

# Australians at War Film Archive

## William Aubrey (Bill) - Transcript of interview

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<http://australiansatwarfilmarchive.unsw.edu.au/archive/1860>

### Tape 1

00:45 **Bill, thanks so much for your time today. Could you begin with an overview of your life starting from where you were born and ending at where you are now?**

I was born in New South Wales in Waverley, a suburb of Sydney.

01:00 As I can remember I first started school at Maroubra Public School. I grew up there until I was about five or six and then my father's employment took him to Victoria where I went to school in Victoria for a couple of years. I had another year in Bendigo. I lived there for six months,

01:30 and then came back to live in New South Wales at Como West, which is in the Sutherland Shire, when I was about 11 or 12. I went to Sutherland Primary School. I was educated at Sutherland Intermediate High School for the Intermediate Certificate and then finally I went to Sydney Tech [Technical] High where I was doing my

02:00 Leaving Certificate and I decided I would rather join the air force. So I joined the air force while I was at school. In the air force I went to initial training at Cootamundra in the middle of winter. From there I was posted to Adelaide. I went into the air force as a trainee technician and

02:30 I went to Adelaide to do my initial basic training and then was selected to do radio, where I studied at the School of Mines in Adelaide to become a wireless assistant. Then later I was selected to go on radar. From Adelaide I went to Maryborough in Queensland and complete the radar course and came back to Ballarat to do more radar

03:00 training. The war was almost over and I got posted to Darwin to 112 Air Sea Rescue. I was with the Catalinas at Air Sea Rescue Squadron in Darwin and in an emergency one day I was asked did I know anything about LRAN [Long Range Aid to Navigation]. I said, "Yes, I did LRAN on any course". My

03:30 radio officer said, "Good, you're the one we want. You're off to Bathurst Island tomorrow. Be down at the wharf at five o'clock with all your gear." That's what happened. I was taken on a lugger across to Bathurst Island. It was an all day trip to a place called Cape Falkroy. There I remained for seven months with two other RAAF [Royal Australian Air Force] personnel. We were there looking after a

04:00 navigational aid for aircraft flying over the sea. I stayed there for seven months and finally when they couldn't replace us we were withdrawn from the island and came back. I was with the navy for six weeks during the evacuation and we finally ended up in Sydney after spending six weeks with the

04:30 navy withdrawing the whole of the radar chain. My next squadron was at Schofields. I worked for 486 Maintenance Squadron, which was the maintenance squadron for 36, 37 and 38 Squadrons. I worked on Dakotas, radar on Dakotas. At the time they were the most busy squadrons in the air force. In fact it was most of the air force. They had about fifty

05:00 Dakotas that were flying all over the Pacific and mainly to Japan. They were doing three trips to Japan a week. I worked on the LRAN again specialising in radio altimeter. I stayed there until 1948 and I was posted to Schofields. I rose to the dizzy heights of acting

05:30 corporal. I was posted to Rathmines to work on Catalinas with 11 Squadron, which was the home away from home posting. I worked on Catalinas for another twelve months before being posted back to Ballarat to become an instructor, a corporal instructor by the way, instructing officers.

06:00 That lasted for about six months. And then I was finally posted back to Richmond, back on Dakotas again, back to 486 Maintenance Squadron which was the maintenance squadron for 86 Wing. I spent about nine months working on Dakotas again and was promoted to a sergeant. I forgot to say I was promoted to permanent

06:30 corporal while I was at Rathmines. I was promoted to sergeant in 1950 at Richmond. Somehow somebody heard or somebody found out that I once worked on the ground LRAN stations and the air

force wanted to restore them for reinstallation on the east coast of Australia. So as a sergeant I was put in charge of doing the full restoration of the LRAN

- 07:00 stations. That lasted two years. They never went ahead with the installation because there were better navigational aids. I went back to working on aircraft again. They were mainly 11 Squadron aircraft at Richmond. I was working on Neptunes. They had a fair amount of
- 07:30 radar equipment in them. I worked on the Neptunes for a couple of years. I got married in 1955 to my present wife. I had only been married two months and I got a message saying, "You are posted to England." I thought, "Oh, what's all this about?" I was posted on a specialist radar course in England. I didn't know what to
- 08:00 do. I had built this house that I'm living in now and hadn't even moved in. The house was empty and had been empty for two years. We decided that I would go and my wife followed me a couple of months later. I spent nine months in England doing a specialist radar course on very secret equipment. I worked on the Vulcan
- 08:30 bombers, which were flying out over Europe at that time. Then when I'd finished the course we had to come back via the Suez Canal, by ship not by air. I went over with the RAF [Royal Air Force] when I flew over. That was in 1956. Because I had done this specialist course I
- 09:00 had to become an instructor at Ballarat, which is the Radar & Radio School. I did instruction duties for 12 months. I didn't like it. I didn't want to be an instructor. I finally put in for my discharge and I obtained my discharge. I finished on Friday with the air force and I started on the Monday with ABC [Australian Broadcasting Corporation]
- 09:30 Television where I spent 30 years. Because of my microwave experience, I was in charge of their microwave link sections for about two years. And then I became a technical producer. And for 23 years I was a technical producer doing any program which was outside the studio. That was all sporting events and
- 10:00 major operas or the opening of parliament. There I stayed until I retired in 1987.

