather than in it.
They were not at all interested in Germany as Germany or Germans as Germans, it
was very much a ‘what’s in it for me’ attitude. It’s hard to judge, I mean most of
them had done quite a long trek to get into – into Germany and some of them must
have had difficult – a difficult time of it, but still walking through the jungles in
Burma wasn’t a cake walk either and yet I never saw any signs of abuse or – even of
quite primitive peoples. And when we were in Malaysia, near Kuala Lumpur for example, my boys were – would do anything rather than hurt or damage the property of Malaysians who were there. They were very, very respectful … it was a different attitude to – to life. Maybe it was because they were manifestly in a very foreign environment whereas in Germany although it was foreign it was still Europe and it was nearer to them, so they perhaps felt released from – from any soft soaping.

[1:08:10]

But I was very pleased when the coalition government had come into force and we got flooded with documents from London. This had started actually when I was in Malaysia, opportunities for people coming out of the services and this for me was an absolute eye opener because they were encouraging people to apply for jobs that I previously thought were well out of my range. Well, one example was colonial police force, hmmm, I forget how many vacancies, but several hundred vacancies for the colonial police force. This was really a non-existing force because when you were accepted you were immediately allocated to a colony or a territory, so there wasn’t any force as such but you went through the selection process. So I applied and forms were ready there for you to fill in and you were encouraged to apply, and they had people coming out from the UK who gave talks in the evening about what their life was like and what the salaries would be and the conditions of service. And I could scarcely believe that this was – I mean they did the same for the Foreign Office and home civil service, so I applied for the colonial police and by the time I got to Germany and brought back from – from Malaysia I had my first interview in London with a gentleman in the colonial service there and he, after two hours, said, ‘You’re in the wrong service.’ And I instinctively thought I’d shot too high and he said, ‘No, you should be going for the Malaysian civil service, that’s the real place to go for. So I’m going to take you out of the police recruitment and shove you into the higher civil service group.’ And he said, ‘While you’re at it you should apply for the Indian political service. They’re only taking on two people.’ This Indian political service was a very elite mob, I think at the – at their peak there were less than 200 of them and they were all – all over India as the political representatives, I never dreamt of even trying for it. So I had these two applications going and I went for interviews
from Germany. This was the other good thing, you got free rail passes and free hotel
passes to go for your interviews and COs were told that this had priority over
everything except top grade operational duties.

[1:11:50]

So I did, I think, two interviews for the Indian political service and two for the
colonial service.

*What does an interview actually consist of at this point? Is it –?*

The first interview was with just a couple of civil servants who were going through
your CV and checking your languages and just making sure that you were not a – a
conman. And the second one was with a board, five or six people, and that was a bit
more severe and more general. And the third one, before the Indian political service,
it was held in what was then India House in Whitehall in the banqueting hall, an
enormous wood panelled place, and there must have been twenty people at the table
including a fiery young brigadier. And the chairman started off in a very gentle way
how pleased he was that I’d been able to come over and this. And then he said to the
brigadier, ‘Oh, General, he’s all yours.’ And this old man charged into me, first of all
he said, ‘I’m surprised that a man like you should come improperly dressed to a
meeting as important as this,’ and he paused and I didn’t say anything. He said,
‘Well, what are you going to say?’ I said, ‘I’m not improperly dressed Sir.’ You
should know that in the Royal Signals your emblems – you had two Mercuries and
they were supposed to face inwards and it was a common mistake when you put them
on, you put them on the wrong way round and they look outwards. And he said, ‘You
know your Mercuries?’ And I said, ‘My Mercuries Sir are looking inwards’ ‘Are you
doubting my word?’ I said, ‘Well, we’re not really sir discussing your word, we’re
discussing my Mercuries.’ ‘So you insist you’re properly dressed?’ ‘Yes Sir, with
respect.’ ‘Oh, well, then let’s move on.’ ‘How many hours a day do you think you’re
going to work?’ And I said, ‘As many hours as are necessary, I’m not limited.’
‘That’s no answer, I want a mathematical answer.’ ‘I’m very sorry Sir but you can’t
have a mathematical answer. The answer is I will work as many hours as possible in
order to do what there is to be done.’ ‘This man’s impossible, this man …’ and he went on like this at me and I got really a little bit exasperated but managed to keep it under control. It went on for about half an hour and at the end of this he said, ‘Oh, well, that’s … I’ve had enough.’ So the others asked a few desultory questions and the – the chairman, then he said, ‘We’re most grateful to you for having …’ And I eased out and as I got to the door a little lady said to me, ‘Here’s your number for coming back afterwards,’ and I said, ‘Christ, I don’t need a number, I’ve just had a hell of a row.’ She said, ‘Who with?’ I said, ‘With the – the Brig’ ‘Oh, that’s excellent, oh, that’s very good, that’s good news. Take your number.’ So sure enough I came back at two o’clock and I’d been accepted. This was just his ploy to see whether you could, so to say, stand up under fire, and I was then offered one of these two posts with the Indian political service. And later that afternoon I had the final interview for the colonial service and this was a completely different affair, it was in the old colonial office in Victoria Street and five academics, or near academics, were there and we had a very calm and quiet discussion for about two hours, at the end of which the chairman looked at his fellow members and said, ‘Well, I think we can call it a day now. I have great pleasure, Gibson, in offering you a post.’ So, ‘Thank you Sir,’ and I said, ‘May I think about it overnight?’ He said, ‘Well, yes, yes, please come around at ten o’clock in the morning.’ So I had to think which of the two I would take, so I decided that was the one to take and I went back to the India office and saw the little lady and said, ‘Between you and me I’ve got another offer so you can tell the old man to … well, I do not require his post.’ Which was good really because India and independence was on a fast track and these two posts, I don’t know whether they ever actually arrived in India, I think they took the next man down to give to him and I think he was bought off for 500 pounds or something because Indian independence was so advanced that it was silly to – to recruit people.

[1:18:00]

And was that why you chose to go to –?

No, no, but the atmosphere pleased me much more and I’d been in Malaysia and I’d seen what a lovely country it was and I’d made a point all the way through of saying I...
wanted the colonial administrative service but only if it could be in Malaysia or in Borneo, not for Africa or the West Indies or the other places, which they accepted. It was … it was really a luxury for me to – to be dealt with so – with so much consideration. The whole atmosphere was – and I remember in the – in the final interview the chairman saying, ‘I do want you to realise that you’re – you’ll be going to Malaysia to help them win their independence as quickly as is practical. You are not going there to perpetuate British rule.’ And I thought this was a new sound and it came directly from the – from the Attlee government but they were punctilious about this, and this pleased me very much.

Why did you choose to go into the colonial service in particular, when you had these other options, the Foreign Office, the Home Office, that sort of …?

I suppose because I felt so much at home in India and in Ceylon and in Burma. The idea of living out there, in peace rather than in war [laughs], appealed to me very much. But it wasn’t just to get away from England, I wouldn’t have taken Nigeria or – because I would have felt out of place and unable to understand the local problems, whereas in East Asia I felt very much at home; I don’t mean very much at home in a patronising way but I felt I understood the problems and understood the people, and I thought I could do a good job there.

How did you feel about the Empire at this stage?

Oh, I always thought it was a bit of a scam really, and what the hell were we doing there, I’ve never been terribly impressed with empire. I suppose to Canada or Australia or New Zealand, which for me were kind of outlets of – of British population, but I never really understood what we were doing in India or in Malaysia.

Was that attitude common amongst your friends, colleagues?

Oh, amongst the younger people, yes, amongst the people who came out with me it was very common but not so much with the older people, although many of them chose quickly to – to leave. Shall we have a little break?
Could I ask one final question –

Yes, of course.

Which just relates to the same –? I was about to say the same thing actually, but you mentioned that you were in favour of the Attlee government when it came in. Could you just tell me why?

Well, I mean he was Labour and this – this opening, his whole attitude to – to class, to social benefits, to health insurance, the Beveridge plan and things like that, I mean this was right up my street.

[End of Track 2]
And we’re running.  *Sorry, you joined the colonial service …?*

Yes. One of the interesting things about the entry to the service at that time was that a commission had been set up by Lord Devonshire to – with the cooperation of Oxford and Cambridge to receive eighty students each bound for the colonial administrative service and to pack into an academic year what you would normally do in three. And instead of being just one faculty, several faculties, so you had six, seven and sometimes more lectures in a day. And we did anthropology, colonial history, economic history, world history, geography, meteorology and climate, some transport and engineering, a whole host of – of things taken from every faculty you can think of. Then the whole law side, criminal law, law of evidence, criminal procedure, and we were farmed out amongst the – the colleges and the lectures were arranged either to take part in the lectures that were already being given in the college or specially prepared for – for the course. And in the vocation period we had attachments to law court, municipality, the lord mayor, where you were expected to follow the lord mayor around during a week and see what a lord mayor did and didn’t. How a criminal court works, sit with the magistrates on the bench, go to a lawyer’s chambers and see how they produce a brief. I mean it was just all go, all the time. And then we started in parallel in the summer holidays intensive course at LSE on economics and trade, and at the London School of Oriental and African Studies I started Malay and others started whatever language they were going to need. So I think there were about eighty of us all together … of whom twelve were for Malaysia, for Malaya. And I’d used this time to – to get married in between, so my wife was with me in Oxford and was allowed to go to any of the lectures that she liked, particularly the Malay ones, so she learnt Malay at the same time as me.

*How did you meet your wife?*

My wife worked in the same transport office in 55 Piccadilly in Manchester and so we met – we met there. And when I was hastily recalled from Singapore to Germany I was given three days’ leave, so during the three days we got married.
Had you been in contact during the war as well?

Oh, yes, yes, yes. I’m not sure it was a good thing for either of us but it happened and –

What was her name?

Fallowes with an E, Fallowes, Jean. Her father, as I think I mentioned, was the head of the Home Guard in the transport and was quite a big nut. I think he was the head – the chief uniformed man, in the transport department. There was always a great distinction in those days paid between those who wore uniform and the municipal civil servants who didn’t wear uniform, but he wore a splendid black uniform full of little knobs and things. So we – we did this eighteen month course. It was rather strange because most of the people who were up at Oxford at that time were nineteen, twenty year olds. We were not all that much older but most of us had seen three, four, five years of war and many of us were married so we were kind of a different generation of undergraduate and the … the normal discipline of undergraduates at Oxford didn’t really apply to us. Well, they could hardly – we were married and we were living all around.

[06:50]

I think in retrospect I didn’t profit from Oxford as much as I should have done, but this is partly because unlike most undergraduates we had very full days. There was very little down time to join societies or – and even in the evenings we had a seminar three times a week where a subject would be chosen, should Malaysia have independence and why, and this kind of thing, run by the dons who either had or had acquired a knowledge of – and there were some excellent – excellent people there. At SOAS we had, and LSE, we had Raymond Firth who was a brilliant anthropologist and who had done his early fieldwork in Malaya.

Was he a good teacher?
Excellent, yes, excellent. Absolutely impervious to language, how he managed to do his field studies with the Malay fishermen, God only knows, he must have had an interpreter. But he used to tell the story himself about going on ski holidays with a friend who gave him up as a bad job for teaching any German and so decided all he needed to know was ‘great gott’ instead of ‘great Scott.’ So whenever he met anybody in the streets, ‘Great gott, great gott, great gott,’ [laughs]. He said that was the limit of his – his German but a brilliant man and made a great impact on many of us who went to Malaysia. And Sir Reginald Coupland, the historian. We were – we were really very lucky and very well looked after. They’d taken over what I suppose had been a flat, or a rather large flat, in the centre of Oxford and they made this into the colonial club so we could have lunch there every day, and in the evening if you wanted to as well. Because we had very little money the – we had an allowance but the allowance was just about enough. It was the time when revision of salaries hadn’t yet taken place, people were still on wartime salaries or very near wartime salaries and prices were increasing so we – we hadn’t got two ha’pennies to rub together.

Which college were you actually assigned to?

Wadham. And they were very – very good to us and treated us extremely well. Hmmm, Bowra was the warden when I was there, ancient Greek, very –

Did you enjoy your time at Oxford?

Oh, yes, very much indeed. I could have stayed there for a long time … in spite of my father’s dire warnings.

[Laughs] This sounds a very rounded course they got you on, there’s a lot of things in it.

It was enormous, it really was, and I think they did it three times to stock up the colonial administrative service and we went on the very first one and it was –
everybody obviously wondering whether it would work, and not least whether we would cripple under the load because it really was quite – quite heavy going.

*And did you cope with that sort of workload?*

Oh, yes, and again this was my war, although it had never seen much blood I’d worked very hard long hours and shift work and this kind of thing, so it was – it was relatively easy for me to – to do a fifteen hour day and not really worry about it.

*What was the overall aim of this well rounded education?*

So that when you came to the territory you could be used either as an assistant district officer, which explains – I didn’t mention there were a whole raft of lectures on agriculture. You could be at home with rice planters, you could know the problems of the climate of the monsoon, the importance of this in planting rice. You could understand the difficulties of tapping rubber trees, you knew how to build rough shelters from next to nothing, how to make laterite roads so that you could run a jeep over them and – and at the same time culturally know which knife and fork to use if you were in a secretariat, because you might find yourself private secretary to the sultan or something like this. So that – I mean when we arrived we were told we could forget everything we’d been told and now we could start to learn what it was all about, but this was really only a defence mechanism from the people who were already there, it wasn’t really true. I don’t think they really believed it either. We were much more useful to them, not least so we could speak Malay.

[13:40]

*Oxford, the LSE and SOAS, that’s –*

Yes. [laughs]

*That’s a brilliant combination of all three. That CV you said, for instance, I was trying to figure out how you’d fitted them all in –*
Yes.

*But now I see it’s all at once [laughs]. How did they compare to each other?*

Oh, LSE was a complete shambles. I mean it always seemed to me to be on the verge of revolution. There were always meetings going on in the halls, in the corridors, against or for something or other. Teaching seemed to be a secondary consideration, it was very turbulent whereas I found Oxford very considerate and very calm and very gentlemanly, and teaching standards very high. Teaching standards at LSE were very mixed, some brilliant like Firth, and others a bit gummed together. But it was well worth doing and – and they also supervised our field trips so that when we went to law courts we knew – we knew which magistrate we were going to sit next to and when we went to the county council and it was all – it was all arranged. LSE did all that, they were very good.

*How about SOAS?*

SOAS, excellent standard of teaching, really first class. And I was very lucky because the – one of the teachers was in fact a Malay who was in the Malayan civil service and he’d been in England when the war broke out and couldn’t get back and so he worked for the BBC on the BBC Malayan service and then when the Devonshire course started he took the Devonshire course with us but when we came to SOAS he became a teacher instead of a student. And in fact he became the lord chancellor, lord chief justice and lord chancellor, in Malaya. A Malay married to an English girl.

*What was his name?*

Suffian, S-u-f-f-i-a-n, and became one of my oldest and longest friends. He died just a few years ago, and both my wives, my first and my second, were very fond of him. He wrote the constitution for Malaysia and was very influential.

*What was he like as a person?*
Oh, delightful. A wicked sense of humour, hmmm, very good value. He used to come regularly to us when we lived in Spain, they – they would come and spend a month with us in Spain and then he worked for – as an ex-pat in Geneva at the United Nations in the international labour office and others, so we used to go over and spend some time with them in Geneva and be very intimate, good friends.

Did you have any other good friends at this time?

In Malaya?

Or when you were still in England.

When I was still in England? Well, the twelve of us who were from Malaya were very close ‘cause we were all at Oxford together and – and particularly when we were in London, ‘cause the people from Cambridge then joined us and we were all there together. And we went out on the ship together so we did practically everything together. And I kept up with them of course when I was in Malaya and even afterwards.

[1:18:00]

So when were you actually sent to Malaya?

I think it was … it must have been December of ‘48 or January of ‘49 I suppose, I think that’s right. And we all went out together on the boat and, er, by this time my wife was pregnant so she had not only sea sickness but morning sickness, but the rest of us had a very jolly three week passage to – over to Penang. And then in Penang we were transported to Kuala Lumpur to be looked at by the, what we would now call human resources people, who explained to us that there were three branches to the service; the Malay branch, the Chinese branch and the Indian branch and we could choose which branch we would like to go to. So I chose the Chinese branch and the following day was allocated to the Indian branch. It was a bit like the British army in
that respect, it would have been better to have said Indian then I’m sure I would have got Chinese but the – there was some phoney logic behind it. Because I’d been in India during the war and ‘cause I spoke Urdu they were sure that it would be better for me to be in the Indian branch ‘cause I would have to learn Tamil and Tamil, as everybody knows, is very close to Urdu. I once sent them a list of the six common words between the two languages, I mean they’re completely different, the writing is different, the – everything is different, they couldn’t be more different, but this was the logic behind it and the guy who sent us had a big map of India in his office and he said, ‘You can go to India next week,’ and I said, ‘Oh, yes, whereabouts?’ So he put his elbow on Calcutta and his hand on Bombay and said, ‘Oh, in the south, in the south, that’s where they speak Tamil.’ [coughs] So closer investigation found out that the Malayan government had a, I don’t know what you call it in English, it’s a – it was a little town within a town outside Madras and it was the – the station that was used for Indians who wanted to work on plantations in India. And the immigration was very controlled, not so much in numbers but in terms of health, and people who came had to spend a week in this camp being examined and to see if they were fit in order to make sure that we weren’t taking an undue number of TB people back into Malaysia. And this was really like a small town, I think it could house 5,000 people, something like that, and then there were big administrative block and there were three houses which were in their heyday used for the Brits who lived there, but of course the – during the war there’d been no immigration and it was all a bit run down but we were given half of one of these houses with a family. And the camp, three quarters of it was taken over by refugees from Sindh from northern India ‘cause the partition of India had happened, and the Hindus who were on the – who were on the wrong side fled back into India and vice versa. And the Indian government asked the Malayan government if they could use these barracks, which were very good and very sanitary and plenty of water and latrines and things, so it was full of families, Sindhi families, who’d been evacuated and a little part reserved for the Indians who were still coming to work in India. And once a month there was a boat that came, it did the backwards and forwards between Penang and Madras and took a load of immigrants and brought people back from – from Malaysia.

[23:50]
What did your duties actually consist of?

I was there to learn Tamil and I was given a year to learn Tamil, an allowance for a teacher and absolutely no help whatsoever, but the people in the – in the camp, the residents, were very, very helpful and they put me onto an Indian landowner who in the past thirty or forty years had taken on three or four students, British students, to try and keep his English up to scratch, and so they got hold of him and asked him if he would like to take on another student. So he came and had a look at me, decided that he quite liked the look of it and took me on. He had quite a lot of land around the place and he also spent five months of the year in Bombay writing scripts for Indian films, hmmm, and chasing girls, sometimes both at the same time I think. He was a Brahmin of the highest category and would have nothing to do with this abolition of castes in India; that was Delhi, this was Madras. He spoke very good English, had an MA in English literature, and really very well educated but a Conservative of the worst possible kind.

What was his name?

Krishnaswami Iyer. He used to arrive in the morning about six before it got really hot, would take off his pith helmet, and stand on his head in the corner of the room and start to conduct the first lesson. At the beginning it was rather difficult ‘cause I was anxious to make eye contact the right way but this proved a bit much for my neck. I was in all sorts of positions to try and meet him but then gave it up, because he would spend about half an hour like that but as if it was the most natural thing in the world. And he taught me for about six months, about four hours a day, and then set me things to do in the evening, mainly talking to people and then reporting on it. But then we had to do trips into Madras, we had to go to the cinema and see some of his films. We had to buy cloth for the, what do you call it in English, diapers for – for the child, for the baby who was going to be born, and they had to be of a particular cloth which was very difficult to find. So we went in twenty shops, and treated them like dirt because they weren’t Brahmins and eventually found what we wanted. Another time we did a field trip in the market to find the only rice that he would
consent to eat which came from a town called Conjeevaram which is instantly recognisable to the expert if you roll it between your fingers, which we did, in at least fifty rice shops in Madras [laughs].

[28:00]

He was absolutely impervious to people’s feeling and at the end of six months he wanted them to go to Bombay for a few weeks and it was getting really very hot and my son had been born and it was well over 100 degrees. So he said, well, he would give me a final examination and then I could go to the hills where he would make arrangements. And the examination consisted of being dressed as a Brahmin and being daubed suitably and going round with buses and trains to see five of his cronies and getting a stamp from each of them to the effect that I was still dressed as a Brahmin, had still not spoken any English, and then I could go on to the next one. And I had to have this – these five stamps before he would recognise me. It started off very inauspiciously in – in the main railway station in Madras where we arrived for the train, travelling second class, not first class. We got into the compartment, both of us, a large compartment, very full, to which Swami said, ‘Move out of the way because this gentleman is going to sit there,’ so the – the guy more or less willingly gave up his seat and I sat there. And he said, ‘Now, got all your instructions?’ ‘Yes.’ ‘Well, goodbye, have a nice trip’ and he got out leaving me with about fifteen non-Brahmin Indians looking at me rather askance. But of course the advantage was they hadn’t the right to address me. If I deigned to speak to them they could reply but they mustn’t of course speak to me. So I did the trip, it was very interesting actually, and his cronies had arranged these trips, temple trips, for me to see some of the most beautiful temples, one a temple of a thousand pillars and got in to see the – the local … sadhu, the mainly doped up with one kind of cannabis or another but very interesting people.

[31:00]

And then we came back and we arranged with another cadet who had not taken his Tamil very seriously, he’d been off with his mother living the – the gay life, hunting,
shooting and fishing in places, taken on servants who when he took them on didn’t speak a word of English and by the time they arrived they spoke very good English and Willy didn’t speak a bloody word of Tamil. And we took a house in Ootacamund, a bungalow, at about 8,000 feet. It’s at one of the hill stations in south India, a lovely climate, and, er, I’d arranged through Swami that I would have two teachers to break it up a bit. And I had one who was a local teacher and one who was a – an announcer on the local radio, er, and he came in the evenings. And so reluctantly Willie accepted that he would have the same teachers, so we – we were able to monitor his progress, which was slightly faster than tectonic plate movement, he – but he enjoyed life. He got me into terrible trouble once, we used to – because my teachers were very enterprising, used to go to marriages or festivals, anything where there were a lot of people, and we went to one marriage with a teacher and he left us there to go and do his own teaching, but I knew the form by then and I said to Willy, ‘The father of the bride is going to come round very shortly and he will expect some compliment from you, not a present but a compliment, so you’d better start thinking what you’re going to say.’ So this put him in a bit of a tizzy but after a quarter of an hour he said, ‘Okay, I’ve got something.’ So when the guy came round and saw me and I said something to him and he embraced me and was very happy, then he went to Willy and Willy thought he said to him, ‘Your daughter looked very proud today’ but what he actually said was ‘your daughter looked very pregnant.’ The word proud is very close to pregnant in Tamil and the guy was not terribly pleased until I intervened until I explained that Willy was severely handicapped [both laugh], so it all blew over. So we stayed there for a few months, I kept asking Kuala Lumpur when they wanted me back and got the answer, well, as soon as you think you’re ready. And I said, well, I’m ready now but they – actually what they were waiting for was a field post for me to take over. So we went back on the ship and I arrived in Penang and the local people there gave me an envelope which gave me my posting to Malacca where I had the very grand title of deputy commissioner for labour and protector of children, women and children, which was the subject of a good deal of teasing from – from fellow civil servants who thought that if women and children had been given into my care all was pretty well lost for everybody, but that was the name of the post.
Sounds a very grand title.

It was a statutory title and it was not as stupid as it may sound because you had to work with your office door open so that anybody, any woman or child, could come in and see you and they didn’t need an appointment. They could come and say I’m being bullied or my boss at work is not paying me, open door. And I was obliged to take this down and to listen to them and to investigate it, apart from the other function but this was a statutory function. And it was really quite – quite revealing to see how people had got used to this system, it was – it worked very well. It was sometimes enough for the woman to say, well, if you don’t pay me I’m going to see the protector of women and children and he would say, well, rather than that, you know, well, okay, we’ll settle up with you.

[36:20]

So what did your duties actually involve in that respect?

Well, mainly – apart from that I was inspecting rubber plantations and coconut plantations and palm plantations in general, looking at conditions, listening to complaints, looking at the conditions of the housing, the lavatories, the cooking facilities, the wages, the books; were they being paid? Sometimes some of the Chinese plantation owners were getting the people into debt by making them buy from the company store and then taking it off their wages and there were all sorts of shenanigans going on. And also looking after the docks, and two or three days after I arrived there was a strike on the docks which was quite crippling for Malacca ‘cause it used – the harbour wasn’t very big and they used small boats to go out to and from the larger ships, and all these guys went on strike mainly because the Chinese owners had been cheating them. And one of the first jobs I had was to try and break this strike or settle the strike and to bring peace, and I had the Chinese labour officer, a very, very clever guy who said to me, ‘When you’re negotiating with these people you need to do it continually. If you do it during office hours and go away, when you go back the following day they will have reverted to where they were the first day, you don’t make any progress. They’ll argue themselves through the night and even if you’ve
got an agreement it will all be out of the window. So could you please bring a sleeping bag with you and a knife and fork if you can’t use chopsticks?’ And we moved in with them and for several days we negotiated and we – I learnt to play Mah-jong there. I decided that I need to learn Hokkien, which was the local dialect, so I made a start on that. And after two weeks or ten days we’d settled the strike and everybody was happy, I could use chopsticks as well as the Chinese, ‘cause that was the only way of eating. I could play Mah-jong like the Chinese and it was a good investment all round.

What sort of staff did you have to help you at all?

It was – I was the only European but we had about twenty staff of all three of the main ethnic groups, Malays, Indians and the Chinese. The Malays were the majority, they formed the kind of clerical base for the office but then we had one or two Indians, one or two Sikhs with whom I was able to speak Urdu, to everybody’s joy, and they did most of the finance work. And then Chinese for some of the technical work on the – on the estates and on the ships, so a very mixed grouping. And when I’d been there for six months we got a sudden change because the emergency had broken out. It won’t mean anything to you but it was the communist emergency arising, the revolution, and so they moved people around and I was moved out of – out of Malacca and up to Penang, which in fact was a more senior post.

Did the emergency affect the area you were actually in when you were there?

Oh, yes, particularly – Penang, as you may know, is an island but the – the administrative area also covers the mainland, that used to be known as the province of Wellesley after Lord Wellesley who was governor there and, er … I think there were as many people on the mainland as there were in Penang but the plot on the mainland was full of rubber plantations and an enormous industrial area on the opposite side known as Butterworth. So it was a very varied labour office, a lot of shops as you can imagine, a town as big as Penang, a lot of tailoring, a lot of light industry. And on the – at the back of the island, agriculture, and on the other side the port and lots of – all kinds of plantations. So it was a big – a big job. And on the land side the communists
were quite active. I was a bit scornful of it because the main activity was a little bit further south and north, so while I was there I got into trouble a few times because – because I used to go out on my own in the car, but the chief of police was not very happy with it.

[42:30]

Did your duties change during this period then?

Well, yes, having acquired a reasonable knowledge of Hokkien I took the first government exam, found nobody spoke Hokkien in Penang, they all spoke Cantonese. So back to the drawing board and got myself a Cantonese teacher and started on Cantonese, and took the first government examination in Cantonese which was very good because I could go from one to another, from Hokkien to Cantonese, cover most of the Chinese in the area. In Penang there’s a very big Teochew community but if you press them they’ll speak Hokkien. And gradually of course the private schools were beginning to insist on Mandarin, the national language, and this was the – the cultural face of the emergency. The teachers, many of whom had come from China, were in fact agents, communist agents, and the idea was to implant Mandarin as a – as the language that everybody had to speak. Most of them, including the educated ones, didn’t – didn’t speak it. They could write it, you know, it’s the same ideogram whatever your dialect, and you’d see them talking to each other and writing the ideogram when they didn’t understand or when they couldn’t say it.

How did you actually get on with the locals?

Oh, very well. We were completely – completely integrated with them, Chinese friends, Indian friends, south Indian friends, and relatively few English friends ‘cause Penang didn’t have a very big European population. But I was pretty busy anyway so if I could spend an evening with Indian people it was more to my liking and more to my job to understand what’s going on in commerce and …
Sounds like you were very integrated in the society you were in which is – it’s interesting, I hadn’t really thought about the colonial officials working in that way.

Yes. Not all of them did but I’ve been very, very lucky with the people I’ve worked with and in Penang, for example, the – the resident commissioner was one of the really old school but he spoke a superb Malay and, er, was very, very well attuned to Malays, but he had a complete tin ear for anything that was Indian or Chinese, so his whole colonial education was to understand the Malays. And the politics, particularly in a place like Penang which was commercially very, very advanced even in those days, Malays played virtually no part in the commercial life so he as resident commissioner was very handicapped because he didn’t really know what was going on in the – in the commercial world but he was good enough to know this and used to use me. He was a great mammoth man.

What was his name?

Aston, who was really very generous and very outspoken and sometimes too outspoken for the people in headquarters in Kuala Lumpur but very good for junior officers like myself. And he knew how to use us and use the contacts that we had with the Chinese community, so he was much better informed than he had been before I arrived.

[47:30]

What did your social life consist of at this point? You’ve mentioned friends from a lot of different areas.

Yes, well, mainly going to restaurants. We used to eat in each other’s homes and treat each other to dishes, local dishes, and European dishes and – not an enormous amount of drinking but a certain amount of beer drinking but nothing – well, we didn’t have much money, that was one of the reasons but there wasn’t really a lot of savages’ drinking going on. In Chinese quarters they – there was more because it was a matter of honour that they tried to get the host, the guests, drunk as a matter of politeness.
more than anything else but there were a number of devices that help you to survive that situation.

Such as?

Well, in Cantonese bottoms up is yam seng but if you say yam cheng it means I’m just drinking a little. So they would say yam seng and I would say yam cheng, and they would roar with laughter but they would accept that I would only just take a little drink, whereas if I’d said in English, ‘You must excuse me, I’m only going to have a little bit,’ they would have laughed their heads off. Little devices like that. Also they – they were very – very caring, they wanted to know about children and with my young boy we were always invited all over the place as a family and in fact my son spoke Malay before he spoke English. He had a Malay nurse and my wife spoke very good Malay and we operated in Malay for – in the house. It was a bit silly to speak English and then translate to the servants when we all lived together, so it was only when we were on our own that we spoke English, so my son was fluent in – in Malay.

What was your son’s name?

Paul.

Another monosyllabic name. [both laugh]

Yes. And – but the emergency was getting stronger when we were there. Penang was spared most of it and mainly because it was an island, so it was difficult for the – for the communists to move in and out of Penang. There were – there were a few resident bandits in the jungle in the centre of the island but not very much. It was mainly intelligence gathering and money gathering that they did in Penang. And then I – because of the emergency I got a leave earlier than you normally do, after two years they – they sent us back because they wanted me to become a district officer. Hmmm, until then I’d been in a government department but not in a district office, so we went home and while I was there the wife of a district officer in the centre of Malay was murdered, she and her husband and the chief of police were ambushed on
the road and the two men escaped but she was shot and so they – the men escaped and they moved the district officer to Hong Kong within days, so we were brought back on the double to – to take over.

*So what did you actually do when you were in England, was it training or –?*

No, we were just on leave, holiday, and, er, my father was still alive and it was the last time that we saw him. And he was very taken with Paul and I was able, ‘cause he wasn’t terribly well behaved, to give him the most dreadful threats in Malay which his grandfather mercifully didn’t understand, so that kept him more or less in line.

*Did he speak English by this point?*

No, only a few words ‘cause we were moved straight out very quickly on leave and we didn’t stay very long, but of course gradually he began to speak English but he was more at home in Malay.

*How did your family like living in Malaya?*

Oh, they all loved it, yes. And of course the key to it is language, with my wife she was quite fluent in Malay and in writing. In those days Malay was often written in the Arabic script and in the offices I worked in, in Arabic script. It’s only after independence with – and in an attempt to get nearer to Indonesia that they kept Arabic script only for religious documents and the rest was all done in Roman script. But in my day, certainly when I was in north Malaya, all the – all the files were kept in Jawian script and, you know, you minuted the permanent secretary in Jawian, he wrote back in Jawian, so we were quite fluent.

[53:40]

*Where did your family live? Well, where did you live, were you in the same place when you were in Malaya or did you live apart?*
Well, we – when we went back from Penang – in Penang we’d been in, strangely enough, in one of the houses that had been used by the harbour board. Because I helped settle the strike of the harbour board they agreed to let us have one of their houses to live in, which overlooked the entrance to the harbour so that the harbour master could sit on his balcony and see the arrival of ships. They had four of these and as I say they gave one to – to me and one to – and the same – it was a semi-detached, the other half to another civil servant. And then when we came back to Malaya as district officer it was right in the centre of Malaya in Bentong in just about the worst of the, what we called in those days, the bandit areas. And we lived in the district officer’s house which had to be the highest house in the district, so it was perched on a hill, perfect for mortar fire and –

*Mortar fire in or mortar fire out? [laughs]*

In [laughs]. Luckily they didn’t have mortars in those days, the bandits, but the jungle came right up to the back door, it was literally that far away.

*Within about ten feet then, that’s –*

It was very near and so we had guards around the house. It was all rather full but I was district officer and a magistrate, so I sat on the bench hence the need for legal training when we’d been at Oxford. And this was really very interesting ‘cause when we arrived they sent down to Kuala Lumpur the – the armoured car that they’d had made for the district officer after he’d lost his wife. It was an enormous thing with sheet iron round it and inside I mean it was absolutely unbearable and it was about a two and a half hour, three hour, drive from Kuala Lumpur, winding road, jungle all the way, and this is where most of the ambushes took place. So they sent with us two squadron of light armoured cars and God knows how many infantry in trucks and things, and we arrived in Bentong and the shops closed as a protest so when we arrived everything was shuttered up to say – it was a put up job by the communists, shut up your shop or we will shut it up for you, so I didn’t take it too seriously.

[58:00]
They all opened up the following morning and luckily most of them spoke Cantonese but there was some Hokkien spoke but not very much, but without it I would have been lost. They – and they took that as a sign of trust, many people talked more openly because they could – they could say what was happening to them, they were being done for money by the communists. They had to take rice out in the morning when they went in their field, take out twice as much as they need and leave half of it by a certain rubber tree, this kind of thing. But they talked about it to me reasonably openly, er, and we built up a – on the pattern of the English home guard Malaya built up its on home guard and this was treated with a good deal of reserve in Bentong because we had eighty per cent Chinese population and whereas the Malays were considered to be completely trustworthy and the Indians, ninety per cent trustworthy, the Chinese were considered to be ninety per cent untrustworthy and I had several very stormy meetings in Kuala Lumpur in which I put the thesis, if they are as bad as you say then we’re lost because nobody can win over that kind of – but if it’s just fright or ignorance why don’t we have a go for it? And I was halfway to winning, I got permission to – to build a little home guard headquarters. I got permission for them to buy their own uniforms and have them made up. I couldn’t get permission for them to buy any arms so they were walking round with shotguns that they’d got permanent licenses for but not much else, but it got them into the swing of guard duty and two hours on, two hours off, and this kind of thing. And I found one or two Eurasians who’d been non-commissioned officers before the war and brought them in, they were delighted to have all this unruly mess. We had about 150 volunteers and the local Chinese millionaires in those days because the price of rubber had so gone up because of the Korean War.