**Excellent. Do you have any children?**

Two, two daughters.

**And when where they born?**

Ask me the year they were born – ask me how old they are and I might be able to tell you. One is about 36 and the

- 10:30 other one is about 48.

**You might get in trouble if they see this?**

No, I can't remember the year but I know there is eight years between them anyway.

**That was a terrific overview, thank you. Let's go back to the very beginning. What are your first childhood memories of growing up?**

I can't go back very

- 11:00 far. I can remember the first day of school. I'll always remember that. That stuck in my head. I can remember living at Maroubra. There used to be a car race track there at Maroubra and it used to be just across the road from where lived. I can always remember watching these racing cars going around. We could always burrow under the fence. It was always very sandy soil and you could always
- 11:30 burrow under the fence and climb up on the bank and watch them. I always remember that from my childhood in Maroubra. I don't remember much. I can remember going down to the surf but I was only about eight or nine in those days. I can remember going to Victoria with my father and mother. His employment took him down there and we were living in Melbourne.

**You mentioned the first day at school. What memories do you have**

- 12:00 **specifically of that day?**

The thing that stuck in my head I think was that everybody had to sit down and it was a sort of a privilege to buy your lunch. If you bought your lunch you were sort of privileged. And you all had to sit down and cross your legs and when the boxes of all the food came you had to put up your hand and

- 12:30 wait your turn for yours to be handed to you. I don't remember much of my early, first years at school. That's all gone and disappeared.

**Did you enjoy infants and primary school?**

From what I can remember. I can't remember any bad times. I can go back to about 5th class in

- 13:00 Sutherland. I went to Sutherland Primary School and I did 5th and 6th class there before going to high school. I used to live at Como then. That was a suburb in the Sutherland Shire. And I used to catch the train to school in those days. I used to walk a couple of miles to the station and then catch the train to
- 13:30 Sutherland and go to school. I'd do the same coming back. Como was a very bushy suburb in those days and mainly living on tank water. There was no sewer. And bushfires were quite a common thing. There were gravel roads. I can always remember the
- 14:00 milk man coming around with his milk cart twice a day. Not once a day, twice a day. And there was the ice man bringing the ice. I can remember the rabbit-oh coming around sometimes and the clothes prop man selling clothes props because nobody had rotary lines in those days. They were always a straight line and clothes props.
- 14:30 I suppose the thing I remember mostly around those years is the bushfires that we used to have. We used to fight the bushfires mostly on tank water. There were no water mains at all. Going to high school, I went to Sutherland High School which was the same thing again. By the way, I was living there with my grandmother than. My
- 15:00 parents separated and I was living mostly with my grandmother right through that period from primary school to high school where I did my Intermediate Certificate. I played a lot of football at high school. Rugby league was my favourite game. And at one stage before I joined the air force I was playing three matches a
- 15:30 week. I was playing at school for the school team and I was playing for another club down at Bexley in the St George area and I was playing for the Cronulla Surf Club on Sunday afternoons. So when I used to come to school on Monday morning I was usually pretty sore.

**Your poor old body?**

Yes. Anyway Rugby league was my favourite game and I

- 16:00 followed the famous St George team in those days who were very famous and became even more famous when they won 11 competitions in a row. I passed my Intermediate Certificate and then went to Sydney Tech High.

**Before we get to that, did you have any siblings?**

Yes, I had a brother

- 16:30 who was two and a half years older than me. He more or less went to the same schools as I did. He left school of course before me. He was two and a half years older.

**Were you close to him growing up?**

Very close, yes. He was a very good athlete. He was a top athlete. In fact he was the high school quarter mile and half mile champion. He was also captain of the

- 17:00 school's cricket team and the top athlete from Sutherland High. When he competed in the combined high schools two years running he won the half mile and quarter mile race. He had no coaching or training. The only coaching he had was his own. But he was a top athlete and he also played grade
- 17:30 football too for St George.

**What sort of thing did you do together, playing and things like that?**

Mainly sport, playing football and cricket together and attending the surf club. He was a very good surfer too. He was better than me. He was a member of the Cronulla Surf Club. He had his Bronze Medallion and he could

- 18:00 crack any wave or any size wave that he wanted to. He was a good all-round sportsman.