Of course.

It went from about twenty-eight cents to two hundred and twenty cents, about a factor of nine, so they were rolling in – in money. And I used to tell them, a bit of investment of that rubber money, as we used to call it, might save your skins. Build me a headquarters and get me a thousand yards of – of green material, buy me a thousand pairs of boots. And they did very well. I was very friendly with them. And
they for their part made an informal commando which was my bodyguard. They wouldn’t let me go out to visit estates unless I went with these, they said, you don’t want to go in that bloody great box, we’ll take care of it. And there were always two or three cars with light armour and two or three people in each car and they never asked where we were going. And then meet them and say, ‘Okay, we’re going …’, ‘Okay, that’s where we’ll …’ and we’d charge off. There weren’t a hell of a lot of roads, there was one going north, one going south and one going east and that’s all – that’s all there was.

[1:02:00]

*Can you describe the area where you were posted to me?*

Well, it wasn’t the end of the world but you could see it from there. It was a little rubber town based on rubber supplies and rubber treating, a few shops, one or two Chinese restaurants, two petrol stations, two cinemas, two Chinese schools, two Indian schools and two Malay schools, and that was it … with a lot of outlying villages. And one of the first jobs I had to do was to move people into a wider area because they, by nature, wanted to live out where they were working so they would live in quite primitive conditions so as to be up at six o’clock in the morning and tapping straight away, but of course it left them completely vulnerable to the bandit gangs and they were all of them paying – paying money and suppliers, medical suppliers, food, money. When we brought them inside we fenced it in and with the police and with my home guard we manned two or three gates and the bandits immediately began to feel the pinch. And we did this all over the – the district, pulling people into – into central areas and, er, we built quite reasonable houses, in many cases better than the houses that they’d left. Hmmmm …

*How did the people take to being moved?*

They didn’t like it but when they got there they were relieved because they had an alibi. When they went out in the morning they couldn’t take money, they couldn’t take food except what they were going to eat themselves, so when they met the bandit
gangs say, I’m sorry, with all the goodwill in the world I just can’t bring anything, and this changed the game completely.

[1:04:35]

And then one fine day the high commissioner was killed, he was ambushed just outside my district, a few kilometres to the north of my district. He was going up from Kuala Lumpur to a place that the high commissioners had which was, oh, about a thousand foot or something like that, a little bit cooler than down in Kuala Lumpur and we found out afterwards that there’d been a Chinese informant in the house in Kuala Lumpur and he – he’d leaked it and they were ambushed. Several people killed and Gurney, the high commissioner, so all hell was loose as you can imagine. I was not very well regarded because I was at war, not with Gurney personally, but with all of his senior civil servants because I couldn’t get the money I wanted for barbed wire, for posts and things, I couldn’t – my Chinese were not allowed to have their arms, I was really at war. And just before he was killed I resigned, sent in my resignation and told people why. And I think two or three days later Gurney was killed and out of solidarity I said, put it on ice, we’ll talk about it later, but in the meantime very, very quickly they appointed Templer, General Templer, who had been chief of the British forces in Germany after the war, one of these Anglo-Irish generals, sharp as a knife, hmmm, very – very efficient, very short tempered.

*Did the situation changed when Templer came in?*

Oh, completely, from night to day. After he’d been in post for about a week a friend who’d been at Oxford with me was one of his ADCs in Kuala Lumpur and he said to me, ‘The old man’s seen your letter.’ We had to be a bit careful because we were convinced that there was a leak in the – somebody was listening in. So he said, ‘I don’t really know how to tell you. I think the only way to tell you is the mountain wants to come to Mohammed.’ So I said, ‘Oh, that’s very interesting. When?’ ‘Oh, Christ’, he said. ‘Oh’ he said, ‘I know. You know Rickard Strauss’s Lieder?’ and I said yes. ‘Well, you’ll find the answer to that in one of the titles.’ So I rushed off home and got my book of Strauss Lieder and there’s one called *Morgen*, tomorrow, so
I bet that that was always going to happen. So I went out in my private car with two of my Chinese thugs and stocked up gin, ice and tonic in the boot, and drove to the frontier of my domain, ‘cause there was only one road he could come along and that was the road where the DO’s wife had been killed, it’s a dreadful road. But we were a bit gun happy in those days and these two Chinese thugs with automatic rifles that they’d bought in Singapore and I’d got an automatic shotgun, so we arrived and I worked out he wouldn’t leave before nine so he must be there about eleven by the time they’d cranked themselves up on the pass. And sure enough, about ten past eleven they arrived and he was a bit surprised to see me waiting on the – on the boundary line. He said, ‘Good. Well, if I can get out of this bloody thing …’ which was one of these moving ovens, ‘I’ll come with you in your car.’ And I said, ‘I’m very sorry sir, I’m not able to take you in my car.’ ‘I’m a bloody high commissioner,’ he said, and I said, ‘well, I’m very sorry sir. I’m the bloody district officer and my orders are you must not ride in my car.’ He said, ‘This is a bloody fine way to start a relationship I must say. So what do we do?’ ‘Well, with respect sir, you’ll get into the car but before you go there’s gin and tonic.’ ‘Oh’ he said, ‘that changes everything.’ Opened the boot, out came the gin and tonic. We had a couple of swift gin and tonics, one or two of the army officers as well, and we made the rest of the journey back to the house where he met my wife and my son and we had lunch. And he said, ‘Well, tell me about it.’ So I talked and he didn’t make any notes, he just listened and then he asked a few questions. ‘Very well, yeah, okay. Give me seven days. If it’s not better in seven days then bugger off but if it’s better in seven days then you’ll stay,’ and I said, ‘Okay, that’s fair enough.’ Went back, I didn’t need seven days. God, within forty eight hours money came through that I’d been waiting for. Permission for the Chinese to bear arms came through, loads of barbed wire, stakes, stupid things like turpentine that we wanted to put on the bottom of stakes before we put them into the ground, things that we just couldn’t get.

[1:12:00]

And I got another Chinese special branch man sent in, everything changed, night and day, so I stayed and, er, just before he went he said, ‘By the way I hear you wanted to do your interpreter’s exam in Malay.’ ‘Hmm, yes.’ ‘Well, do it.’ ‘It’s pretty difficult
here because I don’t really have the time or really the inclination.’ ‘Okay, then go to Fraser’s Hill, the place that poor Gurney had been going to. You can have it for ten days and I’ll send somebody to take over just for ten days, you go and study.’ He got it all worked out, the exam was in – he knew the date of the exam and how long I would need, so the following morning a guy arrived in a – we had a once a week small aircraft come in from Kuala Lumpur. He came in, we handed over to him, we got in the car, Chinese guerrillas got in in their car and followed me up to Fraser’s Hill, and they dumped us there for ten days and I really studied very hard. Came back and a few weeks later passed the – the exam. And no sooner had I passed it than he had me posted to Kedah which is the north of Malaya, near the Siamese border, in a new post which bore the name of assistant state secretary, emergency. And I was his representative on the – with the state government in Kedah and with the – with the Siamese as well on the other side of the border and I had an off-sider who was doing the same thing on the east of Malaya, so we covered the whole of the border area. This was intensely interesting and they …

[1:14:30]

Well, I think we should take a short break –

Fine.

In a moment before we get onto this but do you mind if I just ask you just a couple of quick follow-up questions –

Of course.

About things we’ve talked about already? I was really interested in the way you described the area you were in charge of as your domain a few moments ago. [laughs]

Yes.
I was just wondering how true was that, how important were you in this area?

I was all over it. I mean I was in every Malay village, in every estate, in every tin farm, in every lumbar area, not matter how remote I was in them all. When we break – you’ve got some more questions, yeah.

I was just wondering –

Yeah.

How much oversight is there over what you’re doing when you’re there as well?

Very little, very, very little, and particularly with the emergency being on. I mean normally, hmmm, you would have a monthly meeting with all the other district officers from the state and that would be a very gentlemanly affair led by the Malay prime minister of the state and all the nine district officers, but in the emergency it was not often feasible to get them all together because it was – where we were was the worst of all the – it was right in the centre of Malaya and most of the permanent bandits were in that area. So I mean, in Bentong alone we had two battalions just in my district.

What sort of trouble did they actually cause?

The –?

The bandits.

Oh, well, in the first year we were there we lost 187 buses and tracks burnt on the road. We had about fifty murders, people just cut up, taken off a bus, shot, hmmm, it was pretty hairy. Ambushes all the time on the – on the road, and you couldn’t convoy everybody. When people wanted to go to the next town or village they – they took the bus and hoped to God that nothing would happen.
**Hmm. Did you have any worries of your own?**

Oh, not very much, no, a little bit. They – they sent a rubber tapper in once with a message saying, in very bad Malay, unless I gave the girl 5,000 Malayan dollars my son would be the first to go. My son Paul would be the first to go, my wife, Jean, would be the second to go and I would be the third to go. And my car registration number, so and so, would also be burnt on the road. So my wife and I decided that the only convincing thing was to send them – to airdrop them copies of our bank statement since we had nowhere near 5,000 and it was just ridiculous, but it showed that they were well informed and it was scare tactics all the time.

**How did your duties as district officer differ from what you’d done before?**

Oh, completely different because as a district officer you’re really in charge of everything in the district, the labour, the man who’s looking after the roads, the forestry man, the agricultural man, the inland drainage man, they’re all literally under the district officer. It’s a very, erm, old fashioned system where the district officer really is the guy who runs things, and doubly so in the – in an emergency because you were also in charge of the police and the military. [sneezes] Pardon me.

**One final question actually, you mentioned you were the only European in your department before.**

Yes.

**Was that the case now or did you have more European helpers –**

I had –

**In the organisation?**

As the district officer I had one European who was a contract man. He was an ex-planter, a Dane actually, who was helping with resettlement and bringing people in,
and another European who was the chief engineer and another European who was the chief police officer. The others were either Malay or Chinese or Indian.

[End of Track 3]
And that seems to be running now, okay.

This is when I was in the north of Malaya, in Kedah which has the border with Siam, and where we had lots of trouble because the bandits would live in Thailand and they’d come over the border and then go back into Thailand. And one of the things Templer did at a very early age was to negotiate with the Thais that we had the right of pursuit for, I think it was thirty kilometres, otherwise they could just go to the other side of the border and that was it. And one of my jobs was to foster relations with the Thais and as Templer’s representative up there he used to fly up quite regularly and see me. His tactics were very simple, he wanted to talk to people, not to government officers but to people on the street or in the villages. So on the first trip up there we went into a new village and he found some Malays and he talks in English and assumes somebody is going to translate. Then he wanders over and finds an Indian coffee maker, talks, gets a reply and it’s always, how is life, what are you doing, how much do you …? All these humdrum questions that people don’t normally ask. How many children do you have? How many go to school? Do any of the children work after school? Things like this. Then he’d go to a Sikh watchman, the same questions, then he’d go to Chinese. And then my heart sank on his first visit when he saw two Siamese monks in clothe and I knew in advance it was going to be a catastrophe but he stopped in front of them, and I tried them in Malay, no answer, tried them in Chinese, no answer. And I said, ‘I’m very sorry Sir but they’re Thai monks and they – they only respond to Thai.’ He said, ‘Don’t you speak it?’ And I said, ‘No Sir’, ‘Then bloody well learn it.’ So I was a bit piqued by this because we’d already run through five languages, but I bought records, found a teacher, stayed late at night, and the next time he came three months later, another village, same performance, and I could see it in his eyes, he was looking for Siamese monks and sure enough there were two Siamese monks. ‘Well, how are things? How are you liking it here? Why aren’t you living in Thailand? Why do you come over here?’ And luckily I could just about manage to get answers back, no reaction from him at all. Got back in the plane with him sitting there over a gin and tonic, he said, ‘Oh, so you learnt it eh?’ [both laugh].
He sounds an interesting person to have as your boss.

Oh, yes, absolutely, yeah. And very generous about the hearts and minds of the people and tried to find out what they want and what they – where the shoe is pinching. He was – he was right on target with that.

You mentioned records when you were learning a language.

Yes.

How does one learn a language in this period? Because it’s come up a few times and you’ve mentioned a few bits and pieces but I’m just thinking …

Well, with Thai I took the coward’s way out and during the war the Americans produced a series of the old vinyl records, which were excellent, done by some university on the east coast for Thai, and I used those with a – with a local teacher. And when he’s not there then the records are very good, hmmm, and the writing I learnt from – from the teacher. So writing is important because the first letter of the word tells you what tone it’s going to be in. It’s semitone, it’s not quite like Chinese.

How many languages had you learnt by this point?

… Nine I think. [both laugh]

Was this common amongst your peers or –?

No, I was the only one. They published a book in my day of the senior civil servants on which language exams they’d passed and I – I was the only one with ticks in all the boxes [both laugh]. There’s nothing terribly special about it, I just had the opportunity.

[05:50]
Where were you actually based when you were assistant state secretary in emergency?

First of all, in a – in a little place called Sungai Petani in the middle of Kedah and then afterwards at Alor Setar the capital, which is not far from the – from the Thai border. A lovely town with beautiful mosques and a very strong sultan’s family with whom I became very – very attached.

What were your relations like with the local population?

Oh, very good, very good. It was mainly Malays, about eighty-five per cent Malay, compared with Bentong in Penang where it was eighty per cent Chinese. But I brought my Chinese goons up from Penang to show them how they could form a home guard and they – they did, they formed a home guard, but it – it hadn’t got the same … terrifying effect that my guys had when they went out. They looked as though they’d either just robbed a bank or were just going to rob a bank [laughs] which was the old, you know, set a thief to catch a thief. They – they knew all the – all the ropes and in – in the jungle, they could live in the jungle for – for weeks without any trouble.

Where do you actually sort of fit into the civil service hierarchy in Malaya at this point?

Oh, now I was – then I was – the Malay civil service had about 150 people I think and they ranged from permanent secretaries of ministries down to assistant district officers. I was about three quarters of the way up the ladder. And then Malaya at that time, I took leave and then when I came back I was posted to what was known as the federation establishment office which was really the – the human resources for the Malayan government, hiring of all civil servants all over Malaya, the wage rates, wage negotiations with industry in the ports, hmmm, and at the same time they – independence was announced and because some of the Malays had suffered at the hands of some of the British civil servants they insisted on having the right to not
keep certain British civil servants. And the negotiators from the UK side said they were quite happy with that but if they did that then they must offer compensation to those who wanted to leave. And this was all very amicable, I took part in quite a lot of the negotiations but paradoxically from the – from the Malayan government side, not from the UK government side, and eventually they barred about fifteen people in all, including people from the forestry service where somebody had had a row with somebody and when he became a minister he wanted to get his own back, so – but anyway, they set up a scheme whereby you [interruption] where you could leave if you wanted to with a compensation that depended on your years of service and on your age and your possibility of getting another – another job. Small beer mind. I was offered two jobs to stay on, both in the civil service, one as the head of the electricity board, which was quite interesting, and another as just as a – a senior civil servant in the cabinet office. But looking round many of my Malayan, Chinese and Indian friends they were equally capable of taking these jobs and I’d been told my job was to work to independence and now they’d got independence, time to move on, so I – I moved on. Not precipitately, I cleared up everything there was to do and handed over and it was all very amicable. I was in the prime minister’s office for the last year with the new prime minister.

[11:00]

Who was the prime minister of Malaya at this point?

This was Abdul, not Abdul Razak that was the second, Abdul Rahman. He claimed to be the oldest law student that the UK had ever produced because it took him twenty years to get his law degree. This was because he wasn’t very interested in the law but he was very interested in living in England, so he used to go to an occasional class but eventually his father insisted that he take his degree and come back to Malaya, which he did. A brilliant man, lazy but very, very brilliant and, er, I was given to him in his cabinet office for relations with Chinese and Tamil trade unions.

In what sense brilliant?
Well, it was a very difficult political situation. The emergency wasn’t quite over but it was really under control, but the trade unions, who had strong links in the past with the terrorists, were always in a position to say this is what we want and if you don’t agree then maybe the emergency might get a little bit worse again. So he was on a pretty sticky wicket, plus the fact that many Malays believed that the first thing you do in independence is to shit on all the Chinese and the – and the Indians. And, er, so he had to make compromises all the way without losing the north, there was a lot to do and there was plenty of money to do it but of course many people thought that this was a time for personal aggrandisement rather than for Malaya but he was a very wise and good – good man. I enjoyed working with him and his successor, because he died, mainly through overwork and stress and alcohol. He was a fellow district officer for when I’d been at – in Bentong, he was in the neighbouring district of the north, so I knew him very well and the family. And it was he who wanted me to stay on but I – I decided that at my age it was – I think I was … how old would I be? Thirty-five, thirty-six, something like that. It was time enough to get a new career and, er, I felt fairly confident with the experience that I’d had that I could fit in somewhere.

*What was your actual role in the prime minister’s office in Malaya?*

Mainly on these negotiations with trade unions and getting a national rate set, avoiding strikes, hmmm, and in finishing up the compensation to those Europeans who wanted to leave. It was not only the administrators, there were teachers in high schools, the agricultural people, and we wanted to keep a lot of them in the agricultural research stations because there – and Malays had been very slow to pick up the – the jobs. So for them to leave straight away would have left a research gap of a few years. We were anxious to keep them until at least they’d transferred things over, that kind of thing. Mainly on the negotiations, I was told that was my forte there.

*What were the sorts of opposing viewpoints in the negotiations? Perhaps just give me one example that sticks in your mind.*
Well, we had a threatened strike for all the, what we called, the daily rated workers, all those who got a daily rate instead of a monthly salary. Now these ranged from road sweepers in municipalities, you know, right through to people working in electricity generating stations, all the – the lower elements of economic life. So a strike, an organised strike, would have been for the economy a bit of a blow at that time because it would have made independence the same as chaos, and that we wanted to avoid at all – all costs. So I – with Abdul Rahman and two or three others, held long negotiations. I was a bit helped because the – they guy on their side who was running the general secretary of their union was a Tamil whom I’d known right back in Malacca when I was in the labour office in Malacca, so I had a kind of an inside track with him too. He was very tempted by the communist call to use this opportunity to – to get the best out of – out of the government and I remember telling him, you know, you may get it now but by God in five years’ time you’ll lose it all again. Wouldn’t it be better to have a settlement that’s eighty per cent of what you want but which you know then is fairly solid, and he was a very – very reasonable guy. We managed to talk his committee into it and we got a settlement for – we could have got a better settlement if Abdul Rahman had – had wanted to but he – one of his mottoes was, never rub a guy’s face in the shit until you’re sure he can’t stand up again, which was pretty crude but it summarised exactly what he – what he wanted to say: okay, we could screw these daily rated workers but if you screw them too far one day it will explode and it will all come back at you. So we had – in effect we paid maybe five per cent over the odds but we got an agreement where everybody was pleased and lots of handshaking and backslapping and – and it lasted. It’s lasted all this time now, they haven’t had a general strike in that area since. It was very – the mechanism was set up and the – the goodwill to negotiate was there. It included all the railway workers as well, which was quite important for Malaysia, that sort of thing I was doing until I – I went back. My wife went back with my son ‘cause she was pregnant again and – and then they came out for one more – for one year. I said I would go back for a year and see all these things through, and then we went back permanently to England.

[19:30]
Sounds a very measured, planned way to independence it’s –

Oh, yes. I always had this vision of these – these five elderly gentlemen with the chairman insisting that we were there to help to get independence in the best possible way, and, er, that was fine with me.

So who were the five elderly gentlemen?

Well, I’ve often wondered, I really don’t know. I know one of them was the head of the colonial office … whose name escapes me except that he was Sir Ralph Furse, Sir Ralph Furse yes. Deaf as a doorpost, very old fashioned hearing apparatus with an on and off switch which was inaudible to him but perfectly audible to everybody else, so when he thought you were talking nonsense it would go ‘click’ which meant the old boy was really not interested in what you were saying. But he was – I would have thought probably a real old colonial hand but he had his instructions and he was a civil servant and he did as he was told. And, er, the others I think were probably academics I would think but I never did identify them.

Sorry, this is your original interview panel?

The last panel and, yeah, with the colonial service. But they were fond of bringing in people from outside to sit on the panel, so three of them could have been, you know, anything from head of Latin studies in Caius, to anybody. If they thought he was a good judge of horse flesh they would bring him in. ‘Cause you can imagine at that time there were boards all over the place for all sorts of things while they were trying to fill all the vacancies, it was a very interesting time.

Just so I’m straight in my mind, this is the board when you actually – before you started the job?

Yes.

Right, yeah.
The final selection board, yes.

_I was interested in the fact that they kept British civil services on after independence, that’s –_

Oh, yes, I mean you had the right to just continue if you wanted to. This was all in the negotiation though the deal was either after independence everybody goes within X years and you can fill them – fill the posts with other people, or you have the right to say no to anybody you like but if that’s so, the others can stay on indefinitely. Hmmm, and I said, there was so much venom from – from two or three, not from everybody, but from two or three rather difficult Malay politicians who had suffered in one way or another at the hands of one or two civil servants and they wanted revenge and they didn’t really much care how much it cost.

_Where did these negotiations actually happen, was it –?_

Where?

_Yeah._

In Kuala Lumpur, all in Kuala Lumpur. And the UK sent out a negotiating team and sometimes Abdul Rahman was there and sometimes his deputy, but it wasn’t – it wasn’t fractious, it was all very – very measured and nobody was putting in doubt the independence and the date of independence, this was all agreed and water under the bridge, it was just the nuts and bolts, that’s all. And people like Abdul Rahman and Suffian, who I mentioned and Razak, they were world class people, they really knew what it was all about.

_Did you seriously consider staying at all or did you just decide –?_

I had a very interesting offer from a commercial firm, Eastern and Oriental Mining, who were the big tin people in Malaya, and they wanted a new head and they put the
choice in the hands of a dear old Yorkshire man who was obviously the – the man who held most of the shares in the company, a big company, based in Penang with places all over Malaya. And, er, he had with him a lawyer from a London firm who was supposed to be vetting candidates and deciding what their package should be, but he was a laugh a minute, you know. He said, ‘We’ve got ten candidates but to tell you the truth I don’t like any of them. The only one I like is you, so how much do you want?’ I said, ‘I’ve frankly no idea. I can only tell you what I earn as a civil servant and I would perhaps want a little bit more than that.’ ‘Oh’ he said, ‘then old pigeon’s eggs here, he’ll tell us.’ Pigeons eggs was the lawyer because apparently whenever they went out for interviewers he took them to the Savoy in London and insisted that everybody had pigeon’s eggs as the hors d’oeuvre which was thought to be very, you know, upper class, but for old, what was his name, Wilson, he said, ‘Pigeon’s eggs? I could shit bigger than them.’ [both laugh] But they made me a nice offer and it would have been an interesting time but my kids were growing up and it – it’s again the same old story, you know, what are we doing out here, why are we here? And I felt I’d put in ten years there, I think I gave what I was paid for and I came away with lots of friends and – not Europeans, mainly Asians, and this was a nice feeling to go away with. I didn’t feel that I’d exploited Malaysia … and I’ve still got lots of friends there, less and less with the years but still lots of friends.

[26:50]

So I came back and I wrote to Templer who was then chief of the imperial general staff, Field Marshal General Templer, and said I’m coming back to England and I don’t fancy being on the dole for very long, what is there in it for an insolent upstart like me? And within weeks I had an offer from the United Kingdom Atomic Energy Authority to – to join them. It was after the Windscale accident, I don’t know whether that means anything to you –

Yeah.

But there was a release of radioactivity from the Windscale plant and the committee that was set up afterwards to investigate it insisted that the UKAEA form a new
branch which was called the Authority Health and Safety Branch, and this was divided into several sections, one of which was the international section. And we were supposed to be helping to negotiate principally around the international agency in Vienna to get regulations for the siting of power reactors, transport of radioactive materials. The first book I wrote was on the transport of radioactive materials because I became responsible for this and was the chairman of the committee in Vienna.

_Hmm. Where did you actually – where were you based in this job?_

In London. In London, in Charles II Street, just off Regent Street, and there were about forty of us there, a physicist – physicists, doctors, all sorts of people, and then rare birds like me with no real qualifications and I was nominated to be the contact man for Vienna.

[29:30]

_Had you known much about nuclear energy before you started?_

Nothing at all. It’s always been my fate to be put in jobs where I knew nothing about the subject on hand, and this was certainly the case. My colleagues were really so generous, I mean they would stay behind an hour to explain something to me and the different kind of reactors, the different kinds of radiation, the scales, all sorts of – I got a really free education from them. Their spirit was really excellent, not at all keep your knowledge for yourself but everybody who had a speciality made a point of making it available to everybody else and since I didn’t have any speciality I was around everybody’s table licking it up.

_Can you describe your office to me in London?_

Yes, we had very nice offices just next to the Haymarket theatre and, er, very well equipped and – for the time. Secretaries and support, plenty of travel money for going to Vienna to the many meetings that they had there and – and a boss who was a civil
servant who’d come from the Department of Trade and Industry, been landed in to put a bit of order in these long haired scientists. It was very good.

*Do you have any colleagues in particular who stand out from that period in your life?*

Oh, yes, yes. Oh, my immediate boss was – he went on to be the director general of the European Nuclear Energy Agency in Paris, a very sharp, typical British civil servant and could write fifty pages on a subject he knew nothing about just by reading the books and sheer hard work. A very … an admirable – terrible character, impossible temper.

*Sorry, who was this?*

IGK Williams, he’s dead now poor – poor fellow but, er, we saw eye to eye on most things and on other things he would always press me a little bit further than he should have done and got a suitable north country reply, until one day when he was doing my annual assessment he saw I was born on 4th July and said, ‘Oh, I understand now why you’re so bloody independent’ [laughs]. But the relationship was good, I mean he was a professional and he knew Whitehall and where you went in, at what level and this was very good. So he pushed me out the other way towards the French and the – the agency in Vienna and we made a reasonably good team I think there.

*Were your other colleagues the scientists?*

Yes, scientists. There was a man called McLean who was a very laid back Scot who apparently was very well quoted in – in the medical world for diseases related to overexposure of radioactivity. Hmmm … a man who loved his food and his wine and loved France, was less addicted to work, but a very gentle and nice character and he was very supportive, he used to refer to me as our ambassador in Vienna because I was so often over there.

[33:50]
But the Vienna connection suited me well because I – my German was good and I … I knew I enjoyed the international life.

*What were the big issues involved with your work?*

The first was whether we should work with the French or whether we shouldn’t and a meeting was set up by my boss, Williams, and his boss, the chairman of the authority. We had five people from the UK and five French men came from the French Atomic Energy Agency. But they hadn’t taken the trouble to see whether there was any commonality in language between them, so the French sent five, none of whom could speak English, and we had nobody who could speak French, except for my boss took a double first in French and German but refused to speak a word of either. So I was freshly minted from the Far East and my French was appalling, I mean little better than schoolboy French. So at the first meeting there was a deadly silence and then Williams said to me, ‘Well, aren’t you going to translate?’ And I said, ‘I’m not the interpreter here,’ ‘Well, somebody’s got to do it.’ So I staggered through the first morning and then at coffee I was talking to the youngest of the French men there and he said that he’d been a forced labourer in Germany during the war, working in Siemens I think. He said, if you like we could try it in German, I mean little better than schoolboy French. So at the first meeting there was a deadly silence and then Williams said to me, ‘Well, aren’t you going to translate?’ And I said, ‘I’m not the interpreter here,’ ‘Well, somebody’s got to do it.’ So I staggered through the first morning and then at coffee I was talking to the youngest of the French men there and he said that he’d been a forced labourer in Germany during the war, working in Siemens I think. He said, if you like we could try it in German, so the rest of the meeting, the three day meeting, was in German and the next meeting was in German and it went very well indeed, ‘cause he had all the technical words with having worked in a technical environment and – and then he came to me at the beginning of the third meeting and said, ‘If de Gaulle ever knew about this we’d all be out of a job. Really either I’ve got to learn English or you’ve got to learn French’, so we agreed that the younger of the two of us would learn the language of the other. I think he was not entirely honest on this because I turned out to be the one three days younger than him, I think he was 1*st* July and I was 4*th*, and he must have known that because we’d been visiting one of his security establishments where we had to hand our passports in, so I’m pretty sure, as I told him many years later. Anyway, this meant that I had to take French seriously, and a lot with his help, and I was able to chair meetings in French and, er …–

*Sorry, who was this?*
He was a man called Broueux, the French Atomic Energy agency, university dropout because of the war, taken by the Germans to work in Germany for three years, escaped two or three times, was captured two or three times, stole a gun in order to make sure that the fourth time he can get away, shot himself in the hand and had – had to be taken to hospital [laughs]. In many ways he was an accident looking for somewhere to happen, but a delightful character from the Bourgogne and we spent many years, well all my atomic energy years, with him and he worked his way up the ladder as I did and we were sometimes leading the French and the UK delegations and it was a great pleasure and it was – it was a very interesting insight into how much personal relations can modify political instructions. I don’t mean that you go against your instructions but if you’ve got confidence in your partner you can take your own instructions to the limit and if there’s a bargain to be seen you can argue your way into – into accepting that bargain knowing it’s going to be honoured. And I think this is terribly important, I’ve seen it time and time again that the political briefing that you get, do this, don’t do that, accept this, don’t accept that, it’s fine but often it don’t lead nowhere and when you get to the nitty gritty of trying to get an agreement something has to give and I think the art is to make it give in the areas where you know that you’re sure and it is not going to be a complete erosion. And you can only do this through personal relations and I learnt a hell of a lot from – from this. Hmmm …

[39:40]

What was the actual subject of the negotiations with the French?

Well, in general should we go together on designing the casks in which you put irradiated fuel so that there’s a standardised range, if not shall we go together at least in proposing the – the limits on contamination that you can allow in these in describing the maximum credible accident. [coughs] Pardon me. And then on things like is beryllium an alternative, can you work with beryllium safely? And we’d done a lot of work on that and they managed to get a lot of it released to the French so that they didn’t do exactly the same work that we’d been doing. And then we worked
together in – in all sorts of agencies for the transport of isotopes, you know, when – when I started in the Atomic Energy Agency well meaning doctors and scientists in Manchester would go down to London, pick up an isotope, put it in their bag, put it in the rack in the train, and drive to Manchester, so they had five hours’ exposure from their bag into their body and they did this once a month to renew the isotopes. So there were no rules at all, you – you did what you thought was right and we were very anxious for rail, for air, to get standardised containment specifications, external radiation content and so forth, for the isotope so that you could export isotopes. Amersham in those days was a big producer of medical isotopes and the – its traffic was limited to what they could either send round in a truck or else get somebody to put in their back pocket, which was a pretty flimsy way of – but we – we had lots of success with Yeotto [ph] and there was all – I discovered a new organisation I’d never heard of, the International Rail Organisation. It sits in Bern in Switzerland and it’s for the standardising of conditions of transport for passengers and for freight all over Europe, but the complete Europe right up to Turkey. And so we persuaded them to open a new chapter for the transport of radioactive materials by rail, standards of containment and all the rest. And they were very willing to do this and very helpful but the method was pretty difficult, because they didn’t believe in simultaneous translation, they believed in consecutive and their languages according to their convention were French and German, English was not an allowed language. So the Brits replied by this by not going which was not really a very intelligent response and when I came I insisted that we – we get into the act. And I used to go with a – with a fellow Yorkshire man and used to translate for him. He was a chemist, a very gifted chemist, but languages, including English, were not his strong point and I had several difficulties of translation. We had, for example, one meeting of the week was started on the Monday morning, due to end on the Friday afternoon, and on the Wednesday lunchtime we hadn’t been making much progress and he was in the chair. So he started his afternoon session by saying, ‘Well, now as we’ve changed ends’ because it was the second half of the week but changing ends either in German or French doesn’t really make much sense, and a few minutes later a proposal was made and he said, ‘Well, if you want to know what I think, I think it’s neither now’t nor summat.’ So this went on very [laughs] – but he knew what he was on about and we made a good double act.
Who was this?

A man called Fairbairn, Alan Fairbairn, was very good. And also good in the sense that he knew he was going through me so he didn’t muddy the waters too much when I’d say to him, ‘Alan, for Christ’s sake, shut up for a minute,’ then he would shut up and let me try and dig him out of the impasse.

It’s interesting that you work in such a technical area here, scientific cask design, that sort of thing, it’s – is it as technical as I’m expecting it to be or …?

It was fairly technical, I mean I didn’t understand any of it but it was very technical, yes.

I was going to ask, sort of as a person who’s, you know, not from that scientific background, are you making these decisions, advising on them or …?

Advising on them mainly and mainly negotiating, finding whether you can give something without reducing the level of security below what we want. So not negotiating blind but if we’re negotiating in terms of emissions or in terms of thickness of wood or whatever we’re talking about, can we go from four inches to three and a half inches, is that crucial? And I don’t know but – but the boys knew and they would say, ‘Well, we’d rather have four’ and I’d said, ‘Well, if you can’t have the four does the tiny world fall apart if it’s three and a half?’ And then they’d start to say, ‘Well, it would be nice to have four, so it would be nice to have five.’ ‘What about three and a half?’ And eventually they’ll say, ‘Well, I suppose three and a half will be all right.’ So it was a matter of talking to them and not pushing them around and if they said, no, absolutely not, four is already, you know, the limit then okay, I’d go in and we don’t move on four. But if you take that for all the specifications then it was … it was quite taxing, but it depended largely on the goodwill of the – of the technical people who were with us and they were all very – I think they were all a bit
intimidated by the international atmosphere. They were all people who’d been working in – in a little laboratory somewhere near Warrington, so if somebody came from Staffordshire he was already a foreigner, and to be sitting around with Russians and Japanese and the like, I mean this was out of their world all together.

*So how much do you actually need to know about the science to do your job in this period?*

I don’t know but I – I was chairman of the – of the IAEA committee and then on transport of radioactivity and then when I resigned to go to the – into the space field the Australians made a bid to take over the chairmanship and this was welcomed by everybody and they produced a very well recommended professor and he was very keen to have the bureau, which was a group of six or seven people, to meet them on the first evening. And we were sitting around the table and he said, ‘Well, before I take over the chair I would like to know the background. What is your basic knowledge?’ So we went round this way and all the chemists, stress engineers, etc, and he came to me, and I glanced down, and said well ‘No, and you as well.’ And I said, ‘Well, I suppose oriental languages,’ and he burst, ‘This is the trouble with the bloody English, they’re always making jokes at the wrong time,’ [laughs]. But it was in fact true, my main expertise was in oriental languages.

[49:15]

*[Laughs] You mentioned information transferred to the French. Did information flow back as well?*

Yes, they were very good, particularly on economic use of power stations, and I think in those days if relations had been better with the French we could have cut a better commercial deal with them than we did. But that wasn’t my side of the house, my side of the house was purely safety, safety direct and safety indirect and the location of power stations and this kind of thing. And on that we had very good relations but the commercial boys were … they were frightened of being taken to the cleaners and because they were frightened they got taken to the cleaners in my view.
Interesting you’ve moved into nuclear health and safety immediately after Windscale.