**You mentioned that you were also part of the surf club. What sort of things did they have - row boats? What was the sort of training that they did do?**

I was never a member of the club. I just hung around. My brother was. He was a full member. I just used to hang around the clubhouse. And they used to have

- 18:30 a big billiard table there and I used to play billiards. This is at the North Cronulla Surf Club. I used to hang around there and play billiards. Nobody ever stopped us from doing it. I was never a good surfer.

**Your mum and dad, what are your memories of them, your earlier memories of them?**

I haven't got many memories of my father because he left my mother

- 19:00 when we were young. He was a commercial traveller and I think the break up was caused by having to go to live in Victoria. And then we had to move from Melbourne and live in Bendigo. And then it looked like we were going to have to move again. And I think that's what caused the break up in the family. Another thing that brought us back to Sydney

19:30 too was the outbreak of polio in Victoria which got very bad around about 1938-1939. My mother decided she wanted to come back to Sydney and bring us back so there was no chance of us catching polio. We came back and we were quarantined for six weeks. We weren't allowed to go to school or to

20:00 mix with anyone. I can always remember that.

**What did quarantine constitute, just remaining at home?**

Remaining at home, yes. We weren't allowed to go to school and we were not supposed to mix with anyone either.

**How old were you then?**

I would have been about ten I suppose or something around that.

**What prevention or treatment was given in respect to**

20:30 **polio?**

Nothing. It was pretty bad in Victoria and mainly in Melbourne I think. At the time we were living in Bendigo but I think there had been outbreaks of polio in Bendigo also. We were never asked to do anything other than just remain at home and not mix with other children for six weeks.

**Your father's job,**

21:00 **why was he moving around so much?**

He was a commercial traveller and he travelled for a firm called Chartris Pty Ltd. They were the importers of the Remington typewriters. He used to travel around all the farms in the country areas selling typewriters and duplicating machines and printing things and

21:30 stationery. This was in the middle of the Depression I might say and he was very lucky to have a job. A lot of people didn't even have a job in those days. Not only did he have a job, he had his own car. And if you had a car in 1929, 1929-1930, you were classed as a fairly rich and affluent person.

**In regards to the**

22:00 **separation, did you know anyone or have any school friends whose parents had separated?**

At that time, no. It wasn't common I don't think. It wasn't very common then. I can remember my mother got no assistance from the government in any way. I didn't know of any other families whose parents were separated.

**How did your**

22:30 **parents broach the subject about their separation with you and your brother?**

It just happened. They didn't inform us, no. My mother insisted on coming back to live in Sydney, which we did, and my father stayed there. We virtually hardly ever saw him again

23:00 after that. He did put in an appearance a few times later on in life but obviously he didn't really have any interest in his family.

**And you were living with your mum and your grandma?**

In Como, yes. Houses were very scarce in those days particularly in the early days of the war. It was very hard to find a house. Then again you had to have the money to

23:30 rent one too, which we didn't.

**Given your mum had no assistance obviously from the government, was she working?**

Yes. She had to. She worked at Mark Foy's in Sydney as a shop assistant. She worked there for quite a while, right through the war years. I think my father finally joined the

24:00 air force during the war and of course once you joined the air force you have to make an allotment to your wife. It is compulsory. Of course they weren't divorced so he made an allotment to my mother and that gave her some relief as she was getting an allotment from the air force. It still was very minimal and she continued on to work.

24:30 **So times were tough then growing up for you and your brother and your mum?**

Yes. There were times when we didn't even have a meal. I can remember eating bread and dripping and I can remember eating just rice, as a sweet, boiled rice with a bit of milk over it. I can remember my

25:00 grandmother was very good at making a meal up from scratch like leftovers from other meals. She was quite good at that. Yes, we had hard times when we were going through school. We had no father to show us anything. We had no father growing up at all - it was all my mother and my grandmother.

**Did your**

25:30 **mum encourage you at all to get a job like being a paper boy and those sort of things?**

She didn't encourage me, I did. In those days if you wanted to make money you collected bottles. Como had a famous hotel where you could collect their quart bottles. They used to sell draught beer in these quart bottles. And it was a famous after hours and

26:00 Sunday hotel. Even though there were no hotels open on Sundays in those days, you could always go down and collect half a dozen of these bottles which would bring you threepence each. It was threepence each, which was quite a lot of money in those days. I collected horse manure and cow manure and sold it with my billy cart. You could always get a shilling or something for a bag of

26:30 cow manure for gardens. My first real job I suppose was in a grocery shop in the school holidays. That was at Caringbah here. It was a general purpose like store where in those days they used to weigh the sugar and measure up everything. Nothing was in packets. Everything had to be weighed and put in the bags. So I worked there in the school

27:00 holidays for the total sum of twenty-five shillings a week. Twenty-five shillings a week and I thought I was a millionaire. I had to hand a lot of it over to my mother because we were still very poor in those days.