Was there any urgency when you started your job?

Well, yeah, that was the – I mean the whole *raison d’être* for the – for the group was this and it became very – very sensitive to public opinion to reassure them, because if it had got out of hand then the building of the commercial power stations would have been put very much in jeopardy. I mean we used to get literally hundreds of telephone calls from – from people. We had to have a duty officer from – from our group, there were about twenty of us that shared it so I had it once or twice a month and you had to leave your telephone number and you would get people ringing you saying, ‘There is radiation at the bottom of my garden,’ and this kind of thing and you had to make a judgement whether to turn out the guard or – I remember a policeman ringing up one night, I was in London for some reason and because the trains were so bad – I lived in Whitstable and the trains were not very good, so if I stayed late I used to stay in the – in the … what do you call it, the first aid room where they had a bed, I used to doss down there, particularly if I was duty officer. A call from the police, ‘Yes?’ ‘I am sergeant so and so and I have in my left hand a steel bullet-like thing that has a label on it, radioactive.’ ‘Oh, yes. Where did you find it?’ ‘One of my beat men picked it up on the street.’ ‘Oh, I see. Is there anything else on the label?’ ‘Wait a minute. Yes, it has the word Curie on it.’ ‘Oh, yes. Does it have any number on it?’ ‘Yes, Curie 150000 and then Curie with an S on the end. What should I do?’ I said, ‘Well, at a rough guess either it’s a hoax of you’ve been dead for the last two hours. So put it away and I’ll somebody tomorrow morning.’ And of course inside was a little note saying, ha ha, ha. But if he’d put 30 Curies instead of 150,000 then we would have had to have turned out the – the fire brigade.

Did you have any non-hoax calls?

Oh, yes. You get one or two strange things, particularly from doctors’ surgeries. It was the time when doctors had been – begun to use isotopes before there were really strict rules for the utilisation and keeping of them, so some of them used to keep them in their desk drawer. One GP rang up to say all his X-rays for his patients had gone
black and he was sure that this was radioactivity. I said, ‘It certainly sounds like it. Where did you keep them? Where did you keep your isotopes?’ ‘Oh, in the drawer just below.’ ‘And did you keep them in metal containers?’ ‘No, no, I kept them in the old brown paper parcel’ [laughs]. These things were churning out radiation into his – into his X-rays so they were all black. [laughs]

*It doesn’t sound like the general public were particularly aware about –*

No, it was the crossover period really before – and also from the Atomic Energy Agency side, before they started to see the need for quite massive education, not only of people but of doctors and people who were using radioactive sources in laboratories, ‘cause they might have been excellent engineers but they knew absolutely damn all about radioactivity.

*Did the standard of phone call you get improved over this period –*

Oh, yes.

*Shall we say?*

It dropped off almost completely. In a year we noticed the – the difference, yes. You get the odd screwball, even now.

[54:55]

*What was the actual procedure if it was real?*

We had teams at Harwell and at Aldermaston, or if it was in the south of England from Winfrith or if it was in Scotland from Thurso, but very, very few people rang from Scotland. We put it down to the whiskey actually, the whiskey seemed to have a calming effect on the – on the people.
Were there any sort of general worries you noticed amongst the people who were calling in?

We had one lady who – who called to say that she’d been very worried because it was in the lamb country that the Windscale cloud went over and she had lamb chops once a day – once a week, for all of her life and so I decided this was a case to be handled by a specialist. So I got the guy from the next office who was a doctor and I heard him say, ‘You’re absolutely right madam, it’s rather dangerous. I would think that if you were to eat lamb chops that had come from the Windscale area say once a week for the next, say, 350 years you would certainly increase your risk of cancer by five per cent. Yes, I said 350 years madam. Yes. Oh, not at all, not at all. Any time, do please ring.’ [laughs]

So you were in the health and safety department right when it started back then.

Yes, from the very beginning, just a few days after it started.

Was it taken seriously from the start or was it, you know, just a sort of political sop after Windscale?

Well, they got some very good people in straight away. There was a medical team at Harwell, there was a small team at Aldermaston and an engineering team in – in Risley, near Warrington, and then the headquarters team in London. And because they’d taken people out of the operating groups they were taken seriously. If they’d imposed people from outside then I think there would have been trouble but these were ex-colleagues who were gamekeeper turned poacher or poacher turned gamekeeper and so they were taken seriously. Never had any – any trouble at all with them.

Hmm. So your office was in London. Did you spend any time anywhere else during this period?
Used to go once a month to Risley, once a month to Harwell, and once a month to Aldermaston, and about three times a month to Vienna. Every time there was a meeting of the committees in Vienna we had to go and make sure they were not doing anything silly.

*What’s at Risley, sorry?*

Risley is the – it’s the big engineering, or it was, the UKAEA big engineering centre just outside Warrington.

*Oh, right. What did you do on these visits to Risley?*

Try and get expert advice on the subjects that were going to be negotiated internationally. So we were going to have a meeting in Vienna on what is the maximum credible accident that you can think of on a road where a lorry is carrying irradiated fuel; do we imagine that an aircraft drops on top of it or that it bumps into a truck or that it bumps into a truck at the same time as the leading driver has a heart attack, and these scenarios. And from this you can get some kind of a feel for what the maximum credible accident is and then look at your containment to see how you would react and then run a series on what happens if he has the heart attack early or late, or what happens if the tyre bursts at exactly the moment, and so on. And you could only do this if you’ve got access to experts and a certain amount of computing power as well.

*Is that the case with the people at Harwell and Aldermaston as well?*

Yes. Aldermaston mainly for – for leaks on plutonium and things like this, where they had very good expertise because of bomb manufacture, and Harwell because that was the centre for the – for medical isotopes.

[1:00:00]

*How much did secrecy come into your work?*
Very little, very little. At Aldermaston you had to be careful, hmmm, I was fully cleared for everything at Aldermaston but I only used to go to certain areas for what I needed. But the abiding feeling I have looking back was that although we had the occasional difficulties people really understood the need to try to internationalise the use of radioactivity. Of course the bomb boys, they were in a part of their own, we weren’t trying to tell them what to do, but everybody realised that nuclear fuel had to be transported in order to start the reactor. When it was irradiated it had to be brought back to be cleaned and the plutonium taken out. And you had to have rules and if you wanted to sell a reactor to somebody it had to go with a complete set of international rules.

How much were people concerned about the disposal of nuclear fuel at this point?

Quite a lot but there were a few nutcases [telephone interrupts conversation]. I was just saying that if you – you want to sell, as they did, a nuclear power station, several nuclear power stations to the Japanese, then you have to be able to tell them what the hell they do with the fuel when it’s irradiated ‘cause they hadn’t got the means of dealing with it. And this led me, because I was in the transport business so to say, being sent to Egypt to negotiate it, the ship to go through the canal with the irradiated fuel. And this was just after – a year after or eighteen months after the Suez crisis so I had the job of meeting the new general who was the new head of – of Suez Canal and making an agreement with him whereby we could go through the canal. That was a life changing experience, I went with two colleagues, technical experts, and a man from Lloyd’s who was insuring the deal. And after a lot of prevarication we got a meeting with the general in a tent in the desert in which we were fed and watered, and in front of us was a single plate with a few dates and couple of olives and things on but no person. And eventually he came, a very tall, impressive character who spoke absolutely perfect English, a Sandhurst graduate, and he knew his dossier. No papers with him but he knew what it was all about. And then he said suddenly, looking the insurance man in the eye, ‘I suppose when we took over the Suez Canal you thought these bloody Arabs will never be able to run a thing as complicated as the canal,’ and looked at him straight in the eyes. And the insurance guy swallowed hard and then
said, ‘Yes, I’m afraid you’re absolutely right Sir.’ And he said, ‘Well, it’s funny that because I thought the same,’ [laughs] and we were saved. But if he’d come out with a smarmy answer I’m sure we would never had made it but he – he was very good with us and after we’d done the original fencing he wanted to know about the – the mechanics and then he said, ‘Okay, it’s a deal.’ And I said, ‘Do we need a piece of paper?’ ‘No, no, you don’t need any paper, I’ve got the name of the ship. Oh, but you need one thing, you need a case of whiskey.’ And I said, ‘Oh, yes, of course’, ‘Oh, not for me’ he said, ‘but for the pilots on the Suez Canal, they’re a terrible bunch. They won’t do anything until you’ve given them a case of whiskey. So don’t fight against it, take a case of whiskey, give it to them and you’ll go through like a letter in the post’ and we did. [both laugh]

What sort of things do you talk about in these negotiations? Is it just ‘we want to send our ship through’ or were there more technical aspects?

Well, we have to tell them, and tell them why commercially it’s important, what safety precautions have been taken, what the worst scenario is. And I think you have to lay it down straight to them and tell them, which we did. But we had a good story and we had excellent slides and drawings of all the – all the stuff, and he was very good on – he could, you know, read an engineering drawing, he knew what it was all about but his minions just stood round, about twenty of them, without saying a word and it was only – only he spoke, he – but at the end he just said, ‘That’s it, okay,’ [laughs].

How was it a life changing experience?

Well, because there was a man who had straddled both cultures, was equally at home ribbing the insurance man. Obviously well placed, he was appointed by Nasser, the president, to do the Suez Canal and in fact after the meeting he insisted on taking us to the canal headquarters and showing us what had been done. And he said, ‘I wanted an assurance from you. You’ve been too polite to ask for it but you want an assurance from me. Come and see how we do it.’ So we went and he showed us how the – the wireless communications worked and he knew it all, it was – and hats off, you know,
we’ve a habit to write them off as saying not capable of running that kind of an enterprise but equally capable, there we are.

*I think this card’s just about full.*

[End of Track 4]
You mentioned that the other major aspect of your work when you were with the health and safety people at the UKAEA was travelling to international meetings at Austria.

Hmmm hmm.

What was the subject of these?

Well, this was the early days of the International Atomic Energy Agency and they were just beginning to take an interest in regulations as opposed to general talking and limiting the use, etc. When it became obvious that radioactivity had got commercial applications then the agency slowly began to take an interest then in, well, if you’re going to build a power station what are the internationally acceptable criteria for choosing a site, what are you going to do with your waste, and all these kind of things. And they set a whole raft of international panels which tried to come up with codes of practice, it was too much to expect that it could be an international regulation for the codes of practice and then the idea was that you would use this code of practice to go back either nationally or internationally to get it into a regulation in the right place so that, for example, we’d get a code of practice on isotopes then we could go to the airlines and go to their body, the IATA, and get them to accept these in the form of regulation. So it wasn’t the – the agency that was doing it directly, it was facilitating this internationally, hmmm, and then we followed these into actual regulatory form. So I think the agency did a wonderful job at that time, it was of course a difficult time politically because the Russians were – were very, very suspicious of anything that was happening, and so were the Americans, and we were like babes in the wood just trying to get a job done. Sometimes the trouble came from the Americans, sometimes it came from the – from the Russians, but all – all together, I mean I must say they did a splendid job, the agency, in getting things going. It was known in Vienna as being the absolute ultimate in luxury for people to get a job at the agency, this was – ’cause they had a lot of local Austrian staff and Austrian staff were allowed to use the – the shop, the commissary, which has a turnover of God knows how many million, it’s an
enormous affair and they could buy anything from underwear to Mexican gin or Russian vodka and they were very well looked after. And these facilities were grudgingly extended to poor ex-pats who came from the member states, so life was quite – quite good. You know, the work side was good and the living side was good.

**How were the negotiations?**

They were not bad. My feeling was that the lower you could keep them the better they went, the more you – when people said, well, this is a job for the ministers, then my heart always used to sink because I knew, a) it would take a long time and b) the result would have absolutely bugger all to do with the subject matter, it would be for political decision which might depend on whether the smoked haddock was good for breakfast or, you know, for things that are quite extraneous to the subject they’re discussing. But as long as we were an expert committee we always managed to come up with something that was clear and agreed, and we used to avoid politicising that as much as possible.

**How large were these committees?**

The largest of them was about twenty though the best of them were less than that, fifteen or so.

*Excuse me.*

And they were always very well provided with secretariat from the agency, not just secretaries but also one or two experts who could help to keep the peace.

[05:10]

*You mentioned that the Americans and the Russians had political considerations of their own in these discussions?*
Well, I mean, yes, they – they basically mistrusted each other so much that at one point if one said white the other would automatically say black because obviously his a general line of defence. And it was only when we got working in smaller groups that we were able to say, look, you know, this isn’t political, this is purely technical or scientific, and then a lot of them relaxed provided they got the political clearance and slowly we managed to get that.

*Were there any areas that were particularly troublesome?*

We had the most trouble on external contamination of package, packages, and the Russians’ instructions were that the international regulation should say zero, zero contamination. And we said, wonderful but quite impossible, once you take a container inside a reactor area it’s contaminated and you will never get it down to zero. And the Russian scientist said absolutely right, so what should the level be? Zero. Well, why is it…? Well, those are our instructions. And this went on literally for several meetings and they knew as well as we did that it was bloody stupid but it – there was no trust to – to have a proper dialogue on this. And then we got a breakthrough, I don’t really remember why, but we had a riotous dinner one night, invited by the Russians, and I said to him, ‘What’s this sudden rush of blood to the crotch?’ And he said, ‘I’ve got new instructions.’ ‘Ah, yes, very good. What do they say?’ ‘I can use scientific limits.’ So then we started to talk and should it be point five zeros or six zeros then you can really talk but if you say nothing it’s – it’s meaningless. This held up things for ages, and that sort of thing, but considering the time and the – the atmosphere that there was generally politically we made a lot of progress. I mean we brought out not only the code of practice but the IAE regulations on the transport of radioactive materials, hmmm, and this was approved by the general assembly and everybody thought it was extremely good.

*How did people you were working with feel about nuclear power at this time?*

Nuclear power?

*Hmm.*
Oh, quite a lot because the French, and the Germans increasingly, the Brits of course, the Americans, the Canadians, the Japanese a little bit falling behind, the Ukrainians with the Russians.

Did people feel positive?

The Australians. Oh, yes, I mean it was widely felt that this was going to really save civilisation and this was the way to go. It was a very – very gung ho society in Vienna at that time.

Were you sold yourself on nuclear power?

Yes, absolutely, I mean compared with the risks. When you see all the trouble that we were going to, orders of magnitude more than in the oil industry and, er, the standards of containment and the limits on – on Curie capacity and that kind of thing were very strict, I mean if there were any doubt you’d take another order of magnitude and add it on there. Nobody was taking any risk or cutting any corners. This was very good because industry was not involved, industry got what we decided and they had to make do with it. Of course they didn’t really mind because it was the purchaser who paid in the end, it wasn’t – industry didn’t pay it but the price obviously went up, double containment and this kind of thing for – for reactors.

[10:30]

And how did you come from working for the Atomic Energy Authority to working at ESRO?

Well, I saw an advertisement in the paper, The Times of course, and put in my application. For two reasons, one, I thought the nuclear scene had just about been worked out. They’d approved the regulations they’d been working for and it was, you know, more of the same. And secondly because the – the salary that they were offering was about fifty per cent higher than I was getting and like most people I’m
not insensitive to that as an argument. And much to my surprise I was called for interview.

Where was the interview held?

In Paris and, er, I was interviewed by the director of administration who was a Belgian, a very nice guy, a diplomat who asked me if I would mind if the interview was conducted in French and I didn’t mind. And then at the end he said, ‘I think we should continue in German,’ ‘Okay.’ So he spoke quite good German but he said at the end, ‘Oh, your German’s better than mine’ [both laugh]. So I think he was a bit intrigued to find a Brit who could defend himself in French and German and – and the post was actually – was head of administration, so I was an administrator so I got the job.

What do you think they were looking for?

… It’s hard to know really what they were looking for. I think things were a bit chaotic, they’d started in Paris and, er … ESRO in my view in those days was in the hands of a few people who could see what they wanted to do but they were not really gifted for organisation and it had become a series of feudal lords looking after particular areas. And the director general was a brilliant scientist, Professor Auger, there is an Auger effect in physics, but he knew nothing whatsoever about organising. He was very good in persuading member states of the need to get together on satellite research but having got them to agree it was all a bit of a mess. I think they really wanted some professional administrator to come in and – at ESTEC in the Netherlands to try and sort it out. Two days after I was appointed there was an enormous fire in ESTEC and all the – all the building was burnt down except the building that they were creating, which was by no means finished. I thought this was a little excessive as a demonstration but maybe it was an accident, and I arrived a few days later. And then people were lodged in all the hotels in Noordwijk in the best hotels and in the lesser hotels all over the – that part of Holland while we were building the building.
But I mean there were no rules, there were no rules for procurement, for recruitment, for budget, everything had to go to Paris. I remember being told by a little man in Paris, ‘Whenever you get approval to buy something, a typewriter or something like that, you must send me immediately the number on the carriage and on the machine and I will note it in my file here.’ And I said, ‘What do you do with it?’ ‘Well,’ he said, ‘when you sell it or you get rid of it you tell me and then I destroy my card.’ I mean there is an impeccable logic in all that until you ask the question, what the hell good did all that do? But that was the state of things, people had been allowed to set up their own little mechanisms and if you wanted to take on a typist you had to ask Paris and Paris would send somebody to look at the typist to see if she was suitable for – as if we weren’t capable of judging that ourselves, so I was very … bolshie about the whole – the whole business. When I arrived I was taking over from a Dutch civil servant, an elderly gentleman, very, very nice, who was known as Father Christmas by everybody because he resembled him in beard and white hair and things. And he had a secretary who was very, very efficient, her husband had been a major politician somewhere in Central America and she was very wired up. It turned out however that she didn’t take shorthand and didn’t type very well, so the – the rate of production was pretty slow. And after I’d seen Father Christmas for the first day I said maybe I ought to look at the files and they said, well, you know. And the secretary said, ‘Well, they’re in the cupboard but do be careful when you open the cupboard,’ as they used to say in the aircraft, ‘in case should anything fall out.’ And it did, I mean paper just fell all over the corridor and there was everything there, from the building contracts which because of geographical distribution for contracts were – the Danes had got a contract for this, the Swedes had got a contract for that, and it was all over the place. And he went away and I was left with this dear lady and I said on the second day I’d like to dictate some letters and she said, ‘Oh, sorry, I don’t take shorthand.’ [laughs] The first thing I had to do was to get somebody who could take shorthand and then they told me in Paris that the only way to do it was to transfer somebody from Paris to Holland. Well, that’s like, you know, a downgrade straight away for anybody who’s been living in Paris. Anyway the English girl said she would risk it for a year and came, and she was excellent, and we just took the thing by
the scruff of the neck and I got people involved in writing contracting plans, rules for procurement, rules for recruitment, rules for everything that didn’t exist, rules for allocation of premises and laboratories and going out for tender for – for large contracting [ph]. In those days we were offering contracts of fifty million pounds which in those days was quite a lot of money, so you ought at least to have had some rules for that. But they – the member states were terrible, they would argue like Persian carpet dealers right up to the last moment to get some more work back in their country, irrespective of whether it suited the project or not.

_Sounds an interesting environment to be begin work, it’s –_

Yes, it was, it was. I mean I was in perpetual revolution against – against Paris and …

_Against Paris in the shape of ESRO headquarters?_

The headquarters, yes. I mean they – eventually they came to see that it was inevitable that if you’re going to – we had to take on a hundred engineers. When you take on a hundred engineers in that kind of an environment you have to know where to find them. They’re not just engineers who’ve just come out of school, you really have to go and wean them out of industry or from national research agencies and they won’t reply to just a straight announcement. And you need to be able to clinch a deal with them and offer them a good deal, maybe one or two points up the scale and this kind of thing. And eventually I said, well, either we do it that way or I don’t do it at all so they could see that it was reasonable, well I think they did. And then the DG, Auger, left, I mean he really wasn’t terribly active in my day. He’d done a brilliant job in convincing member states to sign the convention, he and Harry Massey and Amaldi the Italian and people like that. He was very visionary about what was needed and he was replaced by Hermann Bondi who was chalk and cheese and a very hands-on character. Called me down on the second day in office and asked me what was going on and at the end of the meeting he said, ‘I believe in ESTEC for the ESTECians. You can have independence.’ [laughs] He said, ‘I know you’ve already declared unilateral independence but now you can have it formally.’ So he changed all the working methods and we were able to – to work. And in fact my wife who –
she became my wife, who worked in Paris in ESRO, she was in the personnel department and responsible for, hmmm, recruitment of technical staff. And I – if the word isn’t too strong, seduced her into coming to ESTEC to work for us ‘cause she was very good. She was a brilliant linguist and knew her way around the personnel rules and regulations and had a feeling for families and what they wanted, schools and hospitals and things.

[23:05]

And so she came to – to ESTEC to help and we gradually started to recruit people and put them in key posts. It was a long business because we – we had the dual job of making sure that the two first satellites were launched and getting the administrative and regulatory side shorn up. It would have been useless to show them we’d got wonderful regulations if our two satellites didn’t work. And on the other hand, if the satellites had just worked like that they would have cost twice as much and we would never have got permission for a third satellite, so these two aspects had to be reconciled. This was not always easy, the chief – the chief technical guy was a very difficult French character, renowned even amongst French people for being extremely difficult.

Who is this?

A man called Blassell, maybe Geoff mentioned him, he couldn’t stand him at the time. But one really had to stand one’s ground, it was – I realised he needed certain things and I had to get him to appreciate I also needed certain things, and member states also needed discipline. You can’t allow member states to put three inertia wheels in a satellite simply because three companies want to build inertia wheels and I built the – the slogan, I can build rockets, I can build satellites but I can’t build a political satellite, so you sort out the politics, you tell me and then I will build the satellite, but don’t try and tell me how to build a political satellite. And this had a hard passage in the beginning but some member states were very helpful. The UK was very helpful, Switzerland, Spain, and gradually the others fell into line, but it was just a Persian market in the beginning and the – the fate of the satellite was really not
terribly important. But Blassell did an extremely good job, he was a very, very highly qualified satellite man and if he’d been a little bit more intelligent in his man handling he would have gone a long way but as it was he had to leave.

*How’s your role of administration connected with the satellite work?*

Well, there I was head of administration but there was no head of the establishment. The head of establishment had been appointed, he was a Swiss gentleman but he had delusions of grandeur and rented on behalf of the organisation a large house in the Hague which was for him and similar transgressions, and eventually he had to be invited to leave. And nobody took over from him and so they sent a man from Paris who was head of technical services or something, a Swede, nice chap, and he used to come once a week, but of course coming once a week to a bunch of guys like we had in ESTEC was water off a duck’s back and they — they’d all — we got ahead of sounding rockets, we thought that Jesus Christ had invested him with the power to launch sounding rockets and he wasn’t some pipsqueak coming from Paris who was going to alter that. Blassell was even worse, the head of space science wouldn’t even receive the head of the establishment because he — he’d moved all his people out to a motel when the fire took place and wouldn’t come back. I mean it was … it was really quite amusing looking back.

*It sounds like they were all building up little individual kingdoms.*

Oh, yes, absolutely but what they — they hadn’t realised was that in a properly organised international organisation if you got your hands on the money and on the recruitment of staff you’ve got them by the balls. And, er, they’d been used to storming into Father Christmas’s office and getting what they wanted and then going away, but with me it didn’t work. And then after a year of this we were all a bit battle weary by that time, we’d managed to launch the first two satellites. They appointed a German head of ESTEC who had been the head of Siemens Research, radar expert, excellent man.

*Who’s this?*
Kleen, K, L, double E, N, who became – me and my wife a personal friend over thirty years, first class guy and he decided that what I was doing was the right thing, so from then on we – we were able to do things legitimately and he, one by one, chopped the heads off the barons and we brought them under control. That was at the time then that Geoff Tootill moved to Germany with the control centre, there were two or three big shake-ups like that. And then Bondi decided that he wanted a new head of administration, a director of administration in Paris, and asked me if I would be interested. It was a bit paradoxical because I’d been fighting Paris for nearly three years and after just a summary interview and a council decision I found myself director of administration in ESRO and, er … it was good in a way because I was able then to leave behind people whom I’d worked with and trained over a number of years, so the man who’d been number two in administration became the number one. The number three became the head of contracts, so I got people that I knew and could work with, and I was quite willing to let the reins loose because there was a lot to do on the political side, trying to prepare for the European Space Agency which was then being talked about but needed a heck of a lot of political work.

[30:50]

_Hmm. Could I ask you one or two more formal questions about your time at ESTEC?_

_Hmm._

_I was wondering if you had any contact with ELDO when you were there?_

Very, very little. When I went to Paris several times I tried to make contact with them to talk about contracting methods because I thought maybe they’d got some tips to give us so that we could have, if not exactly the same, at least comparable contracting methods, you know, going out for tender, tender boards and this kind of thing, evaluation factors. But nobody could talk to me, nobody knew what was the – what was being done and there wasn’t a head of contracts as such. Member states used to offer what they would do and then the poor ELDO secretary would shuffle around and
try to make use of it, it was dreadful. You know, the head of ELDO was an Italian diplomat and he had no knowledge whatsoever of the area but he was a consummate diplomat, [coughs] pardon me. I think he had four or five secretaries when I was there then. When ELDO was moved in with ESRO we found out that one of the secretariat, one of the secretaries, actually worked with Christian Dior as a model, so she wasn’t always available for secretarial work. Another one couldn’t type and couldn’t take shorthand, and I hesitated to ask what her functions were but it was – so we decided at a quite early stage that there was really not much to be gained from a closer association with ELDO. I’m not criticising the people who were there because the member states wished it on themselves through lack of – of control and through this overweening ambition to get national things accepted without seeing where they fit. Their idea was you take a British stage and you put a French stage and then you put a German on top and then the Italians put a – and you light a fire there and off it goes. Well, it don’t work like that but it’s – it was that mentality that stopped the people who otherwise, many of whom, were quite competent, who could have done a much better job.

How much influence, or interference perhaps would be a better way of putting it, did national politics have on your work at ESTEC?

… Quite a lot but always through the headquarters, through the committees. There was the council, which was highly political, and there was an administrative and finance committee which was supposed to be not political but taking account of political considerations, looking at value for money and distribution of work and this kind of thing. And in the first – when I first arrived it was not unusual for the administrative committee to have industrial representatives sitting around the table deciding on the adjudication of contracts, until I pointed out that this was just not a way to build a railway and – but this was the – as I say, it wasn’t the people themselves, it was member states who just went for the short term advantages and the – they were badly served by their representatives, but we got rid of a lot of that by tightening. When I got to Paris I was able to write very strict rules and exclude people from meetings and this kind of thing. Hmmm … politics into ESTEC I always tried to limit by saying this is a technical establishment and they – they don’t want to
know what the politics are, they want to know we’ve been commissioned to build a satellite and these are its specifications and this is what it’s supposed to do, this is how much has been allocated for it, now tell us how you’re going to do it then go away and do it. But if in the middle of that you come up and say, well, the United Kingdom attaches great importance to the poor guy with a screwdriver who doesn’t really know what the bloody hell that means to him, so kindly do not talk to my people with screwdrivers, come and talk to me if you want to talk to him. Hmmm … the message got through but it was, well, like all things, as long as it worked they did it. When it didn’t work then they realised that they’d have to change their working methods. But I think we managed quite successfully to keep ESTEC out of the – out of the firing line though there were the occasional insurgencies from individual delegates who came to see people that they’d worked with nationally to get some inside information, but even that I managed to hose down quite severely.

[36:50]

_Hmm. Your time at ESTEC, were you still technically on secondment from the British civil service or –?_

Oh, no, the British civil service and the UK, the UKAEA, were very kind to me, they gave me three months to make up my mind, did I want to come back to daddy or would I break off all together, and after three months I decided to stay so I had no further contact with them. This is an – it’s an interesting point that I was no longer dependent on any civil service unit for promotion whereas take, for example, the Belgians, the Belgians get or got promotion in absentia from their civil service, so after ten years with ESRO they would get ten years’ seniority in the civil service and get an appropriate grade in the civil service. The Germans, pretty much the same, and the French the same. They always bury their own dead whereas with the – with the Brits, once you’d committed the unspeakable sin of not wanting to work in the UK then you were gone and lost forever.

_[laughs] How did you consider yourself at this point? I suppose initially you were a British civil servant in an international organisation but –_
Only for three months.

*How did you consider yourself after that?*

An international civil servant. I was quite comfortable with it really, it was obviously an organisation that had … a future and when I started I was on a five year contract and then I got an – an extension. And then when I went to – to Paris as director of administration I was given four years of that, which was interrupted when I was made director general. No, that didn’t – that didn’t worry me at all.

*What was a typical day’s work like during your time at ESTEC?*

Well, it started about seven o’clock in the morning, very early in the office. See as many people as possible in as many labs as possible, try and take the temperature of the day, and it finished at dinner time, eight o’clock in the evening, and take work home, produce stuff for the secretary when she comes in at eight o’clock, or the secretaries, we needed two. And I brought in this French guy that I’d been working with in atomic energy, Bouillet, and I brought him in as a personal assistant into ESTEC and that helped to put a bit of order in things ‘cause he was very methodical and – and also he was a technical man, he wasn’t just an administrator.

*It sounds a very long day’s work by any standards.*

Yeah, it was long and there was quite a bit of travelling, mainly to Paris in the beginning to – to argue my way through everything. It was quite tedious in the beginning but in – when Bondi was there it was very good, he was very – very understanding and once he’d decided what he wanted to do then he would say, okay, that’s your share and go away and do it, and then he didn’t want to know unless it was going pear shaped.

*Is there a social life outside work at this point or …?*
Very little, very little, but luckily I had my wife to be with me so we had a social life which was intimately connected with – with work and, er, since she was an excellent cook we would sometimes have dinner with a couple of engineers from a project or a couple of guys from the audit office and mix a dinner with some talking, which was very helpful.

[41:30]

*What had happened to your first wife, if you don’t mind me asking?*

No, we were divorced, we were a bit – well, we were estranged but – and not legally so but eventually it became necessary to have a legal divorce. It was done reasonably amicably and … I mean I still have contact with them and she and my second wife are great friends [laughs], having both suffered the same husband.

*[Laughs] Did you divorce before or after the ELDO, the ESRO period?*

It was during the ESRO period that I divorced.

*Was there any connection to the long working hours?*

No, not really, we – well, we were really quite estranged before I even went to ESRO but she did come to Holland for about a year or about the best part of a year I suppose, but she didn’t really fit in there and … well, things had broken down really. And not her fault, I mean both our faults.

*What was the atmosphere like at ESRO?*

In Paris it was a kind of dreamland where international civil servants happily planned for the next council meeting or entertained a delegate from Sweden, and they worked very hard but I’m not quite sure what they produced and neither were they. They didn’t seem to have any concept of where ESRO was going and what it ought to be looking for, and Bondi certainly had. When he came he started shaking them up and
this was the basic reason why he brought me from ESTEC into – into Paris, and then we started then talking about how could we get member states to agree that ESRO should go into meteorology, into Meteor sats, because the convention actually says scientific satellites, that excluded telecommunications but did it exclude meteorology? So he, and the new technical director was a Frenchman, also very – very helpful, Dinkespiler and myself, we argued our way through with delegations so that meteorology was accepted as something we could get into. So the French had been working very hard on a – on a Meteor sat payload and we concocted a deal whereby it would become European, and we took over the work they’d done on the – on the payload, which was very good and very advanced, and in return we set up a unit in Toulouse which was half ESA and half French Space Agency, but under the aegis of the European Space Agency, not joint. The team was joint and the people were half and half but the responsibility was solely with – with us and, er, it took a bit of swallowing but the French were really very good about that. They were chuffed at getting it in Toulouse because that was where they were trying to build up the space instead of it being in Paris, and it worked very well. I sent extremely good people down there and it worked very well.

*Is that back to ESRO when it’s turned into ESA or –?*

It was on the borderline. We started actually before – the first agreement was before ESA came into – into being but it was very important because we’d been doing a lot in telecommunications on the spurious grounds of scientific satellites also need telecommunications, so we built up a team of telecommunication people whose real aim was telecommunication satellites and TV satellites but woe be it if anybody mentioned that. What we were really supposed to be doing was looking at sending data back from scientific satellites by the best means and gradually as member states cottoned on to what was going on they realised that this had been a very good investment and so they – they blessed it post hoc.
[Laughs] You raise an interesting point there actually about the scientific work that ESRO was set up to do –

Yes.

And yet there’s also a lot of engineering at ESTEC as well isn’t there?

Oh, yes, indeed.

How do you –? Are there any complications with administrating the two strands for you?

… I think we always tried to keep the – the science specifications away from the engineers, so if it’s a scientific satellite why are you going there? You’re going there because scientists want to do certain things. Or, what is that they want to measure and with what degree of accuracy? And that degree of accuracy, is it really their bottom line or can they give a bit? And this takes a hell of a long time to – to get out of them. I mean sometimes you even go to the point of saying, well, if you want ten to the minus five you’ll have to go somewhere else ‘cause we can’t afford it. Say, well, maybe ten to the minus six will be okay, so ten to the minus six goes in and then when you’ve got those set up then you can turn round to the engineering side and say, now boys, it’s got to be made so that it does this, and there is no further negotiation possible. But if you have a running go-between them it’s deadly, because they don’t talk the same language … so we – this was a way. Maybe there are better ways of doing it but we were – we were learning in those days; I’d never built a satellite and not many other people had either.

This is ESRO one and ESRO –

Two, yes, and then ESRO four.

I understand that from the original ESRO, was it the Blue Book, they originally set out the plans?
One satellite every Tuesday morning, yes.

Yes. [laughs]

Yeah.

And then that didn’t happen which –

It was – it was ridiculous.

What was the feeling within the organisation because of this?

Well, this belonged to Paris, this Blue Book. I mean Paris said, ‘We have the Blue Book and we now know what we’re going to do,’ they had no idea how they would do it. I mean one of the first things I did at – at ESTEC was to run through the Blue Book and take a rough estimate of what the budget would need to be yearly over the next ten years and it was something like, as I remember, twelve or thirteen times higher than we’d actually got. I mean it was just utterly ridiculous.

Oh, so never really a practical proposition in the first place?

No. So what we used it for was to sort out what that meant in terms of scientific priorities, so ESRO four was created and TT1 was created, and they got perhaps Blue Book great uncles and great aunts but made into satellite programmes that we could afford on a timescale that fitted more or less with our – with our budget. The scientific budget was very strange, I don’t know whether you’ve realised it in reading but the science budget was always separate from every other budget in ESRO and indeed in ESA. It’s done on a pro rata basis for PNB, for your gross national product, and no questions asked. You pay a fixed sum every year according to your gross national product whereas all the other projects are project funded and the percentage depends on your interest, so you can take forty per cent or you can opt out and – and not do it at all, but the science programme is protected in that way. So in that way
they – they become a bit uppity because they’ve got a guarantee but they also become … much too ambitious, they try to start too many programmes without looking at year three or year four to see the hump coming.

[52:00]

*Were there any tensions between all the different nationalities you’ve got working for this organisation?*

No, very little, very little indeed. People didn’t really bother about nationality, hmmm, I don’t – I don’t remember any row based on nationality. Lots of disputes on all kinds of things but generally on differences of opinion on work or all sorts of things, but never on nationality.