**And your brother, did he also get these odd jobs?**

He more or less did the same thing as I did. He sold bottles and

27:30 collected horse manure to sell.

**Did friends or a local church or even a social group help at all?**

No because we were living amongst people who were the same space. Como was a very poor suburb in those days. People that were living around us weren't much better off. They were no better off.

28:00 **You mentioned earlier the Depression. What are your memories of that particular time?**

Well the Depression didn't affect us until my parents separated because my father was always employed. And as far as I know he had a good job because we had a nice home at Maroubra. He didn't buy that without having some fairly good income because it was quite a big mansion. He always had a car.

28:30 After my parents separated... I've lost my train of thought.

**Just give us reflections of the Depression and what you saw amongst other households?**

Everyone was battling to put a meal on the table right up to the

29:00 time the war broke out. Once the war broke out people started joining the services and employment came. There was plenty of employment then. No one could really be out of work during the war years.

**Was the government doing anything to try to help the community or communities during the Depression?**

I don't

29:30 know of any. We had no help from anybody. I don't remember any help. I suppose there were these people like the Salvation Army and other organisations that were there. I'm sure they were there but we never sought any help from them.

**You mentioned that you lived with your grandmother at Como. Can you talk me through the house and what it was**

30:00 **like that you lived in?**

My grandmother bought the block of land for ten pounds. She told me that. You could have bought the whole street for one hundred pounds. There was only a gravel road out the front. There were no facilities or any of that. There was no garbage service and no postal service and no water.

30:30 It was just a block of land out in the middle of the bush. And all those people that had come and bought these ten pound blocks they were people who were really desperate for somewhere to live and they sort of half built their house. They might build half a house to start off with. My grandmother's son, he was a carpenter, and he built this house for my

31:00 grandmother. It only consisted of four rooms. There was a very small bedroom and a lounge room and a very small kitchen and a laundry, all together, and he built the lot. He even drew the plans. I saw the original plans. It was just a plan drawn on a scrap of paper and submitted to the council and approved. There were no worries at

31:30 all.

**So where did you all sleep?**

My brother and I slept in virtually half the kitchen. We had beds in there. And my mother slept in the same room as my grandmother.

**So for how many years were you living in this state?**

32:00 Probably six to eight years. It was about six years. Finally we were able to move out. My mother was able to move out and she managed to rent a place at Cronulla. We lived there for a couple of years.

**Could you describe for me the kitchen, which is obviously the kitchen but also your bedroom?**

32:30 Well the kitchen, all it had was a sink really and a fuel stove. It had a sink and a fuel stove and nothing else at all really. It was very small. And just off that – I said that we slept in the kitchen but it was

33:00 really like a dining room off set thing. We had a bed in there. We often shared the bed. My brother and I often had to share the bed together.

**Running water, you mentioned there was no running water, where did you get that from?**

It was only tank water. That was all. You just had a connection into the house – I don't think we even had a connection into the house from the tank. I think we had to go outside to get it.

33:30 Yes, we had to. Before the water mains were put in we had to go out to the tank and fill a bucket up with water.

**And garbage, what did you do with garbage?**

We had to bury it down the back. It was the same with the sewerage. One of my jobs was to go down to the backyard and dig a hole for the pan and empty the pan into it. There was no sewerage. They didn't even collect the sewer in those days,

34:00 in the early days. It came later. Not the sewer itself but the pan man, what they called the '24-door sedan'. He used to come and collect the pan. For years there we had to do it. Luckily there was plenty of soil down the back to dig the hole and take the pan down there to empty it.

34:30 My brother and I used to take it in turns to do it.

**So in respect to the toilet, was there a room out the back with a pan?**

There was a toilet out the back with a pan. It wasn't in the house. It was away from the house. All toilets were outside before sewerage came.

**Did you grow any sort of vegetables?**

Vegetables, yes. We used to grow beans and potatoes. Beans were the easiest to

35:00 grow. I can always remember digging the garden up for growing beans and potatoes. We used to grow carrots and things like that. Another thing, coming back to earning money when we were going to school, Como had a lot of Christmas bush. We had a lot of Christmas bush on the land there and you

35:30 could pick bunches and bunches of Christmas bush. I used to take it down to Hurstville and sell it at Christmas. I used to get threepence a bunch for it. That was another way of earning money at Christmas time, selling Christmas bush.

**Christmas time itself for you, do you have any memories of that?**

We used to have a

36:00 Christmas dinner. I remember my grandmother always cooked Christmas dinner. We scraped around and we were able to. I don't think we ever had the luxury of having chicken or anything like that but we certainly had a baked dinner on Christmas Day. That was normal in those times to have a hot Christmas dinner with Christmas puddings. And there were sixpences and threepences in the puddings and all that. It was a typical

36:30 English tradition. Even if it was ninety degrees or a hundred degrees outside we still had the hot Christmas dinner.