*Did you enjoy working at ESTEC?*

Yeah, the climate was terrible. I mean the meteorological climate was terrible but the work atmosphere was very good. We used to – well, next to ESTEC is a … I suppose it’s a lunatic asylum in the unpolitical, non-political language, and it had a big fence round it, and so did we. And the … the local story at ESTEC was they had it to keep the inside world out and we had it to keep the idiots in [both laugh], if we gave them a chance they’d go and get a job somewhere else.

*Talking of jobs somewhere else, the transfer to Paris, did you expect it or was that out of the blue?*

No, no, I wasn’t a candidate at all, it was – it was entirely Bondi who – I don’t know whether the Belgian director wanted to go or whether he was – it was suggested he should go, I really don’t know. He was okay but he wasn’t very visionary in Bondi’s sense of the work, er, but he did a good job and he went off and had a good career subsequently. But there were lots of people in Paris who had been eyeing this job and were excellent candidates, at least in their own eyes, and it was a bit of a disappointment to many of them when somebody from this dreadful place, ESTEC,
was – and this terrible man Gibson who’s been fighting against us all this time. So we had a few interesting initial weeks.

*It sounds almost like there’s a sort of – a slight snobbery there from Paris. Would I be reading that rightly or –?*

Oh, yes, snobbery and, yeah, they really didn’t want to lose the leaders of power. I think excluding Bondi and Dinkespiler they didn’t know what to do with them but they had the leaders of power and instead of using them upwards they used them downwards to – to prevent things happening in ESTEC, not to prevent them but to slow them down and to make things so terribly complicated. We found that with rules you could do things very quickly if you had a book of rules and you – for example, when we were recruiting – we needed to recruit because we’d had some new projects approved. We needed to recruit 200 engineers in six months, and this is quite difficult and it doesn’t sound very much but to get – we knew exactly what we wanted in terms of qualifications and so we got our man in Washington to be very well aware of who was winning and who was losing contracts for NASA. And when Boeing in Seattle lost the contract then we sent a team to Seattle and put advertisements in the local Seattle paper for engineers, and then you get fifty engineers come. And we knew what we want, we took people over, the experts knew the kind of people they wanted, and I took contracts over already signed and the grade I would put in when we – when we’d seen them. So we’d see a guy, interview him, talk amongst ourselves, send him to another little group, they liked him, send him, come back, say, ‘Do you want a job? Oh, here’s a contract.’ Say, ‘A contract?’ ‘Yes, take an hour, read it, see what you think of it.’ Nine times out of then they would say yes, whereas before you’d say, ‘Well, you know, we like him and now we’ll ask Paris whether we can –,’ and the thing would have dragged on for months and months whereas in this way we picked up – we picked up – we gave priority to first generation Europeans. Well, first priority to Europeans who were in America but then second priority to people had been born in the States but born of European parents. And we picked up people who were still quite big in the space scene and who’d been happy to – to spend their working life with these. We got excellent people.
Can you give me some examples?

Oh, I had Sterver, Stirling, Spahling, Twill Kessell, all sorts of these characters who worked in the States in the big firms and, as I say, Boeing and the Los Angeles lost the contract. Out we'd go to Los Angeles, same manoeuvre, advertisement in the paper, a reception at a local hotel, take two suites a room for two boards, recycle the people through once and the good ones back the other way, and at the end the contract. And we managed to recruit 200.

Sounds a remarkable procedure of reversing the brain drain almost, it’s –

Yes. And Bondi loved it, he thought it was great. [both laugh]

[58:50]

What was the actual situation when you got to Paris? How were you first treated when you arrived?

Oh, with great suspicion but it coincided with a period where the main thrust was towards getting the convention written for the new European space agency and although work went on and life went on and we were building projects and – the big priority was preparing for the European Space Agency, should it be with or without launchers? If it’s with launchers should ELDO come to ESRO, should ESRO go to ELDO, all these kind of things, and then … hour long discussion. I think the convention sub-committee of delegates had fifty or more meetings and – and in the middle of all this Bondi resigned, went back to the UK to be the scientific advisor to the Ministry of Defence and they put me in to holding the fort and then got a German in who’d been with ESRO from the beginning. A very nice and very capable man but whose health was not very good and the strain was really too – too much for him and, er, he got to the point of not wanting to get involved in things that were too stressful. When we were negotiating with the – with the US, with NASA, for Spacelab and the space station and he really just said, I don’t want to know, it’s all yours, and then he went – you know, he was absent for weeks at a time. It wasn’t his fault at all though,
and so I was leading the band there at that time through all the negotiations on the – on the setting up of the convention.

[1:01:30]

And there again the – there was an advertisement for the director general of the new agency and I didn’t put in an application, and one day I got a call to say that the German minister wanted to go to Darmstadt to see the establishment there and he’d very much like me to be there, so I flew down to meet him. He was a very bluff, forthright character, ex-trade unionist, very sharp and he was –

_Sorry, who was this?_

Matthoefer his name was. Very well informed, arrived, said to his two aides, ‘Wait here, see you later.’ Took me by the shoulder, walked me down the first corridor and kept looking in offices to see if they were empty. Found the first empty office, went outside, pulled me in, shut the door and said, ‘Germany proposes to propose you as director general.’ And I said, ‘I’m very flattered.’ Said, ‘What’s in it for Germany?’ And I said, ‘Nothing. Well, nothing for the others either.’ He said, ‘Yeah, that’s what they told me. Okay [claps hands], it’s a deal,’ [both laugh] and that was it. And the UK was asked and they very kindly said they had no objection, so it went through. But it was – it was all a bit informal ‘cause they had quite a lot of official candidates that had been putting in their candidacies, but that’s the way it was. He was good, he was very pro-space, very down to earth about things and, er, because his English was not very good he was grateful to be able to speak in German. I think that played a role really because several of the Germans were happier in German than they were in English.

_It seems that in all your jobs up to this point language has been a very important thing._

That’s true, yes, yes. I don’t want to make too much of it but I’m sure it played a – it played a role, and particularly with him. He spoke fluent Spanish because he’d been
with the International Confederation of Free Trade Unions in South America or Central America and his Spanish was excellent, much better than mine. He got on like a house on fire with my wife because she was a Spanish translator. Er …

*I think that seems like quite a good to point to stop today unless you –*

Yeah, I think if we just round it off and say then it went to the – the ministerial conference in Brussels and Heseltine was then the UK minister at that time and the proposal was put and was accepted, and I was nominated director general.

*How did you feel?*

Yeah … mixed feelings really, I … I predicted that the euphoria from member states at having created the agency wouldn’t last very long and that there would be a period within a few months where member states would say, Jesus, what are we creating and are they going to take money from our national programmes and maybe it was all a big mistake. And you could feel people reaching for the brakes before we’d even got going, and that was – that’s actually what happened. But at the time I mean there was plenty to do, plenty to keep us off the streets at night.

[1:06:00]

We had a reasonably good team, one or two passengers but most of them were qualified people.

*Who is the team at this point?*

These were all the directors that were – I said I didn’t want to recommend directors but I wanted a right of refusal and that was considered to be reasonable. So I think there were eight directors and I knew most of them from beforehand but those I didn’t know I was able to – to meet and gave my okay to – one, I changed his attributions ‘cause he was being given a project job where he wasn’t a project man, he was a kind of a generalist and a scientist and so I thought he’d be better as an inspector general
looking at the quality of programmes rather than busting a gut to get things done by 31st May or whatever it – and their delegations accepted this. So the team was quite well qualified and we had a good programme, and the main job really, the ticklish job, was integrating ELDO, 'cause everybody was very sensitive about this and it wasn’t ESRO taking over ELDO, it was ESA admitting both, ESRO and ELDO. So we – I had the job of accommodating about 200 people, 60 of whom in my view would never have been employed by anybody anywhere, they were useless and I didn’t intend to take them and put them in jobs where they would ruin the whole thing, so they had to be accommodated and I did this sometimes with member states who were kind enough to take back their walking wounded and look after them. Sometimes the guy wanted early retirement, I found one or two jobs at NATO and several of them, I mean, were very good and I put them in key positions including the chef du cabinet. My chef du cabinet came from ELDO ‘cause I wanted to show that we weren’t hiding anything, they were privy to everything that was going on. Even the head of personnel I took from – from ELDO, he was a very good – very good man, but it was useless in that period to take on useless staff because they were bad enough where they were but in a new agency it would have been fatal. And they – most of them got the whiff of the – of the grapeshot. They knew that the halcyon days were over, but it was a long and – I mean one doesn’t – doesn’t like being firm with people or offensive to them, but it had to be done.

It seems a very – a fair process though, sort of putting them in jobs where –

Yeah, some of them had got two years to do and there were quite a lot of things cleaning up, getting things, that we hadn’t had time to do where the guy could do it quite peacefully and quite happily and before he took his retirement and he felt he was being used, and in fact he was doing a good job but he wouldn’t have been able to keep the pace that we were – we were keeping, and the pace was really quite hectic.

[End of Track 5]
This is interview with Roy Gibson, 23rd May 2010. Roy, when we spoke last, which was only yesterday when I come to think about it [laughs], you’d just become director general of, well, was it still ESRO at this point?

No, it was the European Space Agency. It was the – in Brussels at the council of ministers and, er, such was the organisation then that it really had to go back to the council of ESA, so there was another meeting then of the European Space Agency’s council to confirm everything and confirm the programmes that they’d agreed because they – at the ministerial conference they agreed ESRO and ELDO should go together into the new agency and I should lead it and there would be seven or eight directors. And then a programme was set out with – much more realistic than the last one that had been foreseen but it did contain launcher, scientific satellites, and then a raft of application satellites, telecommunications, remote sensing, meteorology. So it was a very big and ambitious programme and the money was voted for these programmes.

Was there any problem getting agreement on the funding?

Well, it all came through in what were known in those days as packaged deals. We had periods of negotiations and then when the vision cleared they managed to get an agreement and we got a package which gave nobody exactly what they wanted but enough to keep them quiet. And there was a big one which ended with ESA being created. The first job therefore was to get the team focused onto dealing with the programme that we’d got ‘cause it was – it doesn’t sound much these days but it was a very ambitious programme and the relationship of the different member states to these programmes varied. The British didn’t want to know about launchers, the French wanted to know about everything, you had to tailor the programmes to the interests of the various countries. The second important thing was to get a system for renewing programmes which would eternalise ESA. My worry was that ESA would be a flash in the pan with a programme, full stop, which would gradually peter out as you managed to launch the satellites whereas my ambition for ESA, and I think it was the ambition of a lot of member states, was to have a space agency which would go on
renewing its programmes. And this in fact has happened and I like to think that these first five years were crucial in getting acceptance for this large beast, and as I think I said yesterday, it was already obvious that the – the novelty was wearing off with a lot of member states when they saw not only was there an enormous budget that they would be contributing to – and we hid nothing, the figures were real figures, not the kind of figures that are sometimes put up to get a favourable decision. They were big by those days’ standards and at the same time they were worried that this was going to bite on their national programmes. This, for the French for example, was very important because there was a kind of atavistic connection between the French and space. They quite justifiably thought that they were the leaders of space in Europe, and they were. A lot of the impetus that came from the early programmes, and even from ESA, came from France. But there was a clause in the convention that said one of the functions of ESA would be to coordinate its programme with the programmes of member states. This was never really properly enforced and – ‘cause inevitably in most countries there was only a limited amount of money, so having increased the amount that they gave to ESA they directly or indirectly decreased the chances of funds going nationally. And this caused a lack of – well, a decline in the enthusiasm as the months rolled by, particularly as they could see that the new council of ESA was going to give almost as much weight to the voice of Switzerland as it would to Germany, although Germany would be paying maybe six or seven times more into the budget and the charm of this rubbed off very quickly.

[06:15]

The third priority was to peacefully integrate people from ELDO, we spoke a little bit about this yesterday and although this wasn’t in the direct line of – of the programme it was relevant to the programmes since you – you couldn’t run these ambitious programmes if you had to – if you were obliged to take on people who weren’t capable of doing the job, so that was a big problem. And the fourth problem was to try to persuade those member states who had either been observers or been looking from afar, whether they should join or not. And I was very – very keen from the beginning that we should extend and in fact we – we did two useful extensions. We took on Ireland almost at once, we’d been preparing them in the aisles and we came to
a special agreement with Canada, making them an associated member state. They were able to join all the programmes and they had the right to vote when those programmes were discussed but they had no right to vote on general subjects such as the future of ESA, but they thought this was good and we did. It nearly fell in the water, the Canadian minister at that time was a French speaking politician called Jeanne Sauve, she later became governor general of Canada. She was a very smart cookie indeed, she was very keen to get into ESA and I and my colleagues coached them on what to do and how to talk to their industry and how to organise themselves nationally. And it was agreed that she would come and meet the council, and there was a draft agreement. The French, however, were very much against it, they wanted to keep them out and have some sort of a bilateral agreement on individual programmes, which wouldn’t have politically suited the Canadians because they wanted a relationship which would protect them from being overwhelmed by NASA, you know, the US peering over the Canadian fence is always a problem for them. And this Jeanne Sauve was a blonde, very attractive, and had charmed her way through the political labyrinths of Canada to become very influential and she was waiting in my office for the council to start. The chairman of council was an Italian, he’d never met Sauve, so we started the council and she was waiting in my office and then he – we came to her item on the agenda and we sent somebody to bring her along, and as she came in through the door – we had an enormous conference room and she came in at the end and blonde, very trim figure, and a very attractive smile. And the chairman of council, as I suspected, was very susceptible to this kind of influence and he stood up and said, ‘Madam, vous êtes chez vous’, you’re – you’re at home here, and so the deal was sold. And the French delegation who’d prepared a long intervention of how it wouldn’t be appropriate, etc, it all fell in the water and in five minutes they were all opening the champagne and falling over each other to try and – [laughs] but I think if a grissly man from the Upper Quebec had come in, in a lumber jacket instead of shirt, it would have been a different story all together. It’s very interesting to see how the course of quite important events are influenced by such seemingly extraneous factors.

[10:50]
[Laughs] You said yesterday at this point –

Yes.

What’s the balance like between men and women?

Very few technical staff with women but a lot in the administrative, finance, contracts, translations, publications, in the ancillary services, but very few engineers. We managed to recruit a few but it was mainly because the – the education systems in most countries was producing generic engineers, we wanted engineers who’d done a space course as well and we – we started to get them. Towards the end of my time we were recruiting more women because more were becoming available on the market.

And negotiations with countries like Ireland and Canada, how would they actually be carried out?

Well, it depended really on the subject. If it was a generic subject like joining ESA then the legal office and the international affairs office would take the lead in the beginning and would go to the country and establish the links with the right people and then make a recommendation back to us. And if it was something that was beyond the powers of the director general then I would have to seek authority from the council and then it progressed like that. But if it was a programme then the programme would take the lead, if it was launcher then the director of launchers would – would give it with the international people trailing him to make sure he wasn’t selling the shop. But we – we were well equipped, we were able to negotiate several – several deals at the same time.

What actually were your duties as director general?

… Funnily enough I didn’t have any list of duties. The convention has got one or two rather placid sentences about what the director general does but I mean it was to run the place and to report to council, and the balance was how much was running and how much did council need to know or approve. It’s important I think to remember
that the – both ELDO and ESRO worked on the basis of a council and an administrative committee, and in the organisations there were secretariats so they would deem to be secretariats to the delegates. The balance of power therefore was with the delegates and with the committees. I mean the very word secretariat means that they were the hewers of wood and the carriers of water. The ESA convention made it possible for us to have a director general and an executive, so the executive replaced the secretariat and an executive in my concept executes and it doesn’t ask before every execution, it uses its judgement whether it’s something which is consistent with what member states want to happen or whether it’s something new where you would be well advised to see whether people want it or not.

[15:10]

There was a very interesting case which set a precedent, I was very keen for us to establish relations with China, this was 1977 I think. China was just beginning to open up and we had had one or tips from embassies in Paris that the Chinese were very keen to talk to this new agency and so I told council that we were going to take a mission to China. I didn’t ask for permission, I said we were going to take it to see what would happen. And sure enough several of them said that’s not within your remit, you need full council approval and we for one will not agree. And I said, well, perhaps we could look at the point in the convention where it forbids me from doing this then we could have a debate about it. Of course they couldn’t find anything, ‘cause I knew the convention, I’d written half of it and I knew there was nothing there. So gradually the penny sank that this was an important thing, so in order to not to rub their noses in it I said what I had in mind was a mixed mission under my leadership under which member states would nominate six people in the delegation and I would nominate six from the executive. ‘Oh, yes, but we’re twelve member states and every member state must have …’ I said, ‘No, we can’t go trooping round like a visit to Dr Barnardo’s orphanage, you’ve got to learn to nominate two or three or four or five of the twelve who will speak for all of you and this would be a good – a good test.’ And eventually they – they agreed and they fought long and hard but it was nothing to do with me which of the six should be, which caused me great amusement because normally they fell back on one country, one person, and they
never had to deal with this – this problem of being a unity and trusting somebody else to talk for them, but they did it and it was a very, very successful meeting. I sent a guy over for two weeks to prepare the ground and two or three of the embassies in Peking, the UK, the French and the Swiss embassies were very helpful and, er, they knew the ropes on who you’d talk to and this kind of thing, and I’d got a few contacts through the space network. And we arrived just at the time that the administration was calling people back from the rice fields where they’d been – all the English speaking professors had been planting rice for the last two or three years but they brought a lot of them back and dusted them down, manicured them a bit ‘cause they’d all got calluses all over their hands from working in the fields. But the administration, the Chinese administration, had very good interpreters but they had very few technical people who spoke English. All the English people had been – English speaking and French speaking people had been declared enemies of the state and had to be re-educated, so these people came back from re-education and we had very interesting talks with them because they were just beginning to be re-admitted into the Chinese establishment and the communist bosses relied on them because they wouldn’t have known a satellite if it fell on their feet and – but they were very keen to know about it and they reluctantly realised that the reservoir of knowledge was in these people. A dear old guy who lectured in London University for twenty years and another one who’d been in the States, another one who’d been in – in France in the Sorbonne, completely westernised in their – in their approach, very well informed about everything to do with orbits and launching, the theory of launching and propulsion and this kind of thing. But the only people that the Chinese had got were the military on their missiles, and the military weren’t allowed to talk to the civil people. It was a very – a very interesting situation but they were obviously making great efforts, we had no – no incidents, no nastiness, only hope and we met the – the vice prime minister and several other ministers in the Hall of the People and we were taken round to all their institutes and then we made two or three trips around – around China to see ‘cause they found out their work – Xian was a big telecommunications centre and that was establishment number 501 and that was telecommunications, so we had to go and see that. There was another one in Nanjing which the military reluctantly allowed us to see because it was a propulsion experimental station, we went to see that. Then we went to Shanghai to see the station that Nixon had brought
with him when he went to China in this, I think a year before or eighteen months before, and there was this enormous receiving station for telecommunication satellites. So we said, oh, yes, is this the Nixon station? And they laughed and said, well, no, it isn’t but it’s an exact copy of it ‘cause we’ve now got three of them. And they’d rear engineered two copies and we crawled over this and they were good, they were very good. So we – this was quite ground breaking for ESA because it – it opened up the way for industry to be able to go. Industry hadn’t realised that with China in those days, and to a large extent now, you go in through the political door and if you don’t get in then your industry doesn’t get in either. But if you get in and if your industry takes time and doesn’t rush things then there is some business to be done. But it was – it was very interesting and very productive and we had a lot – a lot to do with them subsequently but of course it was subject to the ups and downs of political shenanigans which we always kept well clear of.

[22:55]

**What was your impression of the Chinese facilities that you visited?**

Oh, very competent, I mean just as competent as our boys were. Not with as much hands-on experience because of the circumstances. We went, for example, to a big factory where they were going to produce launchers, and it was an enormous place, a big hangar, and there were bits of metal lying around, I mean filthy. In Europe it would have been a clean room with laminate floor and all the things that we’d been taught by the Americans but there it was just a hangar with people sweeping up, and very few people. And I said, ‘Well, where are the people?’ ‘Oh, they’re in the next hangar next door, they’re making refrigerators because we don’t yet have the approval to go ahead on the launcher but as soon as we get that then we’ll move them in and we’ll take new people into the refrigerator factory because it’s less skilled.’ So I mean for us it would have been unthinkable but for them it make perfect sense, they were – they knew what they were doing and when I went back years later they – after I’d left ESA they asked me to go back, oh, four times and give lectures to different groups in all over China, and the deal was that they would pay for me and for my wife to go over and for one week I would give lectures and talks and visit factories, and for
one week they would show me a part of China. So I did this, as I say, four times with
them and built up very, very good close relationship with – with all sorts of Chinese
people, helped a little bit by the fact that I’d worked with Chinese before.

[25:10]

So coming back to – to ESA, we had these five years which were on the one hand
very productive in terms of getting the telecommunications projects going, in terms of
starting a maritime telecommunications satellite programme for communication with
ships because at that time the Americans had got a similar project going which they
were trying to flog to the United Nations, to IMCO, the International Maritime
Consultative Organisation. It was the – the United Nations organisation, well I
suppose it still is, which deals with regulations for ships, routing, safety precautions
and landing rights and this kind of thing. And the Americans were pushing very hard
through COMSAT, which was a supposedly commercial enterprise but which was
actually controlled by US and state department, and they were very keen to finish
their satellite and either give them or sell them or rent them to IMCO to start a global
system ‘cause they knew that once they got the first satellite in, when you wanted to
extend the system in order to have compatibility you’d have to use some more of the
same satellites or that would be the cheapest way of going about it. So we got a move
on and the UK was very helpful on this, I suppose the naval tradition helped and we
swiftly converted one of our telecommunication programmes into a maritime
telecommunication programme and we got our skates on. And then politically we
were able to show that ours was as good as, and possibly superior to, these things that
the Americans had been producing and therefore this new body that was being
created, it was called INMARSAT which was a governmental maritime
telecommunications organisation, vaguely under the United Nations banner. It was
given its first offices by IMCO and then it spread its wings, and it was quite rich
because the members were British Telecoms, French Telecoms, so putting ten million
on the table was no – no big problem for them. So we spent a lot of time negotiating
with them, with this new body, to get a dual system so that the American satellites
came in and covered certain orbits and we came in with ours and covered certain
orbits. And we could produce a payload which was compatible with theirs but which
went further, which obliged them to upgrade for the next generation. Now this worked very well indeed, it was a clone of the telecommunications satellites that were – were then launched and which were – went into use and have been very successful. That was EUTELSAT, I don’t know whether you’ve heard of that, but that’s another grouping of telecommunication bodies, British Telecom, Deutsche Telecom, France Telecom. We set up EUTELSAT in Paris to manage a series, a continuous series of telecommunication satellites for telecommunications in Europe but capable of transmitting outside Europe so that you could – in those days it was thought anything over 300 kilometres was worth using a satellite for, for a telephone call, but under 300 kilometres, so the local wisdom was, it would be better to use landlines. And we spent a considerable amount of time on these two negotiations, on the maritime negotiations and on the land negotiations, because internally my people didn’t want to give the satellite to somebody other than ESA. The ESA satellites, we’d made them, we should keep them, we should run them, we should operate them, and it was a very hard job. I mean I had to impose it with – with the help of some more enlightened colleagues. But the name of the game was that we were an R&D organisation, we were not an operational organisation, and therefore when we could find an organisation that was willing to make an operational system out of our research satellites this was the fulfilment of our mission and we shouldn’t try and get out of it by producing more research satellites unless it was to aid the next generation for this new body. So we eventually signed agreements with EUTELSAT and with INMARSAT, and in my view this was one of the best things that we did because they became independent and we were able for some years after my departure to spot where the interesting research and development areas were so that we could prepare industry for the next generation in EUTELSAT and INMARSAT. Nothing to do with us except for the R&D because we were an R&D organisation.

[31:35]

We had a slightly different job with the meteorologists because although it’s fashionable to think that the meteorologists immediately saw the value of satellites and thought that they would be much superior to the weather frogs that they’d been using previously for predictions. In fact they were very much against satellites and
for one very good reason, it was going to cost money and their – their budgets were made up years ahead, so they had excellent budgets for all the weather stations that they had fixed and ships moored in all sorts of unlikely places, arrangements with other meteorological services for the exchange of data, but when it came to finding 50 or 60 or 100 million for satellites I mean they went white at the gills and this was just something they – so they fought it very, in my view, unwisely on the grounds that it – it wouldn’t be useful scientifically. And this was already wearing a bit thin because we had a payload going where we could mimic what was in the payload and fly aircraft using the payload to get the same sort of thing that you would get from a satellite but using aircraft, just to show whether the – whether the data was valid or not and then comparing it with data that you got from the ground. And we could show very clearly that – that it was working, so we pursued this both through the meteorologists and through our member states and eventually got an agreement whereby we would take into ESA three blue blooded meteorologists in order to be integrated into our team to see what we were doing and to make sure that the product really was going to be a product that the meteorologists would – would want. And this worked very well, it took a lot of the sting and suspicion out of it and when eventually the first Meteor satellite was launched the first one fell in the water because the launcher failed but the second one was a success. And then magically EUMETSAT was created, which was the European organisation of European meteorological organisations with its own director and premises in Darmstadt and then they suddenly found money for their satellite. The ownership of these satellites mysteriously and suddenly passed from being ESA satellites to being EUMETSAT satellites, which was good but it caused a lot of resentment amongst people who’d been slogging in the marshes for several years and – and then to find that they were losing control of these.

[35:00]

We negotiated an agreement whereby ESA was still used as the procurement agency and the R&D agency for the satellites whereas EUMETSAT would be looking at the R&D on the data side, how the data flow could be improved and they would also have, because of these meteorologists who were with us, complete transparency on
the development of all the remote sensing systems. It’s interesting to think that when
the first Meteor sat went up the data used to come down in Darmstadt in – where
Geoff Tootill worked but an extended version of that. And the – the thing used to
come down on a television set much smaller than the one in my room over there and
then a man would come in, park his motorbike, come in with his helmet on and a
camera, and he would take photographs of what was on the screen. It was the Earth
and the clouds and then the second channel was the water vapour and he’d take a
photograph of that and then he would say, ‘Good evening all,’ jump on his motorbike,
and dash back to the television studios in time for the seven o’clock news where these
– the images would be shown. This was the beginning of – and the same was done –
as we gradually managed to dump these images all over, the same was done for the
BBC and of course now it’s all direct linking and – but that’s how it started. And I
mention it not it as a kind of crowing exercise but because it firstly came without a
hell of a lot of help from the people who eventually were going to use it, for which I
derived a lesson that applications are not always immediately welcomed. The space
agents shouldn’t think that they’re God’s gift and that automatically what they’re
doing can help, you have to get to the stage where these people say, this is wonderful,
I’m glad I thought of it. And you have to be sufficiently humble to say, yes, you’re
really quite brilliant, and I think it’s – the second law of international relations is that
there’s no end to the amount of good that you can do provided you don’t care who
takes the credit for it. So these were exciting times and, er, I think one has to
acknowledge that the whole ESA team, with really one or two exceptions, very, very
few, worked really tremendously hard under conditions that were not always very
easy. When we were working with the Americans, for example, they were very
overbearing and they had very many – very much more resources than we had. When
we were doing the Spacelab project which was connected with the international space
station for the first programme, joint programme meeting, they proposed to send
ninety-two people in the NASA team and my complete team was only thirty-five. So
I sent a telegram to the head of NASA saying, I surrender, you’ve got me surrounded.
He obviously didn’t know the details but when he looked into it he saw it was
ridiculously large and he cut down the team to about thirty, but even that was large for
us because every American had his own specifications for the station and we were
going to fit to the station so we were dependent on their specifications. If they moved
a screw on their side we had to move something on our side, they were calling the –
the shots, so it meant we had to be extremely careful to assess the cost of meeting a
change which on their side was – by now, er, we move it two centimetres or as they
used to say, half an inch. For us it was a catastrophe and cost us hundreds of
thousands of Francs, so we had to fight that and find out why that bloody screw had to
be moved and was it just somebody beautifying it or was it really necessary, so it put
a tremendous strain on these guys who were new to the business. As I said yesterday,
many of them we’d pinched from America anyway and some of them were – were
quite new to manned space flight, every – that was the shout in those days that you
had to have belt, braces twice over because it was man rated and man rated meant you
weren’t allowed any – any mistakes.

*And this is on the Spacelab?*

Yes.

*What was actually the origin of that project?*

[41:00]

The American head of NASA came over to Europe and invited his friends and allies, I
never understood what the difference was between the two, to join this new manned
space venture for a space station. And Europe was invited to take a part so we had to
look at the concept plan and try and find – and what we found was that the thing that
would suit us the best would be a laboratory which we’d fit on, so it would be a
European laboratory in a complex of several laboratories. And, er, it also meant of
course that the interface would be a single one between us, and what we did inside
would be more or less our – our business. I mean if we had wild parties and
champagne corks flying that might danger the space station then of course they would
have a word but we had a fair degree of liberty in the design of the Spacelab and
eventually this was agreed, agreed with member states and agreed with the
Americans. But it was a very long process. There had to be a US government
agreement with our member states, not with ESA but with individual member states,
and then an agreement between ESA and NASA. It took over a year of negotiations and I was backwards and forwards across the Atlantic, sometimes once a week, to try and head something off or get an agreement on something. But it – in the end there were still a lot of people who think that the Spacelab was far too expensive, that the Americans screwed us. My own opinion is that it was expensive, mainly for two reasons, we had very little experience in manned space flight in Europe, very little, one could almost say none. And our biggest expertise was in the medical side where the Royal Air Force and the other major air forces had got very good institutes for what they called space medicine, but mainly for test pilots; how did test pilots react with 7G pulls and this kind of thing and what would be the effect of a test pilot flying at 80,000 feet, would the radiation be harmful to him and over what period? So we had that kind of experience but in – in the engineering we had zero experience. That was one reason why it became expensive. The second reason was that not everybody agreed that manned space flight was necessary. The UK was very reticent, France was very reticent and had to be blackmailed by Germany to give a green light and a lot of push to the Ariane launcher in return for which the French would not pee on their chips for the manned space flight. So we had this bipolar existence of the French pushing for Ariane, son of Ariane, Ariane on ice and all the rest of it, supported nobly by the Germans who didn’t really believe in launchers anyway. And then the Germans say manned space flight, this is the way to go, and the French nobly saying, well, yes, if you insist. So it was a very strange period during which we had to get industry, both launcher industry and satellite industry, geared up to meet American industry.

[46:00]

How was the idea of manned space flight seen within ESA? Was it something you were hoping for at some point or was it …?

We were a bit ambivalent about it. We had people who were very, very keen but I was always mindful of the scientists who in many, many countries were doubtful about the scientific value of man in space. And, er … not that you couldn’t do things there that you couldn’t do down below but that the amount of money you would have
to pay in order to do it was not commensurate with the use of that money on classical space science. But I think it was almost inevitable that we got dragged into it because it became wrapped up of course with space exploration and going back to the moon and having a manned visit to Mars, and for many politicians this was a good substitute for kissing babies … but really in one’s soberest moments it was a tremendous financial drag. I was really much keener on – on getting Ariane firmly established as a launch, not just as a launcher but as a launch system, and able to handle everybody’s launches, not just ours. That was, for me, a higher priority than manned space flight and I saw Spacelab, although I perhaps couldn’t say it at the time, more as an exercise in upgrading European industry than it was an exercise in getting man into space. But of course when we had Spacelab we had to go through the – the procedure of selecting astronauts and we selected the first four during my time when I was there, out of I think 5,000 applicants who were filtered down to about eleven. And, er, this was an interesting case where there was a kind of a precedent set, could a member state insist on having a national astronaut? Well, since we were only choosing four, ‘cause they’re very expensive to train and we had I think eleven member states at that time, it was obvious to me, and I’m not very good at maths, that they couldn’t have one each. So I established the precedent that we would take the four best and that the only limitation we would put, we wouldn’t take two, even if they were the best, from the same member state. That seemed to me the – the only security that you could give people, that the French or whoever it was wouldn’t wipe up the board ‘cause they’d got the best in-house training. So we had a very time consuming and very expensive procedure of selection, and in the last four which we selected there was no French man, and so I was bombarded with calls from increasingly senior people, including head of cabinet to the minister, that the minister will be not at all pleased if – and I just had to say – and there was a Swiss, a German, oh, a Dutchman, there were only three, that’s right. There were four but one fell – one fell by the wayside and these were the three, and two of these from small states and only Germany got an astronaut but I – I resisted and said, you know, I’m very sorry but that’s the way it goes and if it’s successful there will be another astronaut.

[51:40]
It had the curious effect of pushing the French to train their own astronaut and to go for a manned space flight programme in parallel with ours, which was quite paradoxical because they’d been less than lukewarm about the original one but they – they eventually got Jean Chrétien too as a – he was a test pilot and they signed an agreement with the Russians I think for him to be trained and then he was re-qualified in NASA and eventually flew Russian satellite and they had several good goes before there was a French satellite in the ESA programme but only to illustrate that these tensions that existed between national and international programmes never really went away with the big member states. The little member states were wise enough to see that the price ticket was much too big for them to want to do it alone, so they were only too pleased to join a European programme and so when you had a council meeting they were always pro a European programme whereas you had to convince the Germans – the Italians, the French and the Germans that this would not be damaging their national aspirations. And sometimes you had to make a bridge so that we could transfer technology backwards and forwards between the national and the international programme, which made a lot of sense. I always worked on the basis that we were – we were not at war but of course further down the line relations were sometimes not all that good because the national programme guys felt that they were fighting for their existence, which in some ways they – they were. Our people felt the same, that we’d been given the convention and we were doing our job and therefore these people in the national programme should just come to heel and listen to us, whereas of course it was much more complicated than – than that. But you needed a lot of patience and a certain … certain experience in negotiation to live through it all.

*There seemed to be a lot of negotiations about this whole process.*

Yes, everything was negotiation.

*What part do you in particular play in these negotiations?*

I was knee deep in most of them. Hmmm … not particularly because I was a control freak but – I don’t mean to say that I started them or went through and did every little thing but I kept myself sufficiently informed at all of these negotiations going on to
see if it was on track, and if it was not on track why wasn’t it on track? And I encouraged honesty and transparency amongst people, you know, engineers and scientists are both the same, they’re inveterate liars and so as far as funders, the people giving the funding are concerned, and they will look you straight in the eye and tell you they can do it for a million when they know damn well it’s going to cost three, because they think if the permission for one nobody will have the guts to stop the programme. So the name of the game with me was tell me what it’s all about and tell me the truth and I’ll do my best, and this worked generally. There were one or two cases where people tried to pull the wool but by and large once you get the philosophy then people find it’s easier to work without actually them telling lies because you’ve put the responsibility back onto the member states, well, if you really want to do that this is how much it’s going to cost you, whereas the previous philosophy was, well, if we tell them this much by the time we’ve got them there then we’ll tell them it’s going to cost a little bit more. And the relationship then is one of complete mistrust whereas people knew … I don’t say I never exaggerated but by and large we told them the truth and the orders of magnitude were right and, er, so if you wanted it, okay, I might be able to help by spreading payments a bit and making it easier over the longer haul but you’re not going to get it any cheaper unless you reduce the specifications, then we can go away and do some numbers and come back again but don’t mess about with – with the truth. So this involved me, I don’t know, must have been seven or eight major negotiations going on at any one time,

EUTELSAT, EUMETSAT, INMARSAT negotiations with the Americans, an air system for satellite, Spacelab, and then the negotiations for new member states, negotiations with the Chinese for a memorandum of understanding, all these things coming up. I had an excellent team in the international affairs with a couple of lawyers, one a German and one a Belgian who were very, very skilled in boiler plating stuff. You get the idea, okay, put that in diplomatic language, they were very good at that and – but it was – it was a full time job.

[57:25]

When I left they asked me for – because my contract wasn’t renewed, well, for reasons that – well, for some reason they didn’t – they didn’t renew it and one of the
conditions that I put from my side, I said, okay, if you’re not going to renew me at least pay me for the leave I haven’t taken in the last six years and they said, yeah, no problem. But it was a year – I had a year’s leave ‘cause I’d never taken any leave at all for the whole of the time, or I’ve taken a day or a couple of days but never any more than that. And many of the others were the same, I mean it was a very devoted team.

Right. Where were you actually based during this period?

In Paris. We took over to begin with the – the ESRA offices and the ELDO offices which were on four floors, two floors for ESRA and two floors for ELDO. You’d think that being next to each other like that they would have talked but there was absolutely no contact between them whatsoever. And we decided, I decided, that while the atmosphere was right we needed to move out and we needed a headquarters, so the man who took over from me was head of administration who’d been one of my offsiders in – in ESTEC. It was interesting to see the flow of people from ESTEC into headquarters. He set up a little mission to find a new headquarters and we found a tube factory from Thomson’s right in the centre of fifteenth arrondissement near UNESCO and it had been very fashionable in the ‘40s and ‘50s to have a factory in the town and it was a – a kind of mark of half marketing and prestige, but they couldn’t extend it because it was covered by all sorts of what we could call building licenses and things and Bannier wouldn’t allow you to increase the height and wouldn’t increase – change the colour of the paint and this kind of thing. And so again negotiations with Thomson to buy this from them and negotiations with the city of Paris and the Bannier commission as to how far we could alter the façade and the shape of the building. And they even had opposite two apartment buildings, only small, but they were part of the lot so we wanted permission to change these into offices and I left this to Van Reeth, the head of administration, until it was virtually settled. He did an excellent job and we bought it a reasonable price and took it through council for doing it up and negotiated a new height level, ‘cause we found that a building down the road had got four and a half storeys so why shouldn’t we have four and a half storeys. And we managed to get five storeys out of the four and a half by sinking the ceiling levels a bit and we – we had a beautiful place. The
conference room was said to resemble the Mafia headquarters in the Cayman Islands, it was a large, beautifully furnished, wood panelled council chamber that would have seats at the table for I think 50 people and a second row of 120 people for their supporters and then another 100 or so seats on the outside with – probably with very good and very efficient translation facilities. And this was ceremonially opened and it made a great difference because like it or not delegations were on their best behaviour when they were in a place like that with a new convention, with an executive instead of a secretariat. They wouldn’t come in and start negotiating across the table whilst we were having a table meeting and this was – even the chairman of council took on a new gravitas that communicated itself to – so we had the usual honeymoon period where this sort of thing went through very, very quickly indeed.

[1:03:20]

I think this was the – the way things were going but you could see the disenchantment growing and the worry growing that ESA was getting too big for its shoes. And in fact to come back to my – to my successor, they decided in council not to renew my contract but to look for somebody whose instructions were to cut ESA down to size, er, from the budget size and from the personnel size. So from a build-up over 1971 to 1975 and then ‘06, ‘07 and ‘08, by ‘09 it was topping out, and then when the new guy came in who, and this was the thing I never really did feel happy about, he wasn’t from the space industry, he was from the automobile industry. He had no experience whatsoever of space programmes but he set about reducing staff and they went down the slope on the other side. I mean it was predictable in a way but it took some time for this to level out but I suppose it was inevitable that some of the larger member states were feeling uncomfortable and they maybe wanted a DG who came to heel more quickly.

Is that why you think your contract wasn’t renewed?

Well, I think – well, anyway, I’d been with the organisation ten, twelve years, and it’s probably long enough to anyway, but certainly I was never renowned for making friends with the delegations. I mean I always tried to give them what – as much as
what they wanted but my job as I saw it was to get ESA started, not to damage member states but certainly not to damage ESA at the expense of what they were asking. So I think it was a wise decision for me to leave and very unwise decision for them to replace me with somebody outside the industry. There were several people available in my view who could have done it but my suspicion is that several of the people were quite happy to have a novice there, it increased the influence of the delegates, most of whom knew more about space than the new DG did, whereas with me I knew most projects when they were a glint in the eye of the scientists, I was there at the beginning whereas this guy was still struggling with all the abbreviation. He was a nice guy but completely out of his depth.

*Who was this?*

He was a Dane, a Dane kind of Swedish grown Dane called Quistgaard who’d been with one of the big companies in Sweden.

*How did you feel at the time about not having your contract renewed?*

Well, I was really very pleased because as you can imagine, very pleased. I mean I accepted it quite without any bitterness and did my best with the new guy in the weeks that he was available. I took him to the States and introduced him to the NASA people and took him around generally as far as I – as far as I knew, introduced him to people, I didn’t leave him any bombs that were likely to go off. But as you can imagine after about ten years of working like this it was quite a relief privately to be able to have some time off and my wife, who’d bravely soldiered on through this period, had left her job because when I became director general I didn’t think it seemly for my wife to be employed by the organisation, which she kindly agreed and so she resigned and occupied herself taking another degree at Sorbonne. But she also bought an old house in Majorca and spent a lot of time doing it up, for which she was quite gifted. So when we found I had nothing to do we moved down to this nearly ready residence and had a couple of months there in which we really did nothing except entertain friends and pay the contractor and enjoy the new – the new life, it was very good.
When did you actually get married?

We got married in November ‘71 when I was still at – no, it was in Paris but I was director of administration there. So she – I didn’t think it was right even then for her to be employed but she kept on for about a year I think in a job there and then resigned.

She was there translating you said?

No, she was in the personnel, human resources, for technical recruitment, but she was from her education point of view a translator and interpreter. And she had all the necessaries in the Scandinavian languages, English, French, German and Spanish as well, so it was very useful. She could interview almost everybody except the Italians in their own language.

What was her name?

Her name was Inga, Inga Maria, and her family name was Elgérus it’s a – it dates from the eighteenth century when it was very fashionable for middle class families to get rid of their Scandinavian name and take a Latin name, so you’ll see nowadays a lot of Swedes instead of having Johansson and Larson and the old Scandinavian names, they have names like Boncus [ph] and Jaerus [ph] and Fatimus [ph] all the Ss and they were definitely a cut above the rest. [By which, interviewee meant to exemplify names ending in 'us']

Shall we take a short break –

Yes.

For an hour and ten –?

[End of Track 6]
As I understand it ESRA had been largely a scientific focused organisation but when you’re talking about launchers, application satellites, telecommunications, it looks like ESRA was supposed to be a much more wide ranging organisation in its remit.

ESA was, the ESA, the European Space Agency. Yes, that’s absolutely right. This is what came out of what were known as the package deals. There were a number of agreements between member states as ESA came along and one of the major ones was to accept that the new organisation, ESA, must have its own launcher and it was only acceptable to – to the UK, who was very anti-launcher, on the basis that they could not be a member of the programme but have a bilateral arrangement with France for one particular part of the launcher development. I railed against this very much but the atmosphere in the UK at the time was such that they just didn’t want to know about launchers, either of the parties. But it meant that Ariane was a part of ESA’s future programme and then, as I said earlier, the Germans insisted at the same time that manned space flight should be – and then there was the other leg of the stool which was telecommunications and other application programmes. These were all to different extents supported by the member states but the cocktail at the end was supposed to be acceptable to everybody, and it was made acceptable by saying that only science would be obligatory, science plus what we called the general budget to make sure you paid the rent and telecommunications and this kind of thing, but all the rest was optional and it was done in a series of very formal legal agreements. You start a programme and there was a procedure for starting it until you have the final legal agreement which was then financially binding over the life of the programme, and all these things were then slotted together to make the ESA budget. But in fact there wasn’t an ESA budget, there were several budgets, ESA science budget, which was by gross national product and you couldn’t get out of it. If you wanted to join an application programme you must first join the science programme. Then there were all the various application programmes, so it meant that the convention was intended to cover the whole suite of space activities, including such things as education and capacity building, which were not popular with the larger member states but very important subsequently in relation to developing countries.
Science versus application. I'm assuming the applications are more sort of commercially orientated, things like telecoms –

They would become commercially orientated, yes.

Was there ever a tension between the two in the organisation, science and commercialisation?

No, I don’t think so. The tendency of course, as I said earlier, was that the people who were on applications wanted their particular application to be considered in the same way as a science programme, that it would go on and on and on. An interesting example is the remote sensing programme where one remote sensing satellite, the first one, was so successful that member states wanted a second one identical to it to be built and launched so that the data would continue to flow. And it was pointed out that a research organisation should not launch the same satellite twice, and then there was a good deal of hypocritical arguing backwards and forwards at the end of which it was decided, well, it’s not really quite out of the R&D stage because there’s a lot of experimental work that needs to be done with the data so in this case we can possibly – so another example of member states tuning the logic to fit their own – their own ends. But no, between the programmes as such we worked on a matrix system in my day, and I think probably still to a large extent, so the programmes were not monolithic, they had a project team and this project team then drew technical support from section controller stabilisation, telecommunication, and they could call off from the various departments. So these departments were multi-programme, they worked for the science programme, they worked for telecommunications. The only hardcore telecom people were the very small, fifteen or twenty, people in the project who – this gave a kind of coherence to the discipline since the discipline had to deal with all the application programmes, all the science satellites, and their main aim was to increase their own competence in that particular discipline. Does that make some kind of sense?
And so that the application programmes were not large 100 man programmes, they were quite small.

**But borrowing expertise from other places?**

Yes. They had a kind of a … cheque system, you know, you could buy so many hours of time from this speciality or that speciality, which we would re-do on occasions but to keep everybody inside their budgets so there were nominal budgets of how much you could draw from – from how many sections.

**Sounds like an organisation that there’s a lot of information flow along between different departments rather than up and down.**

Yes, well, it didn’t start off like that but that’s the way we wanted it to be, yes. And in fact the – as you can imagine, the heads of these technical support divisions were very important people because they had a finger in every project and generally had the area of the most difficult orbit determination and this kind of thing which were crucial to the success. I mean they weren’t simply deciding what colour paint or – they were really right there in the forefront of the technology which meant from our side that we had to constantly bring in people from universities and give them, say, a three year stint in order to bolster the expertise of our group on a particular subject. And on that we were very successful in getting some American professors to come over and –

[08:20]

**What was your original vision for the purpose of the European Space Agency?**

I think it grew straight from the – the quite generous objectives that member states had to reduce the industrial divide between the big member states and the smaller ones. I was quite impressed from the very beginning that people in France, Germany
and Italy, they were really the only big ones, how understanding they were that you couldn’t perpetually have industries with so much discrepancy. And in fact countries like the Netherlands or Spain or Switzerland, they had very little competence. Lots of enthusiasm and many of them had outstanding individual scientists but they didn’t have a space industry, so when a contract was being given it was always a job, how can we fund four per cent of the industrial work to a country that has no industry? And it was fudged a little sometimes because France, they were pretty speedy in this, they would open a French company in Eindhoven and call it a French – a Netherlands country, company, and we would be obliged of course to consider it as such until we got more sophisticated rules on what a company had to be in order to be a national company. But the spirit was there but of course the spirit weakened as the divide grew smaller and some of the countries developed niche expertise which became crucial to a satellite and they became in a position of some importance in a project even though the percentage was quite small. Switzerland, for example, in the clocks that are necessary for timing where we purposely helped them build up an expertise in this. But of course it became quite resented afterwards because the programme had to take that particular contractor and the Swiss were never ones to be behind the door in negotiating, they always got a good deal for themselves. But this altruism was really very noticeable in the early years of ESA.

You say the early years, did it decline afterwards?

Oh, I think so, yes. Even in my time it was getting a bit weaker. Hmmm … I mean it’s understandable because they – people who are involved are fighting for or at least talking about their daily bread and, er, if they see a chunk of it being cut off and taken away it’s very difficult for them to put on a lady bountiful smile and say of course that’s what it’s all about. That has to come from much higher up the ladder.

Talking about higher up the ladder, what’s the purpose of the ESA council exactly?

[12:10]
The ESA council is supposed to be man – mandate at each member by the industry or entity which signed the convention, so the council representative is supposed to speak for his signatory, that’s legally the position. Of course he comes along with one, two, ten, twelve, experts of different varieties. I remember having to remember – remind one delegation that the intelligence quotient shouldn’t be measured by the number of delegates. Hmmm … and then there were so many committees, there was a committee for each of the programmes, yeah, and then a committee for science policy, a committee for administration finance, a committee for industrial policy, and the council delegate sat over the delegates in these various subsidiary bodies, so one likes to think that at home he called in – the council delegate called in the representatives from the various programmes in order to be briefed. Sometimes it was the same man covering two or three programmes in the smaller member states but there was a kind of network in each country which led to the signatory. The game from our side was then to find out how free is that signatory, does he have the keys to the shop or does he have to go to some interdepartmental agency, or does he sometimes have to go to the prime minister’s office on certain subjects? So we had to understand the mechanism in each of these countries. With the connivance of the council delegate, they were always very keen to explain but it was a necessary control on our part otherwise you could get a long way along the line with a willing council member only to find that he hadn’t taken his government with him.

[Laughs] Did you have to sit on these council meetings yourself?

Oh, yes, yes, and in many of the – many of the programme board meetings but I tried once they were established to leave the programme boards to the director of that programme and the administrative and finance committee to the administrative director, but I instituted a policy which – and a mechanism which probably wouldn’t be allowed these days. Delegates were told about it, that the proceedings were always taped but not only were they taped they were channelled to all directors’ offices, so instead of having to sit through all the council meetings directors could listen to what was going on over there in the box and if they thought something was coming up that was in their bailiwick then they’d hasten down in the lift to the council room.
[coughs] Pardon. I don’t suppose that would be allowed these days [coughs], it saved a heck of a lot of time.

[16:20]

_Hmm_ [laughs]. _It seems like you’ve got a lot of different state sensibilities to juggle here._

Oh, yes.

_Were there any in particular that were problematic?_

Yes, well … they were all problematic in a way in that a delegate has a difficult job. When he goes back he has to show that he got at least a fair share back. If he can get more than his fair share then promotion is just around the corner but for us of course it posed a problem because – ‘cause I always used to explain to delegates, if all of them got more than their fair share back there wouldn’t be much left over would there? In other words, when you get more somebody else gets less, and the only way that you can justify it is by taking it over a longer period and saying, okay, this year you got ten per cent less than you ought to have got but you’ve got that credit in the bank and next year you’ll get five per cent more and the year after. And in that way you can stop this mathematical chopping up of return which makes financial sense but for a project is stupid. And that works to a certain extent but even so you have to understand how important it is to the individual government. For example, Italy was always a great problem because their prime minister at the time, and all their ministers, insisted that if there was not a good role for the establishment of Rome in Frascati then they would withdraw from ESRA and then from ESA, because Frascati had been set up as a scientific institute in the ESRA days, mainly because one of the fathers of ESRA was a brilliant Italian scientist, Amaldi, but when I inherited this in the – in the early seventies and went down to see this place I found fifty scientists doing their own thing of very little interest to space in general and of zero interest to ESRA, but we were told the Italians want it and that’s the way it’s got to be. And this Italian problem was with me for, oh, a couple of years before I managed to solve it,
not without a lot of heartache but – that was a particular case where the Italians would vote against anything in council because they weren’t satisfied with progress being made, until we had to fight back the other way and say, okay, I’m not going to make any progress in this unless you treat things one by one in the council. If we hadn’t made progress in six months or in nine months, then okay, but if you start now with the boycott you’re going to spoil it for everybody and eventually – funny, I always seem as you said yesterday to come back to language, I found a junior minister who was responsible for space but hadn’t wanted to have anything to do with it because of this terrible problem with the establishment. And he came from Tyrol, Italian Tyrol, and he spoke excellent German and my Italian was negligible but I could negotiate with him in German and we would sit down in Rome and hammer out things and then he would lift the vetoes in the council for another few months [both laugh] on the basis that we were making reasonable progress.

[21:00]

They were the most sensitive. The Spaniards were also quite sensitive, they – the chief delegate was a very fine air force general who was the head of their semi-military research establishment, also president of Iberia and president of the International Meteorological Organisation, he was a real – a real guy. And he would come to council meetings and be very helpful and conciliatory and we became great friends long after I left ESA, but if things were getting bad and he didn’t think I was playing the game then he would threaten, I’m not coming to the council, and sending his number two. His number two was the most convoluted person I’ve ever had dealings with in my life. He always got the wrong end of different sticks and he was incapable of coming to any agreement because he really didn’t know what he wanted and Azcarraga the general knew this as well as I did and his final word always used to be, ‘If you don’t agree he’s coming to the next council meeting,’ [both laugh] which perhaps gives you a glimpse of the personal relationships that play an enormous role. They’re not more important than the political consideration but they do mitigate it enormously. Azcarraga was a brilliant negotiator and he knew the times of the – of the planes because he was president of Iberia, so when I was in Madrid he would negotiate right down to the wire ‘cause his chauffeur would take me to the plane and I
would say, ‘You know, minister, I just have to go.’ He said, ‘The plane will wait for you.’ Call somebody, ‘Roy will be a bit late. As I was saying, what we really want …’ and I’m getting a bit nervous about it all, so sometimes he would get a little bit more and then he would say, I’ll ring the airport. So I’d get to the airport, this happened more than once, no immigration, straight in an Iberia car up to the … the ladder. People inside fuming at being kept on the tarmac and I’d sort of get in and sink into my seat and we’d take off maybe half an hour later. But you had to get used to these different ways of managing, this was just par for the course in Spain in those days.

*I suppose this is well in the Franco period isn’t it?*

This is just the end of the Franco period and Franco died while we were in this position. And then we had a – I think the only diplomatic incident I’ve ever known where the council chairman called for a minute’s silence on the death of Franco and the Swiss delegate refused to stand up … so the – this was as near we came, if we ever came, to a real diplomatic incident ‘cause people thought it was a bit off.

[25:20]

He was a bit of a firebrand, excellent man and a real enthusiast for space but way over on the left and could scarcely restrain himself from cheering let alone keeping a minute’s silence.

*Were these council meetings typically polite or vocal, loud?*

Very – they’d known each other for years most of these people and negotiate in the coffee breaks and the dinners beforehand, they – it was very unusual to have any aggressive discussion. Quite hard discussions and then you knew when you were getting down to the wire when someone said, ‘My instructions do not allow me to –,’ and then, you know, you either back off or you postpone the meeting, go and see the minister and – but the atmosphere between delegates was very good.
How is council actually deciding on which programmes will be carried out by ESA, or does that mechanism happen elsewhere?

No, it happens there and the – either a member state or the executive come into ESA with a proposal, ‘We propose that ESA should develop a satellite which will –,’ and our guess is it will be launchable in four and a half years’ time, it looks as though the overall packet would be so many millions. ‘Would ESA council give its permission for this to be considered as a programme?’ This was the first stage in the proceedings and generally – I don’t know of a case when they said, no, they would say, go ahead, next council meeting we’d like to see a more structured presentation and in the meantime then we would go to the member states and say, would you be interested, so when you go back the next time you say, this is the – where we are and member states one, two and three have said they would like to take fifteen per cent or twenty per cent each. And then as you get further along the line you get close to your hundred per cent, and you could start a programme, I think it was on eighty-five per cent. When you got eighty-five per cent agreed then you could start passing contracts but it was very – very well scripted, everybody knew at what stage the programme was there and everybody knew when it became a programme of ESA. We spent a lot of time on the nuts and bolts of this thing because in my view it was essential for the future of ESA. If getting a programme approved was a kind of a nebulous process and nobody really knew how to do it then I was quite sure they would go somewhere else and France would start trilateral programmes with the Spanish and the – so it was better to have a clear system that was fair to everybody. It worked very well I think.

[28:45]

You talked a little bit about relations with China and a little bit about relations with the USA on space. How did you get on with NASA? Or what were your relations with NASA would probably be a better place to start.

From the beginning of my days in ESRO we had lots of backwards and forwards-ing with NASA. In the beginning it was in order to try to loosen the grip of the transfer of technology. There was and probably still is a government department that looks at the
transfer of technology out of the States and they were very, very keen on – on space transfers. So we were over there regularly, mainly interfacing with either the head of NASA or the head of international relations who was really, in my view, the number two of NASA, a very sharp cookie who helped a lot in a way but he was quite hard to deal with. But we had to go over there and really negotiate things we’re doing – on a scientific paper we’re going to provide the payload and we don’t know how to do this or that but you’ve got a company, Moore Brothers or someone, who would like access to this particular bit of technology. ‘Oh, absolutely impossible.’ Or come at it another way and go to Bell labs where we’d got good contacts, their labs say, ‘Well, Moore’s aren’t the only people who know about that. There’s a little company down in San Diego that’s very good. One of our ex-directors is the manager there, I’m sure he could …’ ‘So what about the office of munition?’ Office of munition management or something it was called. He said, ‘Oh, well, we don’t need to formalise this and just …’ and say, ‘Well, I need to tell NASA.’ ‘Well, tell them what we’ll do. We’ll transfer it first and then you tell NASA afterwards’ [laughs]. So our relations were – were very amicable but rather disorganised in the beginning. For example, one of my directors at ESTEC was a communist and had been in the 1968 riots in Paris and been one of the professors in the Sorbonne that had gathered students around him and yet he was the experimental scientist for one of our payloads that was going on a – on an American satellite, so I had to get him into the establishment, ‘cause he was on the blacklist there, they wouldn’t let him. He wasn’t even allowed to go to NASA headquarters, so we had to smuggle him in in the back of a car.

[Laughs] Who was this?

Well, I don’t know whether we ought to go into his name but he was a well known mathematician who was very well respected in his profession, but I mean he never talked about politics to me. We only knew about it when his visa came back saying, no, no way. We got him into the States on a visa for an international conference where he was really essential, so they had to give in for that but they restricted it to Washington. Well, luckily the – we wanted him in at Goddard which is, you know, just outside Washington, so we put him in the back of a car and covered him with
coats and people were budged up and drove him in. And he was there for twenty four hours checking out this – his experiment but it was harder to smuggle him out than it was to smuggle him in but we got him out again. Probably get myself locked up for saying this.

As I’ve said before we can almost mute it for thirty years [laughs].

But later our relationships became more formal, we had lots of specific memoranda of understanding and then for Spacelab we really became quite critical to NASA because we were an essential part of their – of their programme. It was the first time really that the States had put themselves in the position of being dependent vitally on another space agency. Previously they were always hedging their bets in some way or another but this was so big that they really couldn’t copy us, they had to rely on us. One of my little trophies is a thing from the head of NASA when I left, it’s hidden in a place where nobody sees it round the corner there, thanking me for cooperation with NASA over the years, which I very much appreciated because it wasn’t all, er, lilacs.

[34:50]

But they were on the whole generous people and they also had this semi-missionary instinct of, space is good for us all and if you’re doing space and you’re not commercial then we would like to work with you. And on the scientific programmes they were very good, very open, and we learnt a lot from that. I mean not clandestinely but in a – in a proper way because you can’t stick an experiment in somebody’s satellite without doing quite a lot about the satellite, and on the telecommunications as well, they were very open and very helpful. You got the occasional redneck but not very many.

Did the American attitude change over the period you were involved with them?

They became much more respectful of our people. I mean when we started American industry were openly despising the European space industry, I mean even to the point of saying which industry. And their quality control and things like this they thought
was just for laughs in – in Europe. It wasn’t entirely true but there was a lot of truth in it, we really – we hadn’t got the rigour, they had too much. They spent a lot of unnecessary money and we weren’t in a position to see that it was unnecessary and so we got in the same mould as them and it was only progressively after years that we were able to reduce it a little bit and perhaps cut a few corners.

[36:40]

Did you have relations with any other space agencies?

Oh, yes, with the Russians. The Russians were – were very interesting. We never met the actual experts, we met the political people and we had very good – they were very well informed but when we asked a question they would write it down and give it to somebody, he would disappear, and a few minutes later the written reply would come, and it was always bang on. And we used to ask questions just to see where they were and how good they were and, er, back came the reply. And years later a Russian with whom I became very friendly had actually, when things got better, emigrated to the States. But he introduced himself at one international conference as, ‘I’m the man down the corridor’ and I didn’t understand at first. He says, ‘Well, every time you came over and you asked questions I was sitting in a room down the corridor with a few of my guys and we’d take this, ‘Oh, that’s what they’re up to is it? Send them this as a reply.’ But thereafter it became very open and we had some – a period just before I left of very good open relationships when they were very keen to establish relations which eventually have come to the stage where they’re going to launch the Russian rocket from Kourou which would have been unthinkable many years ago.

What sort of subjects did you have talks with them on?

Oh, mainly on telecommunications, on coordination of maritime satellites, coordination telecommunications, TV satellites, hmmm, the merits of free access stabilised satellites compared with spin satellites, er, L-band against C-band, all these things that you never really get time to talk about in big conferences but to get a
couple of experts together and they were – they were surprisingly open on their views. Where they got very tight up was talking about planning or budgets and then there was not much hope.

_Sounds like you were doing a lot of travelling in this period._

Yes, a lot, yes. Somebody did some statistics, I forget the period, I think it was over – over ten years I had 2,500 flights. Sounds a lot doesn’t it? But when you think of it, you’d go to Paris and back in a day and the next day fly to Rome and then that’s already four flights.

[40:00]

_I’d like to ask what a typical working day is like but is there such thing?_

It was long. I mean … including weekends, twelve, fourteen hours was normal, generally finishing up with a couple of hours at home.

_What do you do in that time slot?_

I’d dictate into a – in those days into a machine and dump the tapes into the hands of welcoming secretaries in the morning, when they would say, ‘Can’t you go out at dinner or something?’ [both laugh]

_What’s the working day actually filled up with for you?_

Getting things going in the morning, meeting with … not all senior staff but senior staff where there’s something bubbling, as short as possible. Then one or two set pieces where – hauling people in from an establishment to give a presentation on a where we are on a project and how a particular negotiation is going, perhaps receive a delegation who are not happy about something … mixtures of those. A sandwich lunch and off again and – and then with meetings. You can imagine with – I think there were thirteen major committees at the time I was there, lots of other little jobs
but thirteen quite senior committees who were meeting at least six times a year. If you work that out in terms of how many there are in every week you see that there was always something going on.

_Do you have to deal directly with industry as well or does that –?

Only when it got really tough. On Spacelab, for example, they got – it span out of control really because of the mobile interface with NASA and they were accepting from American industry changes which I didn’t have the money to fund, and so there was only one way of doing it and that was to get a fixed price to completion. We are about nine months off completion, we were all right time-wise but we were over the top, so I had about three days of negotiations with them and then with senior delegates and fixed a price with them which industry then agreed to complete the project with no questions asked. And we would pay the money up front, the remaining money, so that they got some cashflow but if it went over that amount that was their business, and I must say the German prime contractors were first class. We shook hands on it, drank an incredible amount of alcohol, and they went off and did it … but it was the only way otherwise there was a rising feeling that the project should be stopped and we should renegotiate our position with NASA and become third class citizens instead of second class citizens, but we saved that and it – it went through. Yes, with industry but also with – several occasions, hmmm, industry was always looking for the soft contract and sometimes they would get a little bit too much in control and the project manager would have lost his authority, so we would then call a DG review when you dig out the managers on their side as well and go through the project and try and get it back on – on track. But not everyday management, just when things looked or smelt bad.

[45:10]

_You raised the interesting subject of funding and finance there. You said earlier, right at the start of this interview, about making sure that the science budget was renewed –

Yes.
So that ESA carried on.

That’s right.

Now funding for science is one of those quite hard areas always to establish funding, how do you go about actually getting funding for a continuing programme?

Well, we had to do it the other way round. We had to ask people how much they would be prepared to give and from that work out how much you could get from everybody, and there was a lot of shaking down to do but it came to a figure that was – I don’t remember how much it was in those days but a figure was established that this would be the yearly amount for year one, that it would only increase by average inflation rate so that it would be literally a fixed amount. And then with that fixed amount where are we on the approved projects at the moment, how much are they eating up and how much free money have we got? With that free money what kind of a satellite might you be able to make? And then when does the next opportunity come with that kind of funding? So you build up a phantom availability schedule of money from which you then find what weight of a satellite that would allow you to build, and then it’s for the scientists then to, in their committees, to decide which kind of a satellite, which disciplines. Should it be an ESA only, should it be ESA with a supplementary part from a member state with a particular interest in that area so he’s prepared to fund an experiment over and above his – his financial contribution? But if you don’t do it that was you end up, as the Blue Book did, by being a wish list that bears no relation to availability, and the chart that I always worked from was the free money chart which shows how much money is progressively becoming available if all that manages to stick within its limits. So it became absolutely crucial to keep within limits ‘cause if you didn’t you were taking money away from future programmes, so if you want there to be sustainability of the programme then for God’s sake keep within your – your limits, which was a hard lesson to teach because they were all a bit gung ho and iffy about money, ‘Oh, I reckon we could do it for about …’, ‘oh, come back in forty-eight hours and give me a figure.’ ‘Yeah. But, you know, I would say about this much.’ Say, ‘Yes, go away and come back in forty-eight hours and give me
a figure’ [laughs] which was hard on them, I know, but it was the only way to keep –
keep some discipline in the budget.

*Just so I’ve got this the right way round in my head, so you sort of decide which
satellites you’re going to send up weight-wise and then the science experiments go in
afterwards, so there’s not so much a science programme to begin with, it’s a satellite
that you can fill?*

Well, perhaps I’ve over-exaggerated that because there was a base of committees of
astrophysics committee, planetary committee and others who were assembling what
they thought to be the priorities in those disciplines. So from those priorities you
could see which experiments might be compatible to make a payload for a satellite. I
mean if you want to send a … what you call a sound rather than a satellite, to cross
near a planet which you – or if you want to look at the moon, you can’t expect to do a
lot of other science at the same time. So they were making kind of phantom payloads
up in readiness for the finance people coming back and saying, well, boys, it looks as
though in year one we could manage ten million, in year two we could manage maybe
twenty-five million, and then you build up a schedule. If it’s going to be a five year,
well, that looks about a ninety million satellite, ninety million satellite. Well, if we
could get that paid for by the UK from their own funds, ‘cause it’s an area they’re
very keen, that would leave seventy – sixty-five million for the satellite, what about
the launch? Well, of course if we did it with the Americans, the Americans would
give us a free launch and we would give them twenty kilograms free, and so it goes on
until you narrow it down and narrow it down until you come to a point that you’ve got
a believable programme and you present it then to the formal delegate body, but of
course you’ve been through a lot preliminary stages.

[51:00]

*What do you have to do in the build-up to a launch?*

To make sure that we’re not over-running budget. I think that keeping – keeping
delegations happy, keeping the politics away from the engineers … making sure that
the flow of technical help to the programme is okay. I set up a series of alarm bells in
programmes so people had no option but they had to say the bell is ringing and then it
all spewed out and – but until the bell rang I’d leave people to get on with it.

_How do you think ESA changed over your period there from your point of view?_

Oh, it became more regulated and more organised, it had procedures and, er, it
became respectable. I mean the – the evaluation process and awarding of contracts
went from Persian market to a really deliberate process where – where you could call
an audit committee and show them how it had been done whereas before it was very
iffy. It was all part of this devious plot to make sure that ESA had got a future and my
– my thesis was if you concentrate on continuing to ad hoc it there’ll come a day
when member states will say, well, if we pull that little pin out there the whole thing
will collapse, whereas if you spend twenty per cent of your time building up the
infrastructure when the time comes, and it will, they’ll say, well, can’t we run this
down? They will find that it’s so set in concrete for their own benefit but it’s so
organised that they won’t be able to do it, and they weren’t [both laugh] which
probably accounts for – for why they didn’t renew me. [both laugh]

_Was this a concern you had from the very start?_

Yes, even before the – even before the convention was approved. Oh, it’s human
nature to build something and then be frightened by what you’ve got.

_You talked a little bit about the funding part of this with the science budget continuing
but how else did you future proof ESA?_

A pension scheme for the staff, before that there’d been only fixed term contracts and
the idea was you came to ESRA as it was and you got a three year or four year
contract for a project from the Blue Book, three years, three year contract, and then
you went back. Well, this was all right in theory for the UK and perhaps for France
but where did the Dutch guy go back to? Hmmm … it just wasn’t viable. Also it
wasn’t – it wasn’t viable to start every project with a new team. We were learning
and it was essential to keep the – the expertise. Control and stabilisation, we gradually built up some of the best expertise in the world. I wanted those guys to stay for twenty years, if they have three year contracts and perhaps another three years and then perhaps another two years, the guy’s going to look around. He’s going to go to British Aerospace or Matra or somewhere, or else he’s going to go out of the industry all together and use his new expertise in project control or quality control in a lot of the industries that were beginning to see it was necessary. So I wanted to keep staff and this was a surprisingly heavy battle to – to bring a pension scheme in, but we won, and I think this was salutary in many ways because they had then 1200 or so people who were staff and pensioned and you couldn’t blink and they would go away, they were there. I think that was a big factor in ensuring stabilisation. I think also a memorandum of understanding with – with China, with the States, with Russia, with Brazil we had, with Canada, all these were obligations really, obligations to continue to be a space agency … which I thought were essential building blocks. Does it sound a bit devious? I suppose it does but that’s what I thought people wanted and that’s what they got.

[Laughs] That sounds a very … a very well integrated way of building something, it’s – so it doesn’t just sort of stay up itself, it’s got a lot of other things supporting it from outside as it were.

Yes, yes. I think the justification if it needs one is that a space agency does need that kind of a structure. Space agencies, you see it all the time, are internationally beyond their own international membership. You can do practically nothing these days unless you have contacts with the Americans, with the Canadians, and they’re not going to do that with some shop that’s likely to shut down, so I think the justification is ample there. What they decide to do in terms of programmes, you should never, in my view, take away from the member states. It’s their space agency, you’re only making it as efficient as you can to do what they want, not what you want, and you do tend to get in some space agencies the guy who says, ‘Well, that’s what they say they want but this is what they’re going to get,’ and we never – we never did that.

Was the space agency as a service for its members then?
Yes, absolutely, but in order to be a good service, so my argument went, you have to have a certain stability, a certain permanence. They wouldn’t think of running a defence research institute on three year contracts, they need continuity.

Worked just as well.

I think the danger that always pervades even national space agencies and certainly international space agencies is that they try to do their own thing, whereas my philosophy and the philosophy that I induced directors to take was that it’s the space agency of member states, therefore you should say to member states, you say you wanted an agency, okay, we’ve made an agency, we’ve made it efficient, now what do you want to do with it? But don’t bite it around the heels, let it go away and do its job. And thankfully for the first four of my five years they did.