**Did you get presents and those sorts of things?**

Yes, basically, but don't ask me what we got. We didn't get anything flash, I can tell you. The only thing I ever owned was a scooter and that was when my parents were still together, living together.

37:00 I had a scooter. But I never had a pushbike. My parents couldn't afford to buy a pushbike. Right up to the time I joined the air force I never owned a pushbike.

**What about birthdays? Did you have any memorable birthdays growing up?**

No. I can't remember them. I can't remember any of them really. We had them and we celebrated

37:30 them but I don't think it was anything like celebrating a birthday today, probably because there weren't many gifts that you could give.

**You've talked a little bit about your mum, but what was your grandma like?**

She was terrific. She could make a meal for nothing.

38:00 And this ten pound block of land that she bought she helped clear it herself. It was fairly thick bush and scrub but she helped clear it. She was a very intelligent person. She was very intelligent and did a lot of reading. She used to talk to us. When we were going to school, this is before

38:30 I ever got involved in the air force, she used to talk about the atomic bomb and atomic energy. She used to read books about atomic energy. And she was always telling us about this great energy that stored up and one of these days everything will be run upon atomic energy. I thought she was reading a lot of fiction. She did a lot of reading and I didn't take much notice of

39:00 her but she proved to be very knowledgeable when the atomic bomb went off in Japan. She was reading about that for years before it ever happened. She lost her husband very early in life. Her husband was a Frenchman. He was a French chef and a very good one too.

39:30 He was a chef at the governor's house in Victoria on big occasions and a very well-known chef in Victoria and in Sydney.

**Did you know him or meet him?**

No. He died long before I was born. My mother was only 12 when he died.

**Did your grandma ever talk about family history and her parents and grandparents?**

Yes, she did. I have got the whole history of her side of the family. My brother's wife did a lot of research on Griffith - she came from the Griffith family. They migrated to Australia from America. I've got the full history downstairs of that.

**We'll just pause there because we're going to change the tape.**

## Tape 2

00:30 **Given you grew up in the '30s, did you know or were you told anything at school about the politics that were going on in Europe at the time?**

No. I don't ever remember anything like that ever.

01:00 I don't remember anything at school from politics. The only thing I can remember from politics at school was my French teacher at school, who was a Jew, he told us one day that, "As soon as you lads turn eighteen the best thing you can do is join the army and go and fight in this war." And he was a Jew.

**What year was that?**

That would have been about

01:30 '43 or '42, 1942 I'd say.

**Did you know anyone that had served during World War I?**

I know my father's brother - I never met him - but my father's brother was in World War I. I think two of his brothers served. I think two of his brothers might have but at least one did anyway. I didn't

02:00 know anyone else that served in the war.

**You mentioned briefly that your dad served in the RAAF in World War II. He didn't serve in World War I?**

No, he wasn't old enough then. He joined about two years before me. I think he joined in 1942.

**What was he doing?**

He was a clerk.

**Did you meet him around that time at all?**

Yes. I met him when was

02:30 stationed at Adelaide doing my training he got in touch with me because he was on his way to Darwin.

He wanted to meet me because I suppose he wanted to see what I looked like. I hadn't spoken to me for probably five or six years. I forget how he got in touch with me but any rate I went and met him and we went and had a couple of beers. He wanted information from me of

03:00 course about the rest of the family. It was only a one-day meeting and I never saw him again after that.

**How did you feel meeting him?**

I was always friendly with my father. I never fell out with my father. I probably might have felt a bit embarrassed at the time. I can't remember now it was that long ago.

03:30 He was posted to Darwin as a clerk. I don't know how long he spent up there. I never ran into him at any time in my air force career other than that time.

**Do you remember where you were at the outbreak of World War II?**

I know I was at Como, living at Como, but where I was that day, no.

04:00 I can't remember what I was doing but it didn't mean much. It didn't mean much then. I think I had just started high school. In 1939 I think I'd just started high school. I remember hearing it on the radio. I didn't read newspapers in those days there was no such thing - we didn't buy

04:30 newspapers, we couldn't afford them anyway. Everyone listened to the radio and listened to the news on the ABC. And I can always remember the declaration of Menzies. I can always remember hearing that when Menzies told Australia that we were at war. I can always remember that side of it.