How did it change in the fifth?

Oh, I think national programmes were beginning to get restive, particularly in France. There was dissatisfaction over Spacelab and the manned space programme, Germany was getting restive. I mean we still had the programme and we were still doing things in the same – with the same enthusiasm but for me as a kind of an analyst of the situation I could see it wasn’t going as well as it used to.

Hmm. What do you think were the high points of your time in the space business, over that period at least?

Well, the launch of all the satellites. Well, the first high point is the actual convention being accepted by member states. I mean that was the result of two years’ work and negotiation and, er, not only inside the house but in delegations and between delegations and they did a tremendous lot of work to get that through. Negotiating an international convention is – is pretty hard work, so that must rank as number one. Number two I think is successful launch of Ariane and the gradual acceptance of Ariane as being an important part of ESA’s panoply. And thirdly, the spawning off of
R&D projects into separate organisations, EUMETSAT for meteorology, EUTELSAT for telecom, INMARSAT for maritime satellites, all these in my view are – are more important than the individual launches of the satellite. But the launches of the satellite give you the credibility, you can then say we know how to launch satellites or we know how to launch Ariane, but in themselves they’re transitory, they have a life of three, four, five, six years. What’s more important is the setting up an organisation which is devoted to providing meteorological satellites till the end of time, which is EUMETSAT. Or setting up a business which thinks there is money to be made certainly for the next twenty or thirty years, or to telecommunication satellites. This for me is much more important than the launch of one remote – our research telecoms satellite, but of course we celebrated obnoxiously every time there was a launch but in terms of highlights they were not the – the highlights.

*Did you actually get to see launches yourself once –*

Every one. Oh, except one, I missed the second Meteor sat launch which was a success. They all asked me not to go to that launch ‘cause they thought I’d put a jinx on the first one. No, they were joking. It was always more fun when I wasn’t there.

*laughs* How did you feel about ESA when you left it?

Oh, very good and I had very good relations with – with everybody and I’ve been back looking forward into consultancies. I’ve done consultancy work for ESA, I’m still doing it, I’m still on a committee looking at applications of space technology so they – they still – I’m still allowed to go in the building and I do – I did a lot of work down in Rome on remote sensing and, er, as ESA got bigger of course it had less and less time to do things with international relations and so several DGs have been happy for me to do a little work on the side on international relations, which I willingly do. I think we’re really now at the stage where I’ve arrived in Majorca.

*Yes.*

Does that make sense?
That’s more or less where we have, yes.

[1:04:40]

It was lovely, the weather was fine, the wine was good, the food was excellent and I had no work. In those days there were no computers, telephone worked but if I didn’t want to take a call you could always blame it on the Spanish telephone system which was pretty ropey at the time. Until I did get a telephone call after two months from an American friend who was the head of Martin Marietta and then what –

Who was –?

Martin Marietta who was a big company, they made the Titan launcher and a lot of defence satellites, when he politely told me that he thought I should get off my fat backside and do a day’s work and would I come the following week to Washington to talk to him, which I did. And what they wanted really was somebody to lead open seminars with senior staff on where a company like Martin Marietta should orient itself for space in general, should they simply stick to being the Department of Defence prime contractor and doing what they’re told to do, should they go into the launcher business, should they go into the free satellite business, what about telecommunications? And they had the – the capability but what they didn’t have was a view of the whole and so for some time I – for several months I went to all their establishments and met with all the senior directors and the people from Washington. Not that we came to any firm specific conclusions but it cleared their mind about whether they should put their investment money in and what relationships they should cultivate in the space world outside, they were very American, very American.

So sort of focused on America then?

Focused on this firm and what this firm should do, should it be more of the same or should they be more adventurous, should they put more capital into building a launcher, a small launcher, is there a need for a small launcher? And I would have
called it a day at that but one day when I was in Orlando with the – the boss from Washington, he asked me to stop by for lunch and when I went to see him at lunchtime he said he couldn’t – couldn’t make it because he’d ‘got the damn Germans here again’ and so I said, well, I’ll go down to the canteen on my – ‘No, no’ he said, ‘come with me, we’ll give them half an hour and then we’ll go and have lunch.’ So we went and we found about ten very frosty faced people, five Germans and five Americans, who were arguing about a memorandum of understanding between Martin Marietta and a big munitions firm in Nuremberg called Diehl, enormous firm, 20,000 employees, but a bit stone age, no electronics and they were anxious to do a deal with Martin Marietta for a very sophisticated artillery shell which would be laser guided, and the electronics were rather complicated and they wanted a memorandum of understanding whereby most of it would be produced in Germany and Martin Marietta would progressively transfer the – the sensitive technology and this would be a joint company between Martin Marietta. Anyway, they were arguing at each other’s throats, the atmosphere was really very bad, and because I was waiting for Tom I was reading the drafts – a draft from the Germans in rather stilted English and a draft from the Americans in jargon loaded American. And I said to Tom, ‘Can I talk or am I just a …?’ ‘Oh, yeah, free for all.’ He was up to here with it. So I said, ‘Well, I really think there’s not much between what you’re saying but you’re not listening to each other. I think you should go away and have lunch and while you’re at lunch I’ll do a draft memorandum in English and in German and you can see it when you come back and see what you think of it.’ So, ‘Well, yes, lunch Sir.’ So they pushed off and had lunch and I did this two or three page memorandum, most of it which – I mean it was just standard boilerplate technology transfer and things. They’d both been trying to use reasonable words and so they were not connecting at all and I tried to imagine what the baseline decision of the Americans was, and I had some experience because of working on technology transfer before. So I did this and they filed back in and looked at it and the Americans said, well, that’s what we’ve been saying all the time. And the Germans read the German and said, well, that’s excellent, does the English say the same? Yeah. Well, yes, it’s a deal. So champagne came out and people were calling themselves by their first names, it was a complete defrosting of the atmosphere. Tom was very pleased that these bloody Germans were going to get out of his hair. And then during the drinking of the champagne the head of the German
delegation said, ‘Well, the first thing we have to do is to nominate a director general for the company and I nominate Roy Gibson. Is that your name?’ ‘Yes, Gibson.’ I don’t know one end of an artillery shell from another so Tom said, ‘Well, yeah, we would accept it. Do you want to do it?’ And I said, ‘I’ve no idea, I must talk to my wife.’ So I rang home and she said, ‘Oh, well, do it if you want to.’ So I said I would do it three days a week in either Nuremberg or in London, we set up two offices and the Americans sent over a nucleus of very highly trained specialists and the Germans contributed people for the actual manufacture and one or two budding electronic scientists and – and the infrastructure for getting into our Ministry of Defence, ‘cause we wanted to hawk this around Europe and sell it all round Europe. So I did this for a year, which was great fun, I had to write the split specifications for this for them to go round Europe meeting defence departments and industry to identify how much of the technology was already within their grasp, how much they would want, a series of negotiations, and then the defence department to see whether they wanted to buy the damn thing and it was getting quite advanced and we had a good team, good specification with good procurement procedures, and I thought that’s time for me to leave, so I said bye bye to them all.

[1:13:30]

And I – in the other three days of the week I’d built up quite a practice in consulting so I went back to that and – a little bit less of Majorca and started consulting with – with governments, mainly with governments who wanted to join ESA; Austria, Norway, Finland. And I did one after the other and they kind of recommended me on. It’s very instructive for me because it was necessary to look at all their industrial and scientific capacity to see really whether they’d got any interest in becoming a member other than the political kudos; how would they fit in, which programmes would be useful, which niches could be useful to ESA? It took about I suppose four or five months per country to – to really get a feel. I found the most incredible things, Nokia was just beginning to get into mobile telephones and they knew nothing about satellites at all, so it became obvious that if you’re going to get into that business you must know exactly who’s going to be your server and where’s it all coming from and what are the economics between the producers, so they were very interested. I found
another interesting niche in Finland which was meteorological instruments. There was a company in the heart of Finland which produced very, very sensitive gauges for – pressure gauges, temperature gauges, which were used all over the world in balloons and fixed stations, and they were very, very interested in getting into the meteorological business. So you found areas where they were really interested. Norway, the big interest was in maritime satellites ‘cause of their big maritime fleet and the growing cruising fleet, they had fleets of cruise ships so they were extremely interested in communications.

*How do you actually find these niches?*

[Pause]

*How long’s a bit of string I suppose but –?*

Oh, no, talking to industry and federation of industries and finding out what kind of subcommittees they’ve got and which are the popular subcommittees and then going back and finding is there anything in it or is it just a façade. Going into factories and finding out do they do any research and – or are they just producing TV sets? And when they’re doing research where do the guys come from, what background have they got? And you find that they’re very close to space technology and they – they could help in all sorts of payload development. Strange things like Finnish paper mills, very – they’re very interested in thickness gauges for the paper running through when they’re making newspaper print and they’ve – they used to pay enormous amounts for developing very, very sensitive thickness gauges which would stop these high speed rollers without damage either to the roller or to the paper, and this was good technology for us for us for control of stabilisation. Things that you got, matches like this. I don’t mean they came and sold their products straight away but the technologies were related and it gave them an interest and an understanding in what was going on. It showed them and showed the people in government that space wasn’t just some mysterious art of putting a satellite together and nobody really knew how it was done, it was in fact being done by about twenty disciplines which were being used in other things, perhaps more advanced, more pointed, but basically the
same disciplines. So this was – well, it was lucrative, I mean they paid me and they always seemed to be very willing to pay me and I enjoyed it. I worked mainly with people that I’d known already and when Austria was happy the Austrian delegate said to the Norwegian delegate, ‘Roy’ll be free on Tuesday morning’ [laughs] so I kind of rolled over into Austrian and into Norway and then the Norwegian said to the Finns, ‘well, Roy’s the man you want so we’ll send him along on Tuesday’ and off we went again. Hmmm …

[1:19:00]

We’re running up to about lunchtime –

Yeah.

But can I just ask one final question? What sort of work do you have to do to prepare a small state for membership? Is it just the finding of these little niche areas where it can help or –?

Oh, no, I think you have to work back into the government system, find out – well, this is quite fundamental, who is asking this question, is it just a professor in a university department who thinks it would be a good thing for his country to join ESA or is it the prime minister who’s said to the minister of technology, we think we ought to join this sort of an organisation? Where is the pressure coming from and where will the support come from? And if it’s the professor, lead him along to the minister and get him back to the prime minister. And if it’s from the prime minister, find out the guy in the ministry who’s really going to be pushing the thing. This is absolutely essential before you even start to think. And then a first meeting of anybody who might be interested in the country, sometimes fifteen, twenty people, scientific groups. In the early days groups of people were dabbling in electronics, industry, chambers of commerce, academy of science. In Finland the academy of science was a big pusher. And then you – in Finland they had a strange body which was very ahead of its time which was a sort of innovation ministry. It did nothing else but look around to find what other uses you could put to what they were doing, and this was ideal for space,
so they got the space portfolio and they've become very – very adept at it. But it – it needs I think – I mean I was a consultant and I was being paid but I wasn’t perhaps the usual kind of consultant, I wasn’t selling them a 500 page study. When I left it was generally about twenty pages which was a document going to ESA as an application or – and/or a document going to their minister saying this is what we propose to do and no fuzzy stuff in the background, and they liked this. But I – if you want to write another fifty pages of purple prose be my guest but it’s not really my line of country, and sometimes they did a write-up for, hmmm … space is the future of mankind and this kind of thing, these are the phrases at which I generally tune out.

*I think that seems an excellent place to stop.*

Good.

[End of Track 7]
Track 8

It’s got separate sound levels for both so it –

I see, yes.

It’s every so slightly fiddly to actually operate. Oh, it’s actually running already [laughs]. Right, so how did your consultancy career progress after?

Well, I was very lucky because I didn’t have to advertise or look – go for jobs because I knew so many people. People would come to me or – I never worked for … other than government or sometimes – occasionally for large companies but generally for government, and I kept on doing this. A variety of governments, South Africa, China, Japan, Canada, Spain. There was an exception, I worked for a company in Spain because it was – the space part was run by the son of the ex-Spanish delegate who was a friend of mine and he’d been assassinated by ETA in front of his house with his family and he was killed and I felt a need to keep contact with the family. And his son was the head of a space division in a smallish Basque company, so I became quite involved with them. As a consultant they were very – very generous and very nice and it was very convenient because when we were in Majorca I could – I could go from there and also convenient because Inga spoke good Spanish and so she was – she fitted in very well with the – with the staff there. I suppose one could go then to 1985 when after a lot of … well, not negotiations but seeing if I was willing to come to the UK, the then minister who was in charge of space asked me if I would go to the UK and start the, what was then called the, British National Space Centre and after consulting my home authorities I agreed and – I think it was about September ‘85 I went over and they announced with great pomp the creation of this centre. Hmmm …

Who was the minister at this time?

This was Sir Geoffrey Pattie but the – the initiative came from a man called Nicholson. He was in the cabinet office, it was one of these jobs in the cabinet office where they take people from industry for a couple of years and in a very senior post
but just two years to get this osmosis going between industry and government. And he was very keen that the UK should get back into space and he wrote the Nicholson Report which recommended setting up the centre and Margaret Thatcher, who was then prime minister, wrote ‘I accept’ on the report and so I was duly appointed and we moved into offices. After a bit of messing about we moved into an office in Millbank, in Millbank Tower there, and they provided people from the Department of Trade and Industry, including an under secretary. They put me in at deputy secretary level which was one below permanent secretary, a grade two and he was a grade three, a Lancashire man, a Manchester man in fact, excellent character. We’re still very great friends.

Who is this, sorry?

Jack Leeming. His wife is an MP and has just been made Minister for Wales, Cheryl Gillan, she keeps her maiden name. And he came with a bunch of, oh, I don’t know, fifteen or so people. On reflection I was a bit stupid taking it like that because the Nicholson Report was – was very good but it was very vague about what the centre was and what its rights were and what its rights weren’t and where the funding should come from and – but I started in good faith and formed a space council with a member from the Department of Defence, who played the game very well indeed. One would have expected much more resistance from them but they were very – very supportive. The Foreign Office, Geoffrey Howe, was personally very supportive and from the Science Research Council the chairman sat on the – on our little board and a member from the Space Committee of Industry, these sort of people, and Jack Leeming and I. And we set up a group to write the report, this was what the space centre was supposed to do, it was supposed to produce a report on what we should do in space.

Were you given any particular direction or suggestion?

No, none whatsoever.

So clear blue sky thinking?
Yes, what shall we do in space? But the signs were good, I mean I – at Farnborough the Ministry of Defence gave me an office, gave me a grade three, which is quite high in the civil service, as a permanent staff member. It came with a secretary and it was all – all doors open, it was a really good atmosphere. The – then there was coincidentally – a few weeks after I arrived there was a state visit from the prime minister of China and I was wheeled out for a dinner in Downing Street and, er, he seemed to show a lot of interest in space and, er, so did Thatcher, a bit – well, on the border of hysteria but she – she was obviously interested in space, all of which was very encouraging.

[08:25]

I mean it’s no good going into a country at their invitation and then finding that they didn’t want you anyway, it’s better not to go, so I was very positive about this. We set up groups of people to write our telecommunication and remote sensing, our science, look at launchers again, look at manned space flight, and then I kept back for two or three of us the horizontal side and the financial side and eventually after about six months we produced a report which was a plan with an A, B and C programme. A, you’re really going it and it will cost some money, and we costed things fairly realistically, or a B where you’re not quite so enthusiastic and a C where you’re doing little more than you are at the moment but in a more organised way, about fifteen, twenty per cent increase over the years. And my minister was the junior minister in DTI, so we had to go – the thing was supposed to be presented to cabinet so we had to go to the minister to get him to take it to cabinet. He was charming but he was not the sharpest knife in the drawer, he – and he had no knowledge and perhaps even less interest in space but he duly trotted off every other Tuesday morning with the brief with his ears still ringing from our oral briefing. And every Tuesday afternoon he would come back and tell us it didn’t get onto the agenda, ‘But next time, dear boy, I’m sure we will make it.’ But we never did – well, for ages we didn’t. I occupied the time by tidying up things and getting a better hold of our relations with the European Space Agency and where I was well placed to get us more influence than we had. We kind of didn’t count much in the European Space Agency ‘cause we hadn’t a programme, we hadn’t a policy, and there was no real thrust in the thing. And if you
know your way about, even with a little bit of money, you can have much more influence, so I started to do this. And I also took us into international relations and smartened up our space relations with the Americans and with China. Took a team over to China on the basis that they’d been over and expressed interest, and it was open door, they were really very keen to get – get alongside us in space, ‘cause funnily enough in those days we had a lot to offer. There were people who’d been there in the early days of Blue Streak and the – and then telecommunications, we were very strong in that, so we had that and we had also a lot of world famous scientists, so we had a lot to offer to – for cooperation. So I kept busy with this and tried to put a bit more guts into industry on bidding on things like this and we made our regular pilgrimage to cabinet office, but we never got anywhere and then there was this – this was a period when … Thatcher’s influence was beginning to wane and she was getting a bit fractious with people and her staff were very defensive, trying to identify who were the wets and to get them out and get reliable ministers back. Geoffrey was not a wet but he was I think a case of rising damp, he was thoroughly suspected of not being as loyal as he ought to be. In fact he came back from one meeting one day after I’d been there a few months and said, ‘Roy, what do you think of a minister who hasn’t got any opinion?’ And I said, ‘I can’t tell you, I’ve never met one.’ ‘Oh, yes you have,’ he said, ‘me.’ ‘You? You’re always dogmatic,’ ‘Oh, no’ he said, ‘I was at a press conference with Thatcher this morning and they asked whether the government was pleased with the progress being made by Gibson in the BNSC and she said ‘Yes, we are very much.’ And The Times correspondent said, ‘and what does the minister think?’ And she said, ‘He doesn’t.’’ So he was very pissed off at this, understandably, but it showed the atmosphere, and the trouble was that Nicholson and his two year stint had elapsed and he’d gone back into industry. Actually he went to Pinkerton, the big glass people, to run that, he was – I mean he was a high flier, but I contacted him to talk about the report and to ask why it didn’t give the – more status and specific details on how it should work. And the way that most ministries were pushing was to put their money into the pot that they’d had and then to ask us to please pass it on to the European Space Agency, so there was no cohesion in the thing at all, it was – except the Ministry of Defence, curiously enough, was ready to play ball and to put its money in and to have dual projects serving military and civil telecommunications, even remote sensing, particularly radar products. They were
very keen getting alongside the Germans on – on radar. But of course until you got the programme, oh, we were absolutely ham strung. So after about fifteen months I resigned for the first time but Geoffrey Pattie persuaded me to stay on and then his senior minister changed and then he went, he was replaced and we got Lord Clarke from the industry and, er, this great comeback, Kenneth Clarke, was the number two, and that was a complete disaster. I mean they had no interest whatsoever in space and Thatcher pretended that she really didn’t know how they’d got into this at all, you know, it’s – so she wouldn’t allow it to come onto the agenda of the – of the cabinet, it had no priority whatsoever. It would have taken them ten minutes to say A, B, C or not at all, but they didn’t do any of that. I had very – very hard talks with Lord Clarke and very – with Lord – wasn’t Clarke, it was Kenneth Clarke. Well, they were acrimonious with Kenneth Clarke, he was a – not a very pleasant character, hmmm, all simply asking them to make up their damn minds about it. And … again I resigned and I was told, well, the thing to do is to just keep quiet and don’t rock the boat because this is a politically very … very difficult time.

[1:17:35]

There were murmurings from people like John Major and Heseltine and Geoffrey Howe that they were getting a bit tired of the way Thatcher was – was into everything and, er, I mean in a completely unnecessary way. I knew she did a lot in the first five years but really by the time I was there she was quite unspeakable. But this went on until finally I just said, ‘What are you going to do’ and they said, ‘Well, frankly I’ll take – we’ll take it to the cabinet but our recommendation is to continue as we are at the moment.’ So I said, ‘Okay, well, we’ll wait until the cabinet meeting,’ which was a few days, ‘and if that’s the reply then you don’t need me any more.’ ‘Oh, no you stay and then you’ll be suitably rewarded.’ And I said, ‘I’m rewarded every month, I get my salary but I’ve really got more things to do than hang around and play wallflower.’ And it went to cabinet or there was a few minutes’ discussion and it was decided that the time wasn’t right for some such a thing, and it was a really very good report, not because I was responsible but everybody in the UK who had any knowledge of space had been involved in it. Eminent people like Sir John Houghton from meteorology and climate, Mason from the Royal Society, all these people had
been party to it and we all thought it was quite good, so it was a bit of a
disappointment that two years’ investment and two years getting people to work
together and then complete flip over from the part of government and no interest at
all. But of course she was toppled very soon after this by Heseltine and John Major,
but it was too late, I was – I was away by then.

What was the sticking point though? It seems a relatively –

Well, there wasn’t really any. I suppose the – it all goes back to the fact that when …
when you got down to it, to brass tacks, they wanted a space programme that would
produce a lot of work very quickly in the country. They wanted – well, one senior
civil servant from the cabinet office said, ‘Before I can allow this to go to the cabinet,’
although he wasn’t really that important in the chain, ‘I need to know how does this
compare with putting the same amount of money in the boot and shoe industry in
central England?’ And I said I thought it was a rather pedestrian argument but he
didn’t agree on this. I mean it was – they were coming at it from an angle that was
very difficult to understand, having asked for it to be done. In my simple way you
look at the report, but nobody ever even opened the damn report, it was all at the level
of, well, we can do this without the French and we can do it without the Germans, and
our relations with the Americans are still very good, we can get all we need from the
Americans, and so on. So they talked themselves out of the need for doing anything
in space, which in the UK was quite easy because they’d done this several times
historically over the last thirty years, even the Labour party did the same. So the only
thing that was a surprise was they’d asked me to go in the first place. Hmmm …

[21:30]

What did you think when you first got offered the job?

Well, I was very keen because – well, after all I am British and I’ve got a certain
ambition for us and I knew that we had all sorts of interesting establishments where
they’d built up space capabilities, rocket testing and this kind of thing, and it was all
there, you know, we could tap it. Telecommunications, the UK industry started the
first work in Europe on telecommunication satellites. They were streets ahead of a lot of people in on-board computing and this kind of thing. Miniature computers for taking minor decisions on housekeeping in the satellites and all sorts of areas where we could have gone in. Hmm, and navigation, we were well ahead, radar was another area. But it just didn’t go and so I left, and because of my very stormy relations with Kenneth Clarke I mean I left very suddenly. He wanted me to stay but not attend meetings with – with his officials, he wanted my number two and I said, ‘If you want my number two you’d better give number two my job and I will leave.’ ‘No, no, you can stay but I don’t want you to come to meetings.’ So, ‘Sorry,’ so, er, said, ‘I will leave everything in order and the key will be under the mat and Jack Leeming can take over.’ And I, to coin a phrase, buggered off [laughs]. There was quite a splash in the press about it and Panorama got onto it and did a programme, this kind of thing, but I played very straight bat on it and my line was it’s government money, government decides what they do with the money, but that money doesn’t change my opinion, my opinion is that they’ve missed a great opportunity but it’s their call and I can criticise the call but I can’t do anything about it. But it made quite a splash at the time, which wasn’t intentional and even the – the House of Lords science committee called me to give evidence after – a few days after I’d left they had a session and called me and I took Jack Leeming with me so that people would know what was going on. And the chairman was Shackleton, the son of the big Shackleton explorer, but he in his own right was a geographer of some importance and he gave the government hell and so did – even some of the Conservative peers, they were very annoyed about it, because we’d been working with them and keeping them informed and telling them what was going on. They were already – parliamentarians were really quite interested and some of them excited about it. And then I got a call from Kensington Palace, Prince Charles would like to know what’s going on, would I go the following day? So I went to Kensington Palace and was wheeled in to see Charles and two of his dogs and nobody else, just Charles and myself, and I was there for about two or three hours. He was very well briefed and he wanted to know, he said, ‘What the hell is going on? I keep asking questions of the ministers and I get stupid replies. This man Clarke, he’s so arrogant.’ And he said, ‘You know, arrogance and ignorance make very bad bed fellows.’ So he wanted to know what it was all about, so I told him as neutrally as I could and he was quite shocked. But the positive
response came from a very unlikely source, it came from INMARSAT which I’d mentioned earlier, the organisation for maritime satellites, and the director general asked me if I would go and be his special advisor and his – his reasoning was that he was a telecommunications man and a business man, you know, tell him so many telephones and so many miles of copper and this kind of thing and he could tell you whether there was a business there or there wasn’t a business there, but now he was in satellites and he hadn’t a clue about satellites. So he hired me, which again I took three days a week, to look after his international relations and his relations with industry.

[27:00]

This is immediately after the British National Space Centre is it?

Yes, a few – a few weeks, three or four weeks maybe after.

Could we talk a little bit more about the report? I’m interested in these three A, B and C options –

Yes.

And if you would mind explaining in a little more detail what each of them involved.

Well, it’s really a matter of money and the percentage at which you went into programmes. I recommended in the – in the top option that they go into launchers but with a very low percentage because since it was an optional programme you could choose your percentage and so the emphasis was rather on telecommunications but in getting a bigger share of the programmes, and also on remote sensing and in the beginning of navigation as well. So this was the – the big option but it didn’t go very hard only on manned space flight. It did a bit, it got us into manned space flight but, hmmm, well, in percentage terms I suppose our GNP would have been about twenty-two per cent at that time and I was recommending ten per cent, so about half of what France would have put in if it – or Germany would have put in, but it would have
given us a seat at the table and an ability to steer the programme. The B was practically nothing in manned space flight and a pared down in some of the others. I suppose in terms of cash starting at the other end, at the lowest, it was about a ten or fifteen per cent increase in expenditure. The B was about fifty per cent increase, not immediately but over three years, and the most expensive was a doubling of the expenditure over three or four years, this was the kind of scenario. For each of the programmes there was a justification or an explanation and then it was put together and we tried to draw some horizontal conclusions out of it. And as I say, it was critiqued before we let it go by, well, the best people I could find and they were all given free reign to criticise it and tear it apart. So I think it was good, in fact because it had been – become a cabinet paper it was classified, so it wasn’t released, and it was only released about five years ago on the expiry of cabinet papers and a journalist whom I knew at that time rang me here and said, ‘Christ, Roy, that was really a good report. I’ve never seen it before’ [laughs]. They didn’t even declassify it afterwards because there was really no justification for what they were doing and there would have been, I think, quite a row if the report had been made public, but nobody knew what it was about and I couldn’t tell them what it was about because it was a classified document [both laugh]. That was an interesting exchange with the establishment.

*It sounds an extraordinary situation, they sort of brought you in as a former head of ESA to sit around not doing much for two years almost –*

Yes.

*After producing the report.*

Yes. I mean I could have understood it after six months if a minister had said, well, it’s all a great mistake and we’re terribly sorry but there are other considerations so we’re backing off, okay. But, no, there’s always this pretence, they believed in themselves, that the next cabinet meeting was really going to get down to it but I think really they were obsessed with internal Tory party politics and there was a lot of backstabbing, if A was in favour of that then B automatically had to be against it, and
the atmosphere, the political atmosphere, was very – well, it was unhealthy. You know the story that used to go round of the re-election of Thatcher and she took all her ministers to the Savoy, as was her wont for dinner, and the maitre d’hotel came and said to her, ‘Madam, prime minister, congratulations. What are you going to eat?’ She said, ‘I’ll have steak.’ ‘And what about the vegetables?’ ‘They’ll have steak as well.’ Well, this was about the size of it when I was there.

[32:10]

Do you think there was some political expediency in keeping you there for two years?

Well, yes, I mean they didn’t want a row about something extraneous. The first year was perhaps understandable, I mean we took six to nine months to write the report so this was all good stuff, a visit to China and this kind of thing. It wasn’t all wasted time and in ESA we had – in the council meeting and other meetings I’d put a rather more draconian national system to make sure ESA was giving us what we needed, and as all good delegates do, try and get a little bit more than we deserved.

So in this position as well you had to represent Britain at ESA?

Yes, I was the – the delegate and, er, no questions about it, I mean it was accepted. It was very funny going from there to INMARSAT which was run like a commercial company. It had a board of senior members from all the telecommunications worldwide, Singapore, Japan, the US. And Lundberg, who was the Swede who was the director general, was very canny and I mean he knew the telecommunications world inside out and, er …well, I think I was able to help in the beginning in running the rule over satellites and how they were going to use them and – but it all came to a head in INMARSAT when – because I wasn’t in a line function, I was staff to the director general sitting in the office next door and talking to him twenty times a day about all sorts of things, but not in a staff, not in a line function. I wasn’t responsible for satellites but I could see that the satellites that were being built by British Aerospace with Hughes in America as the subcontractor, that they’d already lost nine months on the schedule, and at a meeting of council they were getting a bit restive
because they – unlike ESA it was an operational service so you got satellites up there, you estimate what their lifetime is, and you run your replacement projects so you’ve got a margin of safety there so you’ve always got satellites up there that will work. It’s a completely different scenario from ESA where you launch a research satellite, it fails, so you weep a little bit and then you make another one, but there’s no breakdown in service ‘cause you’re not providing a service. But these guys were bottom liners, they wanted to know when the – when the satellite will be ready, how many channels it would have, that meant how many lines, what kind of an occupation of the line we were expecting and what profit would be coming back. And I could see that this was getting out of hand. The guy who was responsible was the man who was also responsible for the whole telecommunications system. I mean he was an expert in network, the whole system from the ship, the terminal, the land base, etc, right through to the satellite, and he was very good at that but he was not so good at running a satellite contract. And in fact the team that they had was a kind of rapscallion group of enthusiasts who really didn’t – didn’t know their business. They’d taken one guy on from the European Space Agency but he was a bit of a dreamer. I knew him, in fact my wife recruited him, I knew him very well. Technically very good but another Swede, head in the clouds, and for him a project plan with a time line was something that you put on the wall and you didn’t really look at it very often. So I said – we had a council meeting in Cardiff, Cardiff council, and the – the natives were getting restive, the council was very shirty about the delays and the cost overrun, and nobody would give a date for launch. And of course when you say date for launch, as a satellite operator you don’t have many cards to play because you don’t have any launcher, you have to buy a launcher, and the launcher man has to give you a slot and if you keep slipping he’s not going to keep opening a slot for you ‘cause he’s got other customers. So they just couldn’t say when it would be launched, and I said to Lundberg, ‘Look, it’s outside my bailiwick but if you really want to avoid an absolute catastrophe you’d better make me responsible for this, for these satellites that are being produced and give me three months to put it in order otherwise …’ So even he could see that it was pretty bad, and the council agreed.
And the guy who had been doing it was quite happy ‘cause he had his ordinary job which was more than an ordinary job anyway, so looking after a satellite project was really a bit much for him, so there was no bad feeling there. And, er, then I spent two weeks, literally days and evenings, going through all the documents and seeing British Aerospace and finding out what the state was, and it was obvious they needed at least ten more people, that we had a delay of minimum of – and that there were one or two things that we really hadn’t even sorted out. The top of the satellite which contained the payload looked like a birthday cake, the little antennas were like candles and they were being manufactured by Hughes but they had an annoying tendency of falling over when they were shaken, and every time they went through the test one or two of them fell over and they kind of put a bit more glue on, shoved them back in again and said this time it will work, and it never did. So I decided this was – this had to be looked at, so I took a team over to the States and combined it with recruiting, the same tactics as in ESA, looked to see where people are likely to be looking for a job, and we picked up about eight or nine excellent people and shipped them home. And then I went to Hughes to see them and see the satellite people and they – they were, you know, first class people. At the time they were head of the pecking order but terribly arrogant and the – the man who had designed these little Christmas trees things was the guru for … small antenna, L-band antenna, and he … very graciously received me with his acolytes and told me first of all that the next test would be successful and I could go home. And then after about an hour not only could I go home but I should go home, and it gradually got worse and worse and worse until he said to me, ‘You don’t know a damn thing about L-band antennas, I invented them, so I don’t know why you’re here trying to criticise me.’ And I said, ‘Well, I’ve got one big advantage over you.’ He said, ‘What’s that?’ I said, ‘I’m a customer, I’m paying.’ The concept was quite new to him and I said, ‘I don’t like it, it’s a concept that doesn’t say anything to me at all. If you’re going to put these candles up and knock them down every weekend, I want something else, and I want a group to look at it and tell me why it doesn’t work,’ ‘Absolute nonsense.’ I said, ‘Okay, let’s go and see the boss.’ So we went to see the boss and the boss sent him out and said to me, ‘All right, what is it?’ and I told him. He said, ‘Okay, we’ll appoint a three man commission to look at it and I’ll switch off the meter for – until we’ve got a solution. I guarantee you a solution within four weeks,’ which he did. And it turned out in fact that this guy was
the guru and was really – I mean he was tops, but he was so arrogant that he wouldn’t take advice from any of his team and his team were telling him that it was too fragile and eventually as soon as we got him out of the circuit they found an engineering solution that was fine. But British Aerospace hadn’t got the clout to argue with them but I had because as I say we were paying for the damn thing. So we launched, we set up a schedule, we launched it, it was a successful launch and, er, I said goodbye. Oh, one of the people that we recruited was a head of satellites for INMARSAT who took over from me. They created a new permanent post because they were going to need somebody down the line, I was just … on the way. So we got him and he was very good and he’s still there, he’s –

Who’s this?

His name is Jyl, Jean Jyl, J-y-l I think. A strange, a strange name, an American, Californian, very good, excellent man. Jylg with a G; J-y-l-g. I think it must be a Montenegrin name by origin but he was a thousand per cent American, and a good project manager.

[44:00]

Had you had any other clashes with scientists over the years?

Yes, but not – no blood on the floor. There were two or three people in the UK who were against space because they were astronomers. It sounds strange to put it that way, that’s the hard fact. So they were not convinced that it was worthwhile putting money into satellites when they could do everything from – either from the ground or from Chile from the European telescope, and these were – these were quite hard because they were very influential people and they – I mean they had a point, it was – but what they didn’t see was that science was getting almost a free ride from the applications satellites, so they were getting – for a 60 million satellite you were getting the experience from all these application satellites, so they were getting very good value for money. And then when we went in we negotiated with the Americans
to get fifteen per cent of the viewing time on the Hubble telescope, the space telescope.

Who’s we at this point?

ESA and the UK was paying towards that amount, so we were getting in the UK for two per cent, that’s to say one seventh of what ESA was paying, we were getting fifteen per cent of the Hubble telescope direct viewing time, change of direction, anything you like. Well, this is good value for money so gradually they began to see these things and they also of course became completely seduced by what we were getting back from – from space. But on the whole there was no – there were no longstanding enmities and I met Professor Fred Taylor from Cambridge when I went over to the UK the month before last and he remembers the – he was one of the recalcitrant space scientists but even he’s completely won over.

You mentioned several other eminent British space scientists during your time at the British National Space Centre; I was just wondering how did these people contribute towards the report?