**You've mentioned high school and around**

05:00 **that time you began. What memories do you have of high school at the time?**

High school was very difficult. We had a terrible shortage of teachers. There were forty in my class. Forty in a class is pretty hard to handle. A lot of the teachers were retired teachers

05:30 who'd come back to make up for the shortage. A lot of the war-time teachers joined up in the services. They joined the air force and the navy and there was a very, very high proportion of shortage. There was a very high proportion of people who had come back out of retirement. Some of them, their

06:00 husbands, particularly on the female side, their husbands were away at the war and they didn't like coming back and having to put up with schoolboys and things like that again. By the way, the high school I went to was one of the few co-ed [co-educational] schools in Sydney. During the war there were no co-ed schools. All high schools were separate - it was either girls or boys - but Sutherland

06:30 High School was a co-ed school so we had girls in the class. Some of the teachers were a bit - we had a high school headmaster - he was an ex high school headmaster who taught us maths and he was good. He was a very good teacher, but some of them were very poor.

**Can you share with me an example of one of the teachers who wasn't able to cope?**

07:00 I don't know that they weren't able to cope but it was quite common for them. I think a lot of them had been out of teaching for a long while and I think they'd forgotten what they were supposed to teach, too. The kids didn't take long to realise that they weren't very good at it,

07:30 especially when they were teaching subjects that weren't normally theirs. You might have a geography teacher teaching maths or vice versa, a science teacher teaching history. It was pretty obvious that they were only one step in front of you. They obviously read the book or did something before the lesson. Some of the kids used to give them a bit of hell. but not like today. It's not like you hear about in schools these days.

08:00 Some of them took it pretty bad. I think.

**Were there any sort of disciplines to keep you in line so you didn't muck up?**

Yes, discipline was there. The cane was still there. I used to get my serving of the cane. Yes, the cane and being kept in until 4 o'clock or 4.30 and you had to write lines. You had to write so many lines,

08:30 a hundred or two pages or a hundred lines of 'I must not do this' or something on a subject. That was quite common. It wasn't unusual for a high school teacher to throw a thing at a pupil if they got a bit upset about something that the pupil said. They'd throw rulers

09:00 and erasers at them. I never copped one but I know a few that did.

**You mentioned that you got the cane a few times. What sort of things did you get into trouble for?**

That's going back too far I think. I can remember getting the cane but if you ask me what I got it for I couldn't remember really. Obviously I deserved it.



09:30 **Was the cane across the backside?**

No, it was always that you held out your hands. You always had to hold your hands out. They'd take you off into the staff room. They never did it in front of the class. You would report up to the staff room in one of the breaks and then they'd give it to you in the staff room.

**Given the school was co-ed, was discipline the same for girls and boys?**

Yes, discipline was just the same.

10:00 If I can remember rightly now we had more women teachers than men probably because of the war.

**So did girls get the cane?**

No. I don't remember any girls getting the cane, no.

**Were students encouraged to get involved in the war effort in any particular way?**

Yes we had

10:30 concerts to raise money for the war effort. We also had the collection of aluminium and scrap metal. We had all those things. I can always remember taking all the old aluminium pots and even the tin foil that was wrapped around sweets and things like that. They used to save all those sort of things. And toothpaste holders. We used to have

11:00 collections like that. I can always remember concerts but that was about all.

**Did you perform in these?**

Yes - I didn't perform, no, I was the curtain puller as I remember. I think I had to pull the curtain up. I used to work behind the stage. They never got me out there. We did the opera -

11:30 what was the pirates one?

**Pirates of Penzance?**

No. It was a Gilbert & Sullivan opera. I can't remember now but that was one of the concerts we had. We had dances too by the way. We had

12:00 co-ed dances. We had annual basketball matches with the girls, or netball. We used to play them. It was quite good. I think having a co-ed school was good in those days.

**Girlfriends, did you have girlfriends?**

Yes. I had a couple of girlfriends at school.

12:30 **What sort of things would you do with them?**

I went to the pictures with them. I went to the pictures a couple of times with them. I went to the beach. One used to follow me to the beach at Cronulla.

**Did your mum or grandmother ever used to talk about sex education with you?**

No, never. That was a no-no. It just wasn't -

13:00 In those days you never talked about it. You talked about it with your mates but you never talked about it with your parents or anyone like that. No, I was very ignorant about sex. I was very ignorant up to when I was eighteen and I suppose when I joined the air force. I was fairly ignorant on today's standards.

**What about news from the war? Did you hear anything**

13:30 **about news from the war from the teachers and the headmaster about what was going on at the time?**

No, the war was never discussed much at school. You always got news of the war on the radio every night and everybody would listen to the news. As the war got progressively worse people took more notice of the news and wanted to hear the news, especially after the

14:00 bombing in Hawaii. The Americans came into the war and then Australia was threatened and of course people got more interested in the news. In the early days of the war when nothing much was going on in '39 and '40 when that sort of pretending war was going on but nobody was really getting stuck into each other, nobody took much notice of the war then. It wasn't until the Americans were

14:30 attacked in Honolulu I think that anybody in Australia took an interest in it. We did take an interest, a lot of people took an interest in the Tobruk war and North Africa and that side of it because Australians were serving there.

**So how did your environment change when Pearl Harbor happened and Singapore and Darwin**

**and then Japan entered the war?**

Well things got scarcer.

- 15:00 Food got scarcer and petrol rationing was in and clothing rationing came in. We started having blackouts and covering up all our windows like you've done here. Everybody had to cover their windows up. You couldn't turn a light on at night. We had all these volunteer wardens who used to come around with their
- 15:30 torch at night and see that no light from inside was coming outside and things like that. I think mainly everything got scarce. You couldn't buy anything really. You couldn't buy much. You had to have clothing ration coupons to buy the basics, just the basic clothing, and there wasn't much choice. You certainly couldn't buy - I always wanted to buy
- 16:00 a football but you couldn't even buy a football. The prize thing was to be able to bring the football home from school. If you went away to play another school you were able to bring the football home and have a kick of it before you took it back to school. That was a prize as far as I was concerned because you couldn't buy a football. You couldn't buy any sporting goods. High schools and places like that had an issue or a
- 16:30 ration that was issued to them but you couldn't go into a shop and buy any. You couldn't buy a cricket bat. You couldn't buy anything.

**Things were pretty tough for you and your mum and family, now with rationing did they become even tougher?**

No I don't think so. You had to have the money to buy it at any rate whether it was rationed or not. I don't think

- 17:00 we ever went without any clothing. I don't think there was any problem as far as clothing goes. But rationing of food was not the best because you only got so many ounces of tea and so many ounces of sugar and so many pounds of butter and one you ran out of it, that was it. You had to improvise with something else. I'm sure that's why we were improvising on
- 17:30 dripping quite often.

**The Japanese sub [submarine] that came into Sydney Harbour, do you remember that at all?**

Yes.

**Can you tell me the events that surrounded that?**

All I can remember is the sirens going off. I know the sirens all went off. I can't remember much other than that. I do

- 18:00 remember being at the Cronulla Picture Theatre one night. I don't think that was the submarine night. That was the night the aircraft flew over on their recce [reconnaissance]. I think that might have been prior to the submarines coming up the harbour. I remember the sirens went off and the theatre stopped the film. Somebody came up announced that they wanted the theatre cleared and it would be a good
- 18:30 idea if everybody went home. I can't remember what year that was now but it was not long before I joined the air force. I was still at school at the time. That caused quite a scare in Sydney, the submarines. Everybody who lived around the harbour all wanted to move out of there. I believe you could have bought a house for almost nothing around
- 19:00 Sydney Harbour after the submarines came.

**What plans did your family have if the Japanese did actually invade?**

We had no plans. We had no plans because all we did was we did try to store some food and that's all, tinned food. When I was working at this

- 19:30 general store in Caringbah I used to try and take a couple of things home from there. I used to take home tinned beans and things like that to store away in case there was a problem with any invasion. We didn't have any plans to evacuate anywhere because where could you go? You could only go out into the bush probably.

**Did the school have**

- 20:00 **cadets?**

No, not at my high school. Sydney Tech High did but not Sutherland High.

**Tell me about the cadets at Sydney Tech High, what were you involved in?**

I wasn't in the cadets. I was in the air training corps. I joined the air training corps while I was at Sydney Tech High.

20:30 **What did the training constitute there?**

Well mainly learning the basics of aircraft and the theory of flight and of course morse code. Everybody in the air training corps wanted to be aircrew. They didn't join the air training corps to be on ground staff. Everybody wanted to be a pilot or wanted to be a navigator.

21:00 Of course one of the main things then was morse code. I think you had to be 15 words a minute or 16 words a minute and we used to have morse code lessons. We used to go into camp. We had a camp at Avalon Beach in Sydney. Do you come from Sydney? At Avalon Beach, there used to be a camp there that we'd go in and have a lot of fun.

**Were there planes at Avalon Beach?**

No it was just a camp. It was just to learn the normal camp life.

21:30 We were doing drill and learning about aircraft identification and all the things that you can do on the ground. There was no flying. There was nothing there, no aircraft.

**So what interested you about joining the air force and becoming a pilot and all those sort of things?**

Every young man, it's the same as today, everybody wanted to be a pilot.

22:00 At the time I went in the air force had all the aircrew that they wanted and they weren't encouraging anyone much and they weren't taking anyone into aircrew. I couldn't get into the aircrew so I went in as what they call a trainee technical. In other words if you get through this basic three months' technical training then they

22:30 choose or they pick what they think you'd be most suited for.

**While you were in the air training corps, did you actually fly with them? Did they take you up at all?**

No, we went on trips to Richmond and we were able to walk around the aircraft and around the station but we never had a flight. I never had that. I don't think they had

23:00 time to do those sorts of things in those days. Richmond was fairly secure and the only way you would get in there was like in an air training corps group like we were.