Well, we had a space science section which was chaired by a space scientist and he could invite who he wanted on – all that we wanted to be sure of was that they would deliver their material consistent with the overall plan for – and they did, they were very good. Well, Fred Taylor was one of them, Harry Atkinson from the SRC was another one. The most important is a guy whose name escapes me, he died a few years ago, he was knighted but I can’t remember his name. I want to say Runshaw but it wasn’t Runshaw – Runcorn, Runcorn. And they were all – we couldn’t pay them, we could pay their travel expenses but we couldn’t give them any money ‘cause there wasn’t any in the kitty and they did it on their own provided we pay their travel. And they worked very hard and their science report was very good.

Hmm. Of the three options that you outlined which did you have the most hope would actually be –?
The middle one I think, yeah. I suppose if I’m candid I only put the upper one in in order to increase the chances of the middle one, ’cause it was very easy to go from two to three in later years. If you’d got two, in my view, it would have justified going to three, people would have seen the advantage.

You mentioned something I meant to pick up on a little while ago when you were talking about the way that Britain used its money with the European Space Agency. I think you said, if you knew your way about a little bit within ESA with a little bit of money you could go a long way –

Yes.

Which just – I wonder if you could expand on that a little bit.

Well, when a programme is – was starting or when an activity was starting very little of it was done inside ESA, some of it was but very little, it was always put out to grass somewhere. Some of it you couldn’t do the ordinary put an advertisement in the newspaper because it was so esoteric that there was a very limited audience, but if you knew that that was coming out, you knew that ESA wanted a report on this or that and you understood the business, then you might know that in Leeds University there’s an excellent group. In fact one guy is doing exactly this work, so you can get ESA money for him to do it. There are lots of examples, on the industrial side it’s the same. You want to look at reaction wheels or you want to look in terms of electric propulsion, lives of batteries, these studies that were going on all the time and sometimes they had to go out and were advertised but some, as I say, were so specialised it wasn’t worthwhile. And if you were close to ESA and you knew the guys who were doing this then you could say, well, hey I think I could probably find somebody for that. And then again, in terms of individual projects, you put in say fifteen per cent and you want fifteen per cent of the industrial work back, known as the geographical return. You want fifteen per cent, not only what’s good for the project but as far as possible what’s good for the industry, so you would like to get hold of the nice little bits that have got a future rather than the humdrum things. And
there you’ve got to be pretty fleet of foot to suggest it and to get industry to go in and say, oh, I can – I can make one of those, even if they never had. [both laugh]

After so many years running ESA how did you find the experience of being a delegate, being on the other side of the table as it were?

Oh, I remember telling them in the first council meeting I went to. It was a great shock to me ‘cause when I was director general I had always imagined that the overwhelming intellectual contribution came from the secretariat but I realised now that I was completely misled, this is not the case at all [laughs]. Oh, it went very well, people were a bit chairy [ph] of me because I knew probably more about their business than they did themselves and – but the atmosphere was very good. I think I had good relations with people.

Sounds an interesting case of poacher turned gamekeeper.

[52:24]

Yes, indeed. And Jack Leeming used to say – he’d been a civil servant all his life, he said, this is the only time I go to international meetings where I have to put on the headset to hear the translation of what my head of delegation is saying because I – I had a nasty habit of replying in the language that the man had posed the question or said something, so – and I didn’t do it purposely but it become – it becomes automatic and then Jack would hurriedly put his headphones on to hear what I’d said. [both laugh]

You’ve mentioned several British political figures from this period, I’m just wondering if we could talk through your contact with those a little bit more.

Yes, I – I had quite a lot of contact with Howe ‘cause one of the parts of the report was pointing out how important it was for the UK to have a visible space programme that was capable of helping developing countries. Developing countries all wanted to get into space but their notions generally were to fly a satellite. This is completely
wrong and a complete waste of money but what they ought to do is to be learning what space can do and what kind of ground stations they need in order to get data, which is completely free. For example, Meteor sat data, if you spend 25,000 pounds on a small sat you can get your own data back to you every day. You don’t need to launch your own satellite, that’s really completely unnecessary, but as an instrument of foreign policy it’s – it really takes a lot of beating. For relatively small amounts of money you can go into a country and have tremendous influence on their development in terms of remote sensing, land utilisation, irrigation, navigation, surveying, and then crop distribution and this kind of thing, all of which can be done with other people’s satellites. All you need is a – you need to be able to know what it can do and what you need on the ground in order to take advantage of it.

Right.

And he was very interested in this and was very supportive. He gave me, onto the council, a very bright young chap who subsequently became ambassador in Brussels I think, and was replaced by another man who became an ambassador in Russia. So, you know, that kind of level, it wasn’t just sending us an office boy along, so they were very much on side. Defence, Heseltine was defence when I was there and he was very supportive. He became DTI afterwards, after Thatcher left. You know, Heseltine resigned in – during a cabinet meeting but when he came back with Major he became the senior minister in DTI and he was the one who signed me as the ESA convention, so he was able to pick up with what he’d seen when he was – when I was there in the UK. Hmmm … Shannon was the DTI, completely indifferent, Geoffrey Pattie, very – very supportive but not very influential. Those were the people I had the most interaction with.

Was the fact that Heseltine had been involved in space for all those years before an advantage then?

Yes … a strange, flamboyant character in those days, he – I met him a few years ago and said, are you still interested in space? ‘Oh’ he said, ‘space. That was a very interesting period, we really did something then didn’t we?’ [both laugh] I remember
after the Brussels ministerial conference the Norwegian ambassador came to me, a
man I knew quite well and he said, ‘This man Heseltine, I just can’t stand him. He’s a
playboy, I mean just look at him over there. Wavy hair and the vision I have of him is
a red sports car, he’s going to drive up to the door with a blonde and he’s going to
jump in and they’ll go off and make merry.’ I said, ‘He’s not like that at all, he’s very
serious,’ which is true. He’d read his brief and he knew more about it than you did,
but as we were talking a red sports car appeared with a blonde, which was his wife,
and Sven said, ‘You see’ and I said, ‘that’s his wife.’ ‘Oh, yes’
he said, ‘doesn’t change my opinion.’ [both laugh]

Did you have to deal with Mrs Thatcher personally at all?

There were two or three times but never on the subject of the plan, always in the
period while we were writing the plan, for instance, when the – when the Chinese
came over. Oh, there was another thing, when we were planning a trip to Russia and
she wanted to be involved, things like that, but never a proper discussion on space.

So sort of areas where there were some item of interest to her then.

Yes, yes.

There is an academic argument that Thatcher made some political capital out of
scientific training. Do you think there was any truth in that from your experience?

I think she was quite – quite sharp on – she knew the right questions to ask but she
didn’t, in my view, couple that scientific knowledge properly into what her job was all
about and she got lost in questions, scientific questions, which she knew how to ask
on and on and on, and the answer to them really didn’t advance the thing at all. I
remember once, for example, she was being briefed by a senior civil servant and she
kept asking questions and he kept replying, then she asked more questions and down
and down and down, and really not central to whether it’s a good thing or a bad thing
but mainly to show that she understood the science behind it. And there came a point
when she said – when the civil servant said, ‘I’m sorry ma’am, but that’s beyond my knowledge but I can get the reply as soon as I get back to the office,’ and she said, ‘I expect my senior civil servants to be able to answer all my questions.’ And he made the great mistake of saying, ‘Yes, ma’am, I understand that but, you know, some questions are more important than others.’ So he went back to the office and found a note on his desk to ring his permanent secretary, he was posted to Brussels the following week, that was about – she just could not stand anything that was criticism or – I mean it was a … not a wise thing to say but like me he was a Yorkshire man and he just got so irked by the irrelevance of the questions.

*You mentioned that one of the reasons you wanted to take the job with the British National Space Centre was because as a Brit you wanted Britain to sort of be in space and in the space business.*

Again, again, ‘cause we used to be.

*What did you make of the, let’s call it the official, governmental line on space research in Britain?*

They didn’t really have a policy, it was a hand to mouth affair. The Science Research Council was very good and it got its money and then it darted off and tried to keep as far as far away from Whitehall as possible and do its – do its best but there was no – in my view no line that said this is a good thing and it’s a good thing because it fits into this and it was all, well, we’ve agreed to give them the money and let’s hope they’ll do something with it. I think that’s changed, I’ve noticed several instances where the integration of the scientific view has become more … systematised, but at the time I wasn’t very impressed with them at all.

*I don’t think there’s anything else I have to ask on the British part of this.*

Good.

*Shall we –? [laughs]*
Well, I went from BNSC to INMARSAT and then I left INMARSAT and I hadn’t been out of INMARSAT very long, still doing a little bit of consulting here and there, when I was called by an ex-colleague from BNSC who had moved to EUMETSAT and he was director of strategic planning, and he said, the director general wants to know if you would come and be his special advisor like you did with Lundberg in INMARSAT. So I went over to Darmstadt to see him and I’d known him before ‘cause he used to be one of the delegates from Germany to the European Space Agency, so I saw him and tried to find out what he wanted. And in brief it was because he had a smallish organisation compared with ESA but devoted to providing a service twenty-four hours a day, seven days a week. He had to get the information from the satellites down, distributed, rectified and ready for use, and it didn’t really matter what else happened but that had to happen every day. So he never got much chance to look at the international scene in general and he felt that EUMETSAT was not fighting at its proper weight in things like – there’s a committee on Earth observation satellites which I started actually many, many years ago and it’s – it started as a club of space agencies to try to get them to, insofar as they could, make comparable observations so that you could use them together. Sometimes if you take data from one satellite and try to use it with another it’s hopeless, you can’t – you can’t understand them. So this started very modestly but now it’s become, or then had become, a very influential body and laid down some standards, and it was dominated by NASA, by NOAA which is the American weather bureau, a very influential organisation, and by the European Space Agency and by the Japanese, by the Russians, by the Indians and by the Chinese, and the DG of EUMETSAT said I have a feeling we ought to be on the stage there. So I set that up and in several other organisations and meetings, and either used to go myself or go with somebody from EUMETSAT and have a presentation and meet people and raise the level of understanding of what EUMETSAT was all about. And this coincided with an initiative from the US called A Group on Earth Observation, this was in 2001 and they called a giant meeting in Washington at which three American ministers spoke and talked of the need for us to get together, rather like CEOS had been done but on a government level. Instead of being a professional bunch of people talking amongst ex-pats they wanted it – they wanted the cooperation at a level where it would stick,
where you could have a political agreement, so they started by having this group on Earth observation. And this gave way to a ministerial declaration and setting up of an organisation in Geneva which was hosted by the World Meteorological Organisation. It was nothing to do with them but – I mean they were interested in it and they had plenty of space in their new building in Geneva, so they gave about a dozen offices to this group, and the group set up a team of four principals and four assistants to write the plan for the next ten years and, er, I managed to get EUMETSAT as one of the four principals which was instead of the European Space Agency, because in my argument the European Space Agency was a research and development agency whereas EUMETSAT was an operational agency, and if you’re talking about sustained observations then that’s the way you should go to –

[1:08:25]

Luckily my relations with ESA were so good that we used to have a scram down on the twenty-five yard line and regularly with them so that they were involved but they were not a nominee. The nominee was David Williams who was the – then the director of strategic planning in EUMETSAT and I was his offsider. Then there was a Japanese from the Japanese Space Agency and their offsider was from Tokyo University, an American and his aide, and a South African who was a biodiversity professor, excellent character. And the eight of us had two people as a secretariat and we literally travelled all over meeting – meeting people, discussing for a week at a time sometimes, it was very time consuming. And we came up with the first ten year implementation plan which was divided into … not areas like telecoms navigation but environmental areas; agriculture, land utilisation, health, water, climate, and then looking back into space to see where the space agencies fitted into all these areas. It was extremely interesting and the – the ten year plan still makes good reading and it’s still being used, it’s – we’re in about year five I think now of it. But I did this for EUMETSAT and, er, and kept going until David left to go to BNSC and he became director general of BNSC, and is now director general of the new British Space Agency which was announced with trumpets by the Labour government just before it disappeared.
I was very interested in this idea of using – of basing the plan on environmental issues rather than –

Well, the whole – the whole thrust was environment.

Right.

And although from my side we’ve been talking about satellites equally important is data from the ground and generally space data is no good unless you can either verify it on the ground or complement it from the ground, so we thought rather than talking in terms of what data you wanted we’d look at it the other way; what are the problems in the various areas? So we were able to plug in to the world experts on water, what is that – what observations, both from the satellites and from the ground, what do you get at moment and what do you need and why? And what are the – really the priority areas there and is there any correlation between that and what you need for agriculture or health? Is the data – is the satellite, for example, that helps you detect locust, is that any good for the people who are looking at water? And these kind of horizontal questions. I think it’s the first time that it’s been done in this way and the atmosphere was really – I’ve rarely worked in such a pleasant atmosphere and we were all wedded to the idea of getting the best possible advice that we could. So before we had a meeting we always lined up who we were going to have and get a water specialist and have him for five or six hours and talk to him, wring him dry, and then have somebody else who was a malarial disease specialist, is there any sense in looking at factors that lead to malarial outbreaks or is it purely mosquito and what happens, where did the mosquito come from, is he after water, or can we –? And these – these are questions that have been asked before but never so consistently as we’d asked them. The book makes good reading even now. We did one small one for ministers and senior civil servants and we did a bigger one with all the – with all the data in it. And ESA very kindly provided us with a professional editor and so it’s, you know, not just a Roneo job it’s a really nice job with graphs and pictures and things. That was one of the most satisfying periods that I had and I still keep going in this GEO, not now with EUMETSAT because the DG left and David left, and although the others wanted me to stay on I’ve got a kind of a time alarm that tells me it’s time to
move on, so I found somebody who was willing to go in and I left but I – I’ve kept in contact with GEO, in fact I’m going the week after next for a meeting on, I think I mentioned it in the corridor the other day, forest carbon and we’ve got a very big project going on there.

[1:15:30]

And I’m hired by the Australians for that work, which is rather good because it internationalises the whole business, and we were over in March and the Prince of Wales generously gave us two rooms in Clarence House for our meetings and – ‘cause he’s very interested in sustainable development and his people were very – very welcoming.

And did he remember you from the space report?

I didn’t meet him, no, but he knew about the meeting and –

You mentioned that you managed to get a place for EUMETSAT on the GEO panel –

Yes.

How do you go about securing something like that?

It was a matter of influence really. I mean we started, or I started, from the questionable start point but I firmly believe that you can’t write a technical report like that with a hundred people sitting round the table, and GEO had seventy-five member states and I think sixty participating organisations, you ask them all to send one person, it’s hopeless. So I persuaded ESA, I think I persuaded the UK, I persuaded France and Germany, that they should go for the idea of a small group. So when we came down to talk how do you define a small group, the plan that I shoved around was, one from Europe, one from America, one from Asia and one from Africa, and they should be allowed to take with them one expert each who need not necessarily be of the same nationality. And after a lot of umming and ahhing, I mean it was either
that or a meeting of 120 people. They wanted something well within a year so they – they accepted this. It’s not a popular concept in GEO, GEO likes to say we’re having a meeting on this and suffer little children, anybody who wants to come to the meeting can, which means that in many of the things that they do it gets bogged down with the man from Honduras who really doesn’t know what it’s all about. Not that that’s a Honduran characteristic but I mean they can’t follow all the things, you need experts to concentrate and then you can put the political dogs on to chew it and see whether they like it. But it’s a long business, you know, long hours of slogging round and meeting people and going for a drink in the bar and showing them the piece of paper and getting them to show the piece of paper to somebody else and …

*How important are these little drinks in the bars with people in this sort of process?*

I think they’re quite important, yes, yeah. And then we – we had rather more official drinks in the bar in the form of caucus sessions where all the European participants would meet for an hour and another where all the ESA members would meet for – so you get these bigger groupings where you could – and most of them were only too pleased to have some suggestion as to how to proceed. I mean there’s no magic to it, it’s pretty hard slug and footwork.

*Just so I’ve got the time slot right in my mind, when is this exactly?*

This was 2001, and it’s still running. It really got up and running 2003, 2004.

*Shall we take a short break?*

Hmm. And it –

[End of Track 8]
Track 9

*Could you give me some idea of the sort of – the time line of your consultancy work please?*

Well, I left ESA in 1980 and went to BNSC in ‘85, so between these two dates. It started off with Martin Marietta and then the arising job with – in Nuremberg for the artillery shell. Then came Norway, Austria, Finland, and at the same time China and South Africa. Then I – when I went to the UK, which incidentally was one of my bleats [ph] at the time, I gave up everything. I cut all consultancies, I gave all my shares to the kids, so as to be completely independent, so I did nothing in those two years. Then 1988, ‘90, ‘89, was INMARSAT, then I suppose Japan, one or two jobs for – long term jobs for ESA … and then the big job with EUMETSAT, which lapped over then into GEO and Earth observation. But in between there, I think it must have been 2000, I was on a three man committee in Australia to write their space plan and this involved eleven trips to Australia in twelve months, hmmm, ‘cause we had to go to each part of Australia, I’ll come back to that. And then since then it’s been GEO or some aspect of GEO that’s been keeping me busy either for the European Space Agency or now for the Australians, because if you’ve – if you’re paid by the Australians then GEO is only too happy to have you, they don’t have much centralised money, they say we want a job doing and come to and country A will say, okay, we’ll get the job done for you and they might – they might – it needn’t necessarily be a national of that country that does it. I think that’s about the – about the scale of it, I’ve – oh, I went back quite a lot a second time to South Africa as chairman of their space board, which again was trying to set up a space agency which they – we did eventually and that was … that must have been 2000 – 2004-2007, that sort of period. It’s all a bit vague isn’t it but I don’t really keep any – any books on it. [both laugh]

[04:20]

You were asking about lifestyle … it depends really on the client, I mean I think if you’re a consultant and you’re going looking for work here and there then you – you
fit into the – to the two, three days or the week or the – or you work from home according to what the – the contract demands. I’ve been lucky in that I haven’t had that kind of contract, my – contracts such as I’ve had, I don’t think I’ve ever had a written contract with anybody, is pointed towards an objective with the Australians, be with two Australians until they’ve finished the report which goes to government on setting up a space agency. Your contact is the permanent secretary for the Department of Trade and Industry. It’s one piece of paper, we will pay your expenses and we’ll talk about remuneration later. Okay. Lifestyle, now that was very hectic again, because eleven trips, you can count two days out and two days coming back, and always ten days of meetings, so that was a large chunk of the year going out and your life has to be fitted in around it. Luckily my wife came ‘cause she was still able to travel in those days. At the beginning she came twice to Australia with me and that made it easier because the lifestyle became Australia and she stayed and we – I took fourteen days to do what I would have normally done in seven and we did a little bit of sightseeing around. But I suppose the – my lifestyle has been mainly based around family, my two kids and their progeny, and the variety of houses that we’ve either bought or done up or – at one time we had four on the go at one time which meant that we had four sets of kitchen things and, er … according to where I was working we – we used to live for the time that was necessary. In Nuremberg we had a flat and I stayed there sometimes three or four days a week and my wife came out regularly with me. Hmmm, we had a flat in London when I was at BNSC, we had the house in Majorca, a house outside Paris, and we had this place [laughs], so it was a rather mobile lifestyle but not a jet setting lifestyle, quite down to earth, neither my wife or I were addicted to high life. A lot of music, a lot of theatre, a lot of friends, mainly friends arising from business, some of whom I’ve kept for – well, like Jack Leeming, thirty years. It’s not always easy to accommodate, especially for the wife. Children accept it more readily, they – because their own lives become more mobile as they get older and – but I’ve gravitated away from the UK, I don’t seem to go back there very often, it’s mainly travel either in France or in Germany or in Austria, or in Sweden because of my wife’s parents and relatives. Is it an answer?

Yes, just –
I suppose a one sentence answer is that the job came first. I’m not all that proud of it but that was the truth.

Weren’t all that proud of it; sounds like such an interesting lifestyle.

Yes, but I suppose the well rounded person learns to play the cello or some such. I’m – even when I’m at rest I really feel the need to do something that’s connected with, either directly or indirectly with, my main interests, or else music and concerts and things.

[10:10]

Which of all these places did you regard as home, if any?

Where we were at the moment. I suppose we were most at home in Majorca, we were both very fond of it and, er, had lots of friends, but as I think I said my wife’s health declined and it was – it was pretty urgent to get back onto the mainland.

How many grandchildren do you have?

I’m sorry?

How many grandchildren do you have?

How many do I have? One, five and two great grandchildren, twins.

What do your children actually do?

My son was at Southampton and did PhD, stayed on and worked with his prof for a couple of years after that and then set up his own consulting business, which he’s kept but run down. But my daughter, who married – her first marriage was to a man who was in – vaguely in the space area and they went, both of them, to Dornier in Germany. My daughter spoke reasonable German and – and then he came back to
England and started a firm, SCA, in England, which was very successful which he sold out a few years ago. But she had been at Salford and, oh, a degree on administration and finance and this kind of thing, and for many years now she’s been – she used to work for her husband’s company as company secretary, she got all the necessary qualifications. But they divorced and she got a job as the same thing, kind of company secretary, for the Institute of Physics in Bristol. They live in Bath and she does their books and manages staff and this kind of thing and runs the board meetings and – so they’re both occupied and lead reasonable active lives. And we’ve got another house in the – in the hills here which – because my wife couldn’t travel very much in the last eight or nine years they – my kids come and take it over and extended it and, er, they use it. Oh, they’re there now, a group of them there now, they come regularly over here. We had another flat in Paris as well, come to think of it. This was all my wife; she was – while I was away she was either buying houses or selling houses and …

[14:15]

You’ve mentioned your wife at numerous points in this story but I was just wondering if you could give me sort of impression of what she was like?

She was a very vigorous and vivacious – when I first knew her. I think you call it strawberry blonde, yeah, or Venetian blonde, that sort of hair and she had worked all her life ‘cause her father – her father was in the paper business; he was a Swede but he was a manager of paper factories in Austria and was there in the war. And after the war the company that he’d been working for, the Austrian company, no longer existed so he had no pension, so he went back to Sweden at the age of sixty, sixty-two, with two kids and a wife and no job. So his wife, who was Austrian, got a job as a minor civil servant and Inga went out to work. And then in the war she – she’d been in Heidelberg University and taken a degree there, then she went back to Sweden at the end of the war and worked for Saab-Scania and became private secretary to the managing director, so she was very keen on management and organisation. And when her mother and father passed away she felt free to leave and went to Vienna to the International Atomic Agency and became the private secretary of the director general,
which was a job which suited her wonderfully because of her languages and she knew what a private secretary did. She was very popular and a very gay and gregarious person. Hard work, ‘cause she was always at it, she was always very – rarely relaxed … but made friends very easily and widely, was always very supportive of what I was doing. She was always very well liked and people took to her very well and she – she was very loyal with people, she didn’t drop them when they were no use, so she kept on with them. I still get letters from – from people she recruited or even from the wives of people she recruited saying how much they enjoyed her. She – I mean played a very important part in my life for – well, for all the time till she died in December of last year, although the last five years she was not really with it. I think I best sum her up by an incident that occurred about three or four years ago, she was in hospital with Alzheimer’s but she – she had moments, or longer than moments, periods when she was able to talk and take part. We had a visit from her Swedish family who were a bit dramatic about the whole thing and when they came into the room where she was in bed, her hair had gone white and she was certainly much thinner than she had been. And a cousin broke down in tears and was shouting, ‘Oh, Inga, my dear Inga,’ and they wouldn’t stop, and Inga looked at me and said, ‘What’s the matter with her?’ [laughs] For me this really sums up her, she was really down to earth.

[Laughs] So you knew her at ESRA as well. Was that where you first met?

Yes, I – she was in the recruitment in ESRA and on my first visit after I’d taken up the post I went round, and it was always my way, I wanted not just to see the boss, I wanted to see everybody in the unit, get a feel for it, and walked in and there were two very attractive ladies sitting at a desk waiting for me. One was my future wife and the other was an Italian lady, her colleague, and afterwards the – the Italian told me many years later Inga said, ‘Well, I’ve been recruiting for this organisation for the last five years, this one’s for me.’ [both laugh]

Did she continue to work throughout your career?
No, as I said she – I felt it wasn’t right when I was a director for her to continue. I suppose looking back it was a bad decision for Inga because she lived for the work but it – we made the decision and that was the way it was. But she kept very busy and she was – she went back to university in Paris and took a degree as if she was French, with French as her mother tongue, which it wasn’t, to take her translator’s degree in English, German, Swedish and Spanish. But she was very much an over-aged student.

[21:00]

_Hmm. Do you see much of your grandchildren?_

Yes, well, they come over here to the chalet regularly and I go over there, not as I said earlier – I don’t go back much to the UK. I used to go more, there used to be a direct line with a couple of flights every day from here but now – it’s started to get better but it’s really not as good as it used to be. I suppose basically I’ve grown out of living in England, since apart from BNSC I’ve been away since 1966.

_Would you still consider yourself British?_

Oh, yes, yes, yes. No, it’s only a matter of everyday life and, you know, I know how to call the fire brigade out to get a doctor and I’m – I’m French to that extent that I know the system as well as the French people do.

_[Laughs] I understand as well you also spent part of your career helping set up the European Environmental Agency._

Yes, oh, we missed that didn’t we? Yes. That came … that came before EUMETSAT and I had a call from a man who had worked with me in ESRO who went to the European Commission and he called me to say that the head of the environment division wanted somebody to help him set up the European Environment Agency and would I be interested, so I went over and saw him. Nice guy, used to be a
Dutch minister and was then director general of a big department. He became a minister again afterwards, a quite important politician in Holland.

Who’s this?

His name is Brinkhorst, Jan Laurens Brinkhorst. And he had a very peculiar task, the parliament and the member states had agreed to set up an agency and they had a charter for it, quite well written, but the last clause was ‘and this will come into effect on the day the council decides where the agency should be located’, which was just about the most stupid thing you could say because it gave everybody the chance of blackmailing. So we had nine offers for the agency to be accommodated but until we got a decision on that there was no agency. Hmmm … and Brussels being what it was, and I don’t know whether it still is, your agency didn’t exist and therefore you couldn’t start even to talk about staff or budgets or anything because you didn’t exist. So I couldn’t do any exploration work at all, the formalities were incredible.

What were the actual terms of this position? What was the aim of the job?

The aim of the job was to, in the first place to get the agency set up which meant, when you read the small print, getting member states to agree where it should be. The way it would operate was nicely set out in the document, it made a good job of that, but we had quite a lot of work to do in the meantime. It had – I suppose it might’ve been about ten or twelve staff there, and we were doing the best we could to see what kind of data would be needed, what kind of links would be needed in member states. We did a lot of proprietary work while we were waiting. One thing that we managed to do though, there was a supposedly one-off ministerial conference in Dublin on environment. It was, I think, the first European environment ministerial conference where they all swore that they were going to reduce emissions, even when they didn’t know what the emissions were but, you know, it was a kind of – a feeling good meeting. But we seized the opportunity to get the civil servants of all these ministers into a group, which we regularly convened every couple of months or so, to talk about the agency and how it would work and how member states would relate to it. So we had – some of them were not even members of the EC, some countries, like
Czechoslovakia in those days, but they were very keen on the environment and we got together a useful directory of who was doing what and which institutes would be helpful and this kind of thing.

[27:00]

But the main was trying to persuade member states that we didn’t need nine sites. I mean some of them, the UK for example, was just to keep up with the Jones’s, they were really not interested. I think it was Bracknell they suggested or somewhere like that. So I managed to get an unofficial agreement with the Brits that they would not insist, and I did the same with the French. They were in the middle of setting up their National Environment Agency and they wanted it in the same place in Orléans, but I got an agreement with them that they too wouldn’t insist. The big players were Denmark, Italy and Spain. Spain was offering a wonderful place right in the middle of Madrid in the gardens, the Redondo Gardens, and Italy was offering almost anything but not in writing and willing to give much more than anybody else without saying what it would be. It was a complete mess, the Italian proposal, and it had plans from world famous architects of buildings that were going to be the European – I mean it would have taken ten years to get the site and to build the place and to do that with the Italians would have been a nightmare. And the Danes were, for my money, the most credible but they made the fatal mistake of proposing a site on the Baltic coast outside Copenhagen, about an hour’s train drive, next to a nuclear reactor. And I knew the site very well from my days when I’d been at atomic energy, I mean absolutely a desert, just marshland running into the sea and this bloody great reactor stuck there against which they were going to convert some of the buildings into an environment agency. So my relations with the Scandinavians, partly because of my wife, had always been very good and so I took them on one side one evening and said, ‘I think you’ve got a good chance but only if it’s in Copenhagen. International staff really don’t want to commute an hour every morning and live next to a nuclear reactor, but if you could get something in Copenhagen –,’ so they were very fleet of foot and they – they found very quickly a bank, a private bank, that had sold out to Barclay’s or HSB or one of these, and it was a huge building right in the middle of Copenhagen, next to the big Hotel D’Angleterre. And they said we could get that but
we’ve got to call the dogs off, so I decided it was no good talking to the Italians so I talked to the Spanish, and in those days the – the ambassador to the commission, the Spanish ambassador, was a man who subsequently became their foreign minister, and he had a Swedish name curiously enough. It’s very funny to see a real Spanish grandee called Westerlund and I put it to him straight, I said it can drag on for ages if you like and – but I really don’t think that in the end of the day people are going to buy Madrid. In my view Scandinavian countries have got a better image for environment and this kind of thing, northern clean air and it sounds better. Doing it in the Redondo in Madrid you think of tapas and red wine but you don’t really think of environment, and he roared with laughter. He said, ‘Well, doesn’t rest with me but I’ll do my best,’ and about a week later he said, ‘We’ll withdraw if the Danes will say Copenhagen.’ So that left only the Italians, there was only one way I knew with the Italians and that was to go to the boss man and say, ‘Look, you don’t have a chance but if you want to go for a vote I think seven member states will vote for Denmark and you’re going to be outvoted, that would be a terrible loss of face for Italy. But you could make a lot of political capital if you were to ring the Danish minister and say, yours is really – in all fairness I must say your proposition is a corker and we’ll support it. You’ve got a friend for life there.’ You could see the wheels going round and he agreed, so I came back and said to Brinkhurst, I think we’ve got a deal and we – we had a deal. The next meeting of council, the Danes, they were splendid, you know, they’re really down to earth people. They appointed two or three people, English speaking people, to be guides to families moving in and housing, they went round and found suitable housing for the staff, they got them into the local health insurance scheme, they found schools for the kids, and all these things that nobody thinks about and which are absolutely vital for getting the right people.

[33:20]

And it started up, we got it, we – but then the question was to advertise for a director general or a director as he was called. And when that started I said my work is over and I withdrew. So I was a bit part in the play but it was interesting.

Was there any particular urgency at this time to get the agency up and running?
Well, there should have been. I mean all these agreements, the international agreements, Montreal agreement, Kyoto and all these things, were all bubbling and the EEC was formally a member of all these, it had signed them. It’s a curious legal situation but it signed not as a government but they signed as an intergovernmental entity, so they had the status of a government without being a government. But when they fielded people they couldn’t field an environment agency … and they weren’t allowed to talk about the environment agency ‘cause there wasn’t one, so they were very keen to – to have it. And we got involved informally in everything that was going on to bring people up to speed when it happened but it really was a dreadful political error to put that in the – in the document.

**At this early stage what was the actual intended purpose of the Environment Agency?**

It was intended to coordinate and facilitate the development of European environment policy in detail in a number of specific areas and then the charter went on to explain how that would be done and what its interaction would be with member states. And then I added some stuff to allow non-member states to become associate members and it was – it’s okay, it’s – it can do a lot of good. The first director who came from inside the EEC was not the boldest man I’ve ever met and he really didn’t push as hard as he could have done at the beginning. I remember telling him, you’ve got about a year, anything you want you shout for in the first year ‘cause after that you won’t get it, but he either didn’t believe me or didn’t like shouting. But they’ve got a Brit now, a lady, she’s very good.

**Are you an environmentalist yourself at all or –?**

Oh, yes, I mean a professional environmentalist, yes. I still take jet planes and go to meetings on environment.

[36:40]
Was there any relation between this building the environment work here and the work you were doing with GEO later? I’m thinking –

Oh, yes, very much so and in fact I think it’s thanks to the time I spent in Brussels not setting up the agency, if you understand me, that I got a better understanding of the areas in which the environment needed to be looked at. And that helped me when I came into GEO to set up this little group of eight people [coughs], pardon me, and setting up a climate group, a health group, this was mainly from my experience with the Environment Agency. It also gave me a certain amount of street credibility having been involved with setting up the Environment Agency. Most people knew, even outside Europe, that we were trying to set it up and that I was involved in it, so I had a lot of contacts already in the environmental field.

You mentioned adding stuff so that smaller nations could join a moment ago.

Yes.

What were you adding this stuff to?

Well, having a written document that set the conditions under which people outside member states could become associated with the – with the agency. It was to give them some status rather than just being observers and they in turn pledged not to give money but to provide experts in groups and this – this sort of thing, because some very interesting work being done in non-member countries. Hmmm … in those days Finland wasn’t a member, Czechoslovakia wasn’t a member, and the Czechs were very – very good. Prague University had a lot of very interesting environmental work going on.

We seemed to have talked about a lot of your actual jobs but I’m aware you have one or two other activities as well. I know you’ve written at least one book.

Yes, on space, yes.
Yes.

Yes. The first one I wrote was on the transport of radioactive materials which – which was a result of my work in the Atomic Energy Agency. I wrote the major articles but I – the other articles were from different experts which I put together into a book, ‘cause it always amuses my friends when they – when they look up and find *Transport of Radioactive Materials, Gibson*. What the devil does he know about it? [laughs] To which the answer is not very much I’m afraid, but I mainly concentrated on writing articles.

*Could you give me some examples?*

Oh, Fortieth Anniversary of Space, I was the European representative and had to give a forty minute talk in Washington, this kind of thing, GEO introducing the ten year implementation plan. Last year in Washington a paper to explain why GEO wasn’t functioning in the way it should, and generally targeted, either articles or presentations or sometimes invitation. This time I’m going to Geneva to give a paper on GEO and on the forests, and then in August to Tokyo to give another one. They’re generally, as I say, focused on particular problems or sometimes managerial problems, that things are not going the way they ought to. Hmmm … but I’ve no pretensions to be an author.

[41:00]

*Can we talk a little bit about the space book?*

The space book, yes.

*I was just wondering, what was the original idea behind writing it?*

It was Oxford University Press that came to me and they had a series of technical subject books. I don’t know offhand now what they were called but like computing or, hmmm, astronomy, and somebody decided that space needed one in this series and
so they asked me if I would do it. It was very good for me because it made me put into some order the ideas that I’d been flogging for the past years. And then the Germans bought the rights and brought it up to date and translated it into German and it came out in Germany, hmmm, where it had quite a lot of effect on German space policy. They were very keen at that time to get an outside opinion, they’re not so keen now.

*Did you have any sort of particular audience in mind or reader when you wrote this –?*

No, I was told – had a very good editor, that it had to be readable by anybody who had been to secondary education and wasn’t dyslexic. It should not talk down to the people and it shouldn’t make compromises on the science or the technology. It should state the problems but in terms that were understandable to the layman and acceptable to the expert, that was about it. It was midway between a text book for professionals and a layman guide.