**Can you describe for me the types of planes that were at Richmond at the time?**

Mainly when I was in the air training

23:30 it was Hawker Demons and Avro Ansons. There were a few Wirraways from what I can remember but the Hawker Demon was the top fighter plane with the Wirraway. The Hawker Demon was the biplane.

**While in the ATC [Air Training Corps] did you know much about the Battle of Britain and what had happened a few years ago?**

24:00 Yes, I think every young man knew all about the Battle of Britain because it was interesting aircraft reading really. As a young man I was interested in it - all the Douglas Baders and the Spitfire pilots and the Hurricane pilots who fought the Battle of Britain. I think that was well known by most young men like myself. I

24:30 think they all envisaged that one day they might be one of those.

**So just to understand in the timeline, you went to Sydney Technical College?**

Technical High.

**What year did you start there?**

In 1944. I was behind because of two things. It was mainly because we moved to Victoria and their

25:00 syllabus was different and I got put back a year. Then when we came back to Sydney and were put in six months quarantine I missed more schooling, and in 5th class I had to repeat again. So really I was two years behind where I should have been. I went to Sydney Tech High in 1944,

25:30 '43 I'm sorry. I was in 5th Year. I was going for my Leaving Certificate.

**Given that you could have left at age 14, was education important to you?**

Yes. My mother wouldn't think of me not going as far as I could and neither would my grandmother, who had a fair influence on me. They

26:00 both thought that you had to have an education to get somewhere in life.

**What did they hope to see you become?**

I was thinking of being a draftsman, an architect. I did well in tech drawing at school. I always liked

tech drawing. I was thinking of being either a draftsman or an architect.

**Since the war was on, did you**

26:30 **want to join?**

Oh yes, I wanted to join. I wanted it for the adventure. You had no choice then you know. If you weren't in a protected industry you were called up into the army. I didn't particularly want to go into the army I wanted to go into the air force. That's why I didn't actually go on with my Leaving Certificate. I wanted to

27:00 get into the air force earlier before the war finished.

**So what was the catalyst actually that led you to apply for the air force?**

The catalyst? It was only my interest in aircraft. I used to make model aircraft. I used to make model aeroplanes when I was younger and fly them. That was one of my main interests and I'd always been

27:30 interested in aircraft and flying.

**Why did you move so quickly to apply for the air force rather than finishing your Leaving Certificate first?**

Well if I'd got my Leaving Certificate it would have been another three months and I would have still been in the same category and I'd have had to go into the army. Unless you were in a protected industry you had to go into the army.

28:00 I joined the air force in August 1944. If I had done my Leaving Certificate that year I would have still had to have gone into the air force or into a service in December.

**Can you share with me the journey of actually going to the air force and applying to join? Can you share with me the day that you**

28:30 **enlisted and what happened then?**

I filled in the forms and had a terrible job getting my mother to sign the papers because even at eighteen you had to have your parents' approval. I finally convinced her to sign the papers and I did their intelligence test which they gave me.

29:00 They told me that they were not taking any more aircrew and that I could come in as a trainee technical, which I eventually did. My first posting of course was to Cootamundra. That was the basic training where you learn how to march

29:30 and keep in step and fire a rifle and live in the bivouac. We went out on bivouacs for several weeks and lived in a tent and carried out the basic training.

**Why was your mum reluctant in signing the forms?**

She was like all mothers I think. She didn't want to see her son going away to war.

**Had your brother already joined?**

30:00 No, he was in a protected industry. He tried to join. In fact he joined the navy. He was working for the Railways Department. When they got to hear that he'd joined the navy they stopped it. They had it stopped. He was all ready to be called up and everything too. He was very disappointed but there was nothing he could do about it.

30:30 **Your mother and grandmother, you mentioned they had a strong influence on your life, what advice did they give you upon leaving for training in the air force?**

I don't think my mother gave me any advice really and my grandmother I can't remember now. I can't

31:00 remember her ever giving me any particular advice. Perhaps I did get some advice to make sure that I wrote home, to make sure that I wrote letters regularly. I can't think of any other advice that I got.

**So when you went to this initial training camp**

31:30 **was it a shock to go out on bivouac for a couple of weeks?**

No. It was something like going out to Avalon I suppose but a bit stricter. We were living in these galvanised huts initially before we went out on bivouac. I suppose the shock of getting up out of bed at 7 o'clock and making your bed and folding the blankets up and polishing your boots, it hits you.

32:00 You hadn't done anything like that before. And then you had all these sergeants marching through the hut in the early hours of the morning and telling everyone to get out of bed and get shaved and dressed and make your bed. You soon got used to it. I got used to it fairly quick. Then we used to have to do our detail in the

32:30 mess. We