*Did you find it easy or problematic to write at that level?*

No, no, I think that’s about my level anyway.

[43:45]

*There was a question, having read it quickly last week I’ll admit [laughs] –*

Yes.

*But I was interested in the first chapter. You sort of talk quite a bit about science fiction and I was wondering if you were a fan of the genre at all.*

No, not at all … but I think it’s interesting to look at some of those origins and – because I was doing the book I started to take a look at, well, all sorts of queer things that you find. In the 1920s one of the early silent films was about a space rocket
going to the moon and this kind of thing, so it’s – there’s obviously some deep psychological motivation for going into space. It never got to me but I mean it does move a lot of people. And I think also a lot of the – the early work that was done, the theoretical work that was done, is very instructive for us because many of them had only got a sheet of paper and a pencil and their own minds to work out the calculations, which we now use. And we may have refined them but they did it and they – I mean they did it really out of their own heads. Now that kind of genius is – is lovely to see. That’s really Arthur Clarke, this award that I got, I knew Arthur quite well. I don’t know whether you know but in 1945 he wrote an article for Wireless World which explained how you could use satellites in a geostationary orbit to transmit telephony, and he worked out how much power you would need to launch the rocket, to get it into orbit, what the orbit would be, and several coefficients like that that were absolutely on. And I mean they had nothing, this was from 1945, but as a guy he went off then into science fiction and made a bomb out of it but his real – his real origins were as an apprentice at Hawker Siddeley and he got caught up in – in propulsion and working out the amount of thrust that you needed and how you would overcome gravity and this kind of thing, but he had no university education. I mean a good technical education but he wasn’t a doctor of physics or anything like this.

You mentioned the Arthur C Clarke award there –

Yes.

How did you feel to win it?

How did I feel? Well, it was very flattering but I was a bit dubious about it. Somebody rang me from the foundation and said it’s the lifetime award, would you accept it? And I said, ‘Well, I’d like to be sure that I don’t have to die as soon as I’ve got it, ’cause lifetime award seems a little threatening.’ And the poor guy was a little bit fazed by this but pulled himself together and said, ‘Oh, no, no, absolutely not Sir, no, no, no, of course not,’ [laughs]. But they really – they were very, very kind and behind the scenes they’d arranged for, oh, a dozen or more people to be there at the
dinner, the award dinner, whom I’d worked with at different stages in my life so it became a very – a very pleasant occasion. I was rather dreading it really.

Well, you’ve won one or two other awards as well for your work.

Yes, I got one from the – the British Interplanetary Society, that was also a lifetime award now I come to think about it. And then I got the – the Sänger prize was an interesting one. Sänger was one of these pencil and paper guys who started on propulsion and many of the calculations that he did went into the first V1 and V2 and later in Von Braun and his work but he – I mean his technical equivalent was a pad of paper, a whole bunch of pencils and that was it. And you can go through his work and his maths, it’s really stunning to see. We don’t think about it now, you go to a computer and get it done for you but there he just worked it out, agonising the equation after equation. And I got another one for – oh, from the International Astronautical Federation where I was president for two years … but the Austrians gave me a medal, hmmm, for facilitating them into the agency and looking after them and getting them organised, that was nice, I enjoyed that. That was something worth having, it was.

Is there any you’re particularly happy at?

Sorry?

Are there any you’re particularly happy at?

The decorations?

Yeah, about being awarded.

Oh, the Austrian one is – is the only one that’s really – is really worth anything, I mean in my – in my view, but it – Austria, as you may know, is a very … stratified society. You’re known by, even if you’ve left it years ago, by the highest rank that you achieved, so you’re Herr General Director twenty years after you’ve left the job
or if you’ve been a professor then you’re always Herr Professor and if you’ve been both then you have Herr Professor General Director. And it’s very good for getting seats in restaurants and in the opera.

*So what actually is your complete title in Austrian?*

Oh, they recognise the little badge, it’s the *Ehrenzeichen* honorary award. But the – those who know it can see that it’s with *Silbernes mit Stern*, which is a bloody great star that you put here. The minister who presented it to me said that the thing that goes round your neck is against tonsillitis and this is against cirrhosis of the liver [laughs]. They were all very light hearted about it.

*Do you think any of these awards have made any difference in your career at all?*

No, I don’t think so, no. I don’t think they should, hmmm, I think they’re nice and they’re really collegial affairs and it’s sometimes very nice to – to know that colleagues you’ve been working with for a few years appreciated working with you, and the Sänger award was really because of the Spacelab programme and, as I said earlier on, having saved it at the last moment when it was probably going to go down the drain and I think the Germans were – were grateful for that, and certainly the scientific people in Germany were. And the Sänger award is the – one of the prestigious scientific awards in Germany.

[52:45]

*You mentioned that you knew Arthur C Clarke as well. How?*

Well, he was one of a group of three or four people who worked at Hawker Siddeley and were trying to get Hawker Siddeley to continue with Blue Streak and Son of Blue Streak. Arthur Clarke was there and two other people, one went out to Australia and the other stayed in England and started a consulting firm. And Arthur left Hawker Siddeley as soon as he found he could make his living from writing, but because we’d known each other he – he used to come and chat about the future and where we might
go. And it was always very stimulating, always thinking outside the box and, er, ten ideas in the day and perhaps one of them was worth following up.

One other thing that briefly popped into my mind through talking about the British part of this again –

Yes.

During your time at the British National Space Centre did you have anything to do with HOTOL?

Yes, I did. It was boiling when I arrived and we had the job of going round with Geoffrey Pattie to most major European countries trying to sell the idea to them. And, er … this was, in my view, typically an example of where the project hadn’t been sufficiently worked out and it was presented at too early a stage, I think if it had been a couple of years later it might have done better. And one of the … one of the things they did was to stimulate the French into doing something similar and they produced a programme called Hermes which was supposed to be God’s answer to launchers, but it was completely flawed as a project. The same mistake, going too early with a half baked proposal, trying to sell it to intelligent people who didn’t know the field but were intelligent enough to see that it wasn’t ready. It’s a pity with HOTOL because Alan Bond was – was very good, he tried to keep some of the technology secret, which was another mistake. If you’re getting an international project in my view it’s very hard to say, well, there are two bits we’re not going to tell you about because that’s the secret. I think you have to get everybody lined up and because you bring more to the party than the others and you get more of a share of the cake, but to keep it secret arises – arises all kinds of suspicions. Anyway, people say smoke and mirrors and never work and this kind of thing.

Were there any other British national space projects you worked with in this period of note?

[56:35]
Oh, I did a little bit of work with an ill fated defence programme that – that never existed, if you see what I mean, but …

_was that Zircon or whatever they called it_?

One of those, yes, yeah. There were several of them at the time but mainly pushed by the – the US. Hmm … to the best of my ability I poured cold water on them.

_I assume you had to sign the Official Secrets Act at some point in your career?

Oh, God, yes, several times, yes, and then more than that for particular projects. But as I was saying the Department of Defense really played the game with us. It was admitted into, as far as I know, all of the black programmes.

_On the subject of secrecy are there any other things you could have talked about that you haven’t? Just so future historians will know, I think is the way [laughs]–_

No, not really. I mean the – the name of the game in my view is to maximise the dual use of projects. You get to a point where you can’t do it 100 per cent but the mindset in the ’70s at least was that they had to be completely separate, so you get tremendous duplication and the technologies grow and you find the stupid position of a company having two contracts to do the same work, one for the civil, the same bunch of guys and they put a secret stamp on it and shove it over in – and they get paid twice for it. Hmm … and it means I think, which is even worse, that the amount of money that’s left over for research and development is reduced, so if you did it once then you could have some money over to see where it should be developing.

_Hmm. While we’re on the subject of secrecy as well, one thing I was kicking myself for not asking about yesterday was you mentioned that you had cipher training at Bletchley –_

Yes.
Did you have any idea what was going on elsewhere in the establishment?

Only that they were code breaking but I mean code breaking covers a multitude of sins. I didn’t to my knowledge see anybody or certainly didn’t talk to anybody about the Enigma work that they were doing. This was, you know, many steps above what I was done, mine was very run of the mill ciphering, deciphering and cipher security, this kind of thing.

While we’re on the subject of Bletchley as well we can segue over into another overarching topic [laughs]. Computers, this is obviously one of those things that have developed a great deal in the time you’ve been involved in the science and technology field. Have you got any observations on the impact that they’ve made?

Oh, enormously because the – well, it did two things that you can see straight away, one is it’s allowed satellites in orbit to have much more power because weight is always a limitation so as you can reduce the size of computers and the weight of computers, so you can get more computing power up there instead of down here. When we first started most of the data was raw data sent down and then in computers the size of this room it was analysed, whereas twenty years later it was analysed in a small matchbox [laughs] inside the satellite, which increased the power enormously. And then obviously equally it increased the range of things that you could do, it helped with telescopes, with cameras, with everything. Being able to do the processing on board was one of the big revolutions in space technology. IBM in their factory just outside Paris illustrated it very well, at one stage they – when you came in through the door and you went to see management they had one room in which they had a replica of an early IBM computer, one that had been at Princeton or somewhere like that, and it was I think about as big as the room there. The next room was the next model and so on, and just before the managing director’s office there was the present model which was about as big as a matchbox and under it it says, this model has X times the computing capacity of the room that you first came into. And when you put this on a timescale it’s amazing. I forget dates but it must have been
something like between 1960 and 1980, about that – that period. And I remember being given a – [people talking outside] shall we shut the –?

Let me just pop it back on, okay.

Shortly after I left ESA I was invited by NASA to join a group of so-called experts who were from all parts of the world working on a scientific project. I don’t really know why we got involved in it, I forget what it was even, but we were all given a little box and this was the time we’d seen probably the system. You could go away and type and send it and then the other people in the team all got the same message. Hmmm, I think it only worked inside the US.

A sort of personal secure email system.

And you had to be – you had to be plugged into – it had a battery but you had – you could use it straight from the mains. But this was a revolution because previously when you got a group of twenty scientists one of the main difficulties was corresponding with them. Fax machines were – were okay but you had to send twenty faxes out to people and … whereas this little box for the time I was there in the States on this little project, it was wonderful. Quite a big keyboard, it was about as big as a cigar box and you’d press a button and it’d say, your message has now been transmitted to the following people, and it was very good. And then it kind of ducked out of sight and I never saw any more of that until we started using … internet and the web and then it all came back to me that I’d seen this somewhere before in a rudimentary form.

Does this mean you had to actually plug into the main, not the main, the telephone then?

Yes, yes.

That briefly snags me over to another –
Okay.

*Overarching topic which if you don’t mind I’m just going to ask a quick question on.*

Oh, yes.

*Communication technology I guess as well is something that’s evolved in this period.*

Oh, yes.

*Has that made any impact on the way you do your work?*

Not on the way I do the work particularly, hmmm, but on the product very much so. It’s altered the – the chain between the satellite and the person who gets the message because the technology both with the satellite and with fibre optics much more to go through, so the race between satellite and fibre became quite important in companies deciding whether they should go space or if they should go fibre optics. It altered the deal so to say for funding of these large companies that were investing in satellites. It settled down eventually but at the time the innovation that came with, for example fibre optics, looked as though it was going to rock the boat for satellites. The same applies really for computing as does for telecommunications, you could get much more into the satellite and for early satellites with one or two antennas and, er, even when I was on it you might have sixty or eighty channels on a single satellite, shared frequency and this kind of thing, modulation. We had to run with the technology in order even to stand still, it was so quickly developing, and the lifetime of a telecommunications satellite in build was about four years. In those four years the technology would be completely changed and you couldn’t always take advantage of it, the satellite was being constructed for a particular technology. Somebody came along with wonderful new gidget but we couldn’t fit it in because the rest of the satellite wasn’t made for it, so you hastily collared the idea and started drawing the next satellite [both laugh]. The Brits were very good at that and on telecommunication technology, I think they were ahead of everybody in Europe and
had a good reputation abroad, but very off and on government support. I mean they never knew where the next hot meal was coming from.

[End of Track 9]
Track 10

We’ve reached that point in the interview where we’re just sort of on to closing questions really. What do you think the future holds for space research and space exploration?

…I think space – they need to be separated out, they’re – in my view they’re different futures. Space exploration is going to have a hard time because of lack of money. I think for many years to come the elaborate plans of twice round Mars and back in time for breakfast is – is out. I can’t say I’m terribly worried about that. Mars and other places have been there a long time and they’re not likely to go away very quickly, but it is a part that has a kind of visceral grasp on people and they – even the most non-space minded person can summon up a bit of enthusiasm at the idea of peering at somebody trying to walk from one side of Mars to the other. Hmmm … I accept it, I don’t participate in it, I never have. The amount of money that you would need to spend, it would in my view be criminal to start committing it at this stage, there are so many other things that need money. The argument that’s often brought is that this is the last moment we’re going to have to leave this planet and we’re going to have to go to some other planet, I think it’s a load of nonsense. The idea of transporting six million of your closest friends to another planet, I’m not saying it will never happen but I think it’s not a sensible argument to be deployed at the moment. Hmmm … it comes in the same – the same range as looking for intelligent life and I forget who it was who said the other day, the surest proof that there is intelligent life out there is the fact that they haven’t tried to contact us. I think these – I put these in the funnies department and it’s a pity really because they – they overflow into political consideration. A minister, newly minted minister, who can shake hands with an astronaut is – that’s a very good photo opportunity. The fact that it’s going to cost God knows how many millions of dollars doesn’t seem to come into the account, so I’m pretty negative on that side. On the other, I think it’s no longer a matter of – well, no, I’m – there’s an intermediate area, that’s space science, and I think there it’s reasonable to keep going and refining what we know about the planets, about our outer environment, about origins and this kind of thing, but not with a view to going there, just with a view to increasing our theoretical knowledge of the construction of
the – of the Earth and the universe and other universes. So I’m in favour of – of keeping that going and I’m very much in favour of wide international cooperation on that, it shouldn’t be hugged closely to your chest. But then all the rest in my view is – the emphasis has now changed, it’s now either commercial or application and therefore it should be driven by need or by the benefit that you can show you will get from putting money into it. There is a spin-off side to it of how much money other people can make out of it, and I don’t rule that out either because when people make money out of something they generally spread a bit of money around in doing so, it doesn’t all go into their pockets. But I think that the various navigation areas, telecommunications, TV, climate, climate change, the amount that you do in these areas has got to be determined by those people who are interested in and responsible for those sectors, not by space. Space has got to be responsive to those needs, it’s got to stop promising that it can do more than it can and fit into the general thrust of that particular subject. It becomes the hand maiden of climate, not running climate but being there, being responsive to what they are needing, sometimes pointing out how space can help in things they want but basically and fundamentally serving needs, and I think that’s the future. Mercifully most space agencies have got the message but I mean you – you can ask, shouldn’t a space agency now have in very high places people who are nothing to do with space to keep them honest [laughs]. And some are starting to do this, you know. And a final page, so to say, is defence and security, and I think this going to continue very, very much in the future, hopefully internationally, hopefully with dual use systems, but it’s inevitable, movement of population, illegal immigration and this kind of thing, needs surveillance. Surveillance needs satellites, satellites need launchers, but it should be because they need to know that people are emigrating across the Pacific and not because you want to build a satellite which could do that, it’s got to come – come the other way [laughs] – the other way round. Do you understand what I mean?

*It’s almost space being there as a service for other activities.*

Absolutely, absolutely. And then generating from that the R&D that you need in order to make the most of technological developments so that this end user is getting better value for his – for his money but it has to be paced by what these needs are.
Are there any particular applications you’re particularly excited about?

Oh, I think defence is the one big area that’s going to dominate us over the next few years in terms of what you can do from space without building tanks and things. And I think defence gives way to security, you find all over the world that ministries of defence are not now buying guns and tanks and uniforms as much as they used to be, they’re buying gadgets and many of these gadgets go into space and I think that is the way it’s going to go. If you can do it internationally again, on however limited an international basis, this is for me clearly the way to go but it’s very difficult because nations are very uptight about their – their sovereign rights which they sometimes pay very dearly for.

Do you have any concerns about the militarisation of space?

No, I think there’s now a very good legal background from the International Atomic Energy Agency on atoms in space, I think that’s pretty well controlled. And the United Nations got a committee on the peaceful uses of outer space, which is pretty much a talking shop but it does at least have a basic set of about ten international agreements on what you can do and what you can’t do in space, which have been the result of long and hard negotiations which provide a very good basis for – for conduct.

Would you consider yourself an internationalist, to use a word that probably hasn’t been in favour since the 1930s? [laughs]

I suppose yes. I mean in the sense that I’m not terribly – I think things need to be done and they need to be done well, they need to be done cheaply and they need to be done intelligently. Sometimes these can be done best nationally. I don’t believe all letterboxes should be the same size, hmmm, but at the same time there’s a hell of a lot that’s done a hundred times over which could be rationalised, I suppose that’s
internationalism. I suppose it’s all the internationalism I’ve got, I’ve got no hang-ups about dealing with – with anybody. You soon find out whether they’re negotiating in good faith or not.

_Hmm_. What do you consider to be high points of your – let’s take your whole career and not just the part that was space –

Yes.

But the whole gamut.

I think the high point will be when I retire. [laughs] There’s a joke in the space community on Gibson’s retirement, I’m said to have retired twelve times and each time we’ve – we’ve had big dinners and celebrations, but I think probably during this year I finally will be retiring and that will certainly be the high point, I’m looking forward to that. And the last time we did it, we did it in Clarence House and I announced I was going to withdraw from this forest project and hang up my solar panels and things – but they all roared with laughter and said, ‘Well, you can’t go now because we’ve just started to sell tickets for your next retirement dinner,’ and – no, seriously I don’t really have any high point. I’ve done – some things I’m happier that I’ve done, I’ve done some things I’m not happy that I’ve done and, er, I like to think the balance is positive, but not entirely so. And my father always used to say, well, life was like a public lavatory, you should always leave it cleaner than when you came into it, and I think there’s a bit of that about it in me. I like to look at areas where – say, well, that’s now working, it used not to work, that gives me a good feeling, but only because I’ve worked for so many people. I mean I don’t want to give you the impression alone I did it and, er, Batman was never my model.

_I don’t think you’ve given that impression at all, it’s –_

Good.
It’s interesting, you mentioned something a moment ago, one of the things I’ve noticed in this interview is you always seem to leave things once they’re ticking over nicely, you’re sort of there to set them up.

Yes, yes, doesn’t interest me so much running things, yes. The same with this forest business, if it goes through at the ministerial in Beijing, and because it’s November you shut down in September because the papers have to be prepared and translated and distributed, so by September it will – the die will be cast and papers will be written, and then it will either be yes or no whether it goes through or not. And it really doesn’t me any longer then, they can take it and run it.

So was that the GEO work?

The GEO forest thing, yes.

I did have a question about, you know, were you ever going to retire actually so you pre-empted that one.

Well, you know, I – I have quite a lot of down time, particularly – it’s a nasty way of saying, but since my wife passed away I’ve more time and I’ve got lots of – lots of interests and … I want to get back to Ancient Greek and I want to improve my Arabic writing, things like this, hmmm, which are things you can’t dabble with, you either, you know – or I can’t anyway, go bald headed into it or not. So – so I’m not looking for complete inactivity.

When did you get interested in Ancient Greek? That’s a language we haven’t talked about in a –

Well, that’s really why I’m interested in it. I’ve been so frustrated over the years of educated and cultivated people and when you scratch a bit you find that they took Greek in school and know the – in English words know those words that come from the Greek and what the origin of them is and, er, this fascinates me and I would like to join the club. I’ve started in a – in a modest way, so I’m not going out completely to
grass. And people, because I know so many people and I’ve always – it’s an aspect really we haven’t touched but it – I’ve always been very keen on helping students and I helped them to start the International Space University in Strasbourg, which was an initiative by two young Americans and when I was in England one of the constructive things I did was to set up the – the committee in England which raises funds and interviews candidates to go to the Space University which has one course every year for Masters and one post-degree. And a lot of the people that I sponsored when I was in the UK are now in quite reasonable positions twenty years later. I met some of them at the Arthur Clarke dinner, and this is a very rewarding business, a guy who has just finished his first degree and is passionately interested in space and how should he go about it, he hasn’t got any money at all, and we were very successful in getting funding. But of course you can’t just send anybody, you have to make sure they’re going to benefit from it, so we set up a panel of – and it still exists, it’s been renewed, and of course most people have done it from when we set it up. But one young guy came to me and clapped me on the shoulder, he’s one of the chief test pilots for the RAF and he was one of the first guys that we sent to the Space University, dearly wanted to be an astronaut but has got some queer eye problem which is okay for a test pilot but no good for astronauts, so he’s – he did the second best thing. But this kind of renewal and seeing people, helping younger people, I think is an essential part of anybody’s satisfaction in the job. Anything to get away from the idea of, you know, I did it and only I can do it, I think is good. It sounds a bit prissy doesn’t it?

Not at all, no. I was going to ask actually what advice you would give to somebody who did want a career in space.

It really depends what part of space. One of the things you have to do nowadays with people is to disenchant them about space. The jobs in space are mainly nothing to do with space, hmmm, most of the jobs in remote sensing are really more on computing than they are on satellites. And a boy who’s dreamed of being an astronaut and can’t be an astronaut so wants to go into space, find himself very frustrated to find himself in a laboratory eight hours a day looking at computer printouts. But many of them – many people are able to keep the enthusiasm about space but see that it’s changed its nature. I remember Hermann Bondi, when he became scientific advisor to the
Ministry of Defence, he – he gave a talk at a conference where Charles, Prince Charles, was chairman and he wandered onto the stage in his usual way with no notes and looking as though he’d come to repair the piano. And he looked round at the audience and said, ‘Well, I feel quite qualified to talk to you today because, well, I am the chief scientific advisor to the Department of Defence in space and before that I was three years in space. And by that I don’t mean I was in space but of course come to think of it if you say a man’s in oil you don’t necessarily think of him as a sardine.’ There’s a lot of truth in that, when you’re in space you are nowadays in all sorts of industries and disciplines that don’t really at first blush seem to have anything to do with space. I think the only advice that you can ever give to young people is to find out what you’re good at and find out where it fits in with other things and try not to be lumbered with too many things you’re not good at, ‘cause you may do them, you may succeed but you’ll never really achieve your full potential. That seems to come out when you – when you’re doing things you’re good at, you have a kind of satisfaction circuit that sets up, which accelerates the output.

[22:00]

*Do you have any regrets?*

No, not really, no. I regret I didn’t spend more time with my wife and family … but as my wife once said, like all the good programmes in ESA our marriage was a package deal, you get the excitement and the travel, ‘cause she travelled all over with me, and you get the periods of absence and it’s all a package deal. I think on the whole she was satisfied with the package.

*Bringing up travel there, something I’ve noticed throughout this interview there has been a lot of travel –*

Oh, yes.

*Do you think it’s had any particular influence on you?*
… Yes, well, probably, I mean I’m – I can change my habits quite quickly if – if I was told even now at my advanced age that I had to go to a foreign city and live there for a month and write a paper on this and live in a hotel, it wouldn’t terribly worry me. I don’t mean Spartan-wise but some people get so dug into their habits that it affects the kind of work that they can do, they can only do it provided these habits are still observed and when you break the mould then they’re lost, but I’ve never been like that, I’ve always been able to uproot and take on another job. Quoting Bondi again, doing – ‘Continue your education in public,’ he used to – he used to say.

Just a quick clarification question for earlier actually, was your time in the army, your first time overseas or –?

Yes, yes. Yeah, my family had got no money for going overseas, we used to scrape the barrel to go to Yorkshire.

Were your parents – well, I suppose … your father died in 1940 …?

1951 I think, yeah. My mother died in 1970 something. We get an idea of the genes really, she – there’s a photograph of her over there when she’d been a widow for twenty years and was the chairman of the women’s voluntary service for Kent or something like – you know, she never gave up and, er, although she was a northerner she fitted in very well down south, much better than I did. And maybe that comes through in the genes.

Are there any colleagues who particularly influence you over the years?

Influence me? Oh, Hermann Bondi, one of the big influences. Hmmm … a very impressive man personally and professionally, I learnt – I learnt a lot from him. Jack Leeming who was my number two, I learnt a lot from him, much cleverer than me in dealing with civil servants and the establishment. I learnt from him in his Manchester way, there’s more ways of killing a pig than wringing its bloody neck, which – which is good advice. A German who came to ESTEC as its first real director, Werner Klein because of his enormous technical knowledge and his enormous culture on the side.
This was German education before the war, Latin, Greek, ancient history and then turns out to have the equivalent of a double first in physics and was the father of radar in Germany and – and at the same time his evening reading was Thucydides in the original text [laughs], this kind of bifocal, I’ve always admired that very much. Oh, a lot of people, I was quite shameless in learning from people.

[27:15]

**Hmm. You’ve had a long career in science but not as a scientist.**

Yes.

*Do you think that’s been a plus?*

Oh, yes, the scientists used to think I was an engineer and the engineers used to think I was a scientist, which I took as a compliment from both of them. No, I knew enough about the science and enough about the engineering side to be able to understand them and when I didn’t understand I said I didn’t understand and I asked if there was an explanation that a mere mortal could understand. And many people – this is Bondi’s continuing education in public, I think if you – if you don’t do that you get to the point where you’ve pretended so long that the scaffolding just falls away around you, whereas if you let it be known from the very beginning that you really don’t know the difference between alpha and beta radiation somebody can tell you in two to three hours the difference. And if you can remember it then you can build on that for the next question. Not very good answers are they but –

*I’d say the exact opposite actually.*

Yes?

**Hmm. They’re very – they sort of span over the whole interview if that makes sense. I can see how they relate to lots of different things, so –**
Yes. I’ve not changed much, my – both my mother and my wife used to say I hadn’t changed very much over thirty, forty, fifty years, and I never liked to enquire whether that was a compliment or not, I just left it as a statement.

Talking of change, what are the biggest changes you’ve noticed in your career?

Oh, email and internet [laughs]. Because, you know, when I first started secretaries had to type a draft and you’d change the draft and they had to re-type the draft and then they used carbon papers to make copies for your directors, whereas now I can sit here and I’m a member of a group of fifteen people on one project that I’m on and we communicate every day. We’ve got a document going that’s about ninety pages long and you can alter it as you like and say why you’re altering it and people come back, say why they didn’t like your altering and – it’s changed the whole way of doing business. And I notice that because I’ve done the same sort of work [noise interruption].

Email – I’ll pop us back on now.

I was saying I noticed it because I’d done exactly the same kind of work but under the – the Stone Age conditions. In those days we were still trying to produce a ninety page document with fifteen experts around the world but it was a hell of a complicated business [laughs] whereas now it’s – it’s just so easy.

How did you actually do that level of work on a scale that’s worldwide? What are the mechanisms?

Oh, telephone, fax. I learnt in the army to type because of the cipher machines, so one of the few skills that I brought back from the war was the ability to type. And in those days I could type with my eyes closed, so this meant I’ve always had typewriters and I could send a fax out for most of the period that I was working, so we used fax for a long – and then had airmail when you – when you were getting near to the end so they had a hard copy.
Which brings me on to another communication question as well actually; how do you actually co-ordinate an organisation that’s as spread out as ESA and, you know, sites everywhere from the Falkland Islands to almost the North Pole?

I think the answer is you don’t, you would like to but methods alter. I remember being with the administrator of NASA who had this problem because the various NASA centre leaders were all very big men. Wernher von Braun was one of the directors and he was, I mean a firework in a lemonade bottle, yeah. And all the others were much the same ilk. We went into a hotel to have dinner one night and went down the steps were there were a number of private dining rooms and in one of the dining rooms, where the door was open because they were smoking heavily, were two of his centre directors talking to a group of senators from the Capitol Hill. And Bob turned to me and said, ‘What does the administrator of NASA do when he finds the administrator of NASA and his clone talking to the senators that he was supposed to meet tomorrow morning?’ And this was typical and it is still typical of the difficulties that there are. You need on the one hand centre directors who are strong enough to run the centre, strong enough to interact with their colleagues, but at the same time don’t get messing about with the politics, and this is the big problem. The nuts and bolts of coordination I think are fairly easy, particularly nowadays. I mean you can have conference calls every day if you need them and it means that people down the line can have conference calls so the need for coordination is less, but it really is a matter of spirit of trying to separate external politics from internal organisation. This is not an easy lesson to learn and member states are sometimes very naughty in the same way as the US senators were naughty in order to get what they think is a full picture. Instead of going to the boss they go to one or two levels below and talk to them, which is very naughty but it happens all the time.

[34:35]

One other quick follow-up question I had, something you brought up a few moments ago, was cipher machines.

Yes.
I never asked you what sort of equipment you used to actually code and decode things.

Well, the machines were called TypeX and they were rather like an old fashioned Telex machine where you used to sit down at the machine and send a message across the Atlantic. Telex was in my day the only means of getting large quantities of data moved and this was a clanking machine, it – I suppose because of the war it had none of the refinements of a modern machine. When you pressed A, clank, and the – the hammer came over and the cipher balls inside churned round and it was a very noisy affair, but they were about this big and, er, inside they’re about, what, two foot by two foot and about two foot high. And the brains of them were a series of little cassettes which had got multi-circuits so that you put a current in at point on this side and it came out at a different point on the other, and by having five or six of these in series by changing them you could multiply the possibilities to a million, which is what Turing was doing in reverse if you like. But we were only aware of the nuts and bolts, the thing didn’t work because you had to put Vaseline on the – on the things to get a good contact and this sort of thing, er, if you could find a vacuum cleaner somewhere it did a world of good to give it a vacuum cleaning every so often, particularly when you were in sandy areas. And then on the other side were books of course which were used at one end for not very important stuff, they were big books like encyclopaedias, and at the other end they were used for the most secret of stuff, the so-called on time pad. Everything was only used once and it was not unbreakable but it was very hard to break because there was no series, they had to break it on the basis of one message. And that was pretty difficult, particularly if you – if you knew how to write a message in the most secure way. You keep putting blank spaces in or you keep putting a series of Zs in and that buggers everybody up because they can’t think of a word with seven Zs in.

Did you have confidence in the codes in the fact they were secure?

We thought we did, yes. It turned out to be quite secure, the thing that let us down, and we always knew it was the weak point, is in the addresses. When signals go out
they go out as a cipher text and then they have obviously from and to, and this is a real giveaway. I mean we used codes for those and they were changed regularly but this is where the Japanese broke not the code but they had a complete order of battle for the whole of the fourteenth army in Burma, right down to the last bath unit, simply through taking all the messages that they’d taken down and all the codes and they inferred which was army headquarters and which was co’y headquarters and so on, and as they got better at it – in fact the only prisoners, the only Japanese prisoner of war I ever met before the end of the war was the man who ran the running book on the order of battle. And as they became more sure they put them into the permanent – they thought it was this, they thought it was that, and then they got confirmatory evidence and he was the guy who sat with the – with the book who wrote, ‘yeah, this is definitely eighty-one division and –’ but they did that all through addresses. It got better towards the end of the war but of course in Burma it wasn’t always easy to get stuff transported and one division was completely surrounded by the Japs and overrun by the Japanese. The headquarters was overrun and we lost all the cipher equipment for about two weeks and we really didn’t know what the hell had happened to it, but we found it, it was safe, they’d managed to get it away but they were scared of communicating for fear of being located by the Japs, but eventually we got it back. But then it put into a whole question, was the whole of the cipher system compromised and – because they had – division equipment was fairly, fairly sophisticated.

*The Japanese prisoner of war you met, was that the chap you said, the cipher clerk you interrogated –*

Yes.

*At Singapore?*

No, I met one before that. I met another one in Singapore. No, the one I met was in a field in Burma who, where everybody else committed Hari Kari and swallowed a grenade or something like that, he decided that wasn’t for him and he surrendered. He was a captain in the intelligence corps and spoke very good English and, er, when he’d
made the break then he just told us the whole story. I mean it was obvious that they were going to lose the war, they were already retreating through Burma into Malaysia, but before that I never saw a live Japanese.

[41:00]

[Coughs] I think we’re coming to the last couple of questions I have really which –

Go ahead.

Which are actually about the interview itself.

Yes.

How did you feel when you got the email through the post, or through the computer rather?

Well, I think I told you, I’m not very much into this kind of thing. Hmmm, I’ve been castigated on many occasions for not wanting to take part in interviews and polls and this kind of thing, I’ve kept severely away from them. But I did this one for ESA and, er, your approach was attractive and logical and so I thought I would end my churlish ways and be cooperative, but at the same time I – I don’t know whether I did but I intended to try and warn you off that there wasn’t as much to be mined as you perhaps thought there was.

You’ve mentioned that several times actually.

Yes, well, it was my way of discouraging you from proceeding. [both laugh]

Who have you actually told about the interview, if anyone?

I’ve told my, I suppose you call it girlfriend, my companion, an Austrian girl, she knows about it. My son and daughter know about it and one person in the residence
knows about it. He was a general in the – the general of the French gendarmerie and his wife is my bridge partner, so I told them to explain why it was I was going into hermitage for two and a half days, but apart from that I haven’t – I haven’t told anybody.

_Hmm. Could I just ask one follow-up question about your companion?_

Yes.

_Sorry, who is she?_

She’s an Austrian lady who used to work in … when I first met her, in the Austrian Space Agency but then we just had professional relations. She was their international relations person and then she moved into UNEP, which is a United Nations development organisation which is in Vienna. You know, the members of the United Nations from Europe revolted at everything being in Washington about twenty years ago and insisted that some of these organisations be in Europe. And one of the big moves was for UNEP to come and for the COPERS, the space thing, also came and the Austrian government built lavish buildings in Vienna for them and she has always been part of that. So we had friendly relations for a long time when I went to Vienna or when I was on a project somewhere, but over the last few years she’s been extremely helpful in getting me through this rather difficult period. Which sounds a bit cold blooded but I think you – commonsense tells you that you’re giving of your best when you’ve got a certain amount of equilibrium in your life, and so our relationship developed over the past years. And she comes here and I go there and –

_Would you mind me asking her name?_

No, not at all, her name is Klenk, K-l-e-n-k, Christina Klenk.

_I had wondered when you said you’d been going to Austria a lot and –_

[45:40]
Yes, well, I mean I’ve always had relations with Austria because one part of Inga, my first wife’s – my second wife’s family were Austrian and so there were odd second cousins and people dotted about and I’ve always had some kind of a link with Austria, but now a much closer link.

*How have you found the interview process?*

Yes, surprisingly rewarding … I think of things that I hadn’t thought of for years, and I must confess I hadn’t done any preparation for it.

*That’s normally the best way actually.*

I thought that might skew things really whereas you want to know, well, either ask or let me talk, but if I start second guessing you, so I did nothing. And as I say, talking about things, odd things come back into your mind, names and, er, I’ve enjoyed it. It is tiring isn’t it if you – if you want to find a happy balance between free stream of thought and some kind of an organised account, but I enjoyed it, it was good, and I compliment you, I think you did it very well.

*Thank you. Do you have any more closing remarks on –?*

No, I’m glad the weather was good for you.

*I wish I’d packed some summer clothing.*

Yes. [both laugh]

*Roy, thank you very much. This has been an absolute pleasure.*

Good. And for me too.

[End of Track 10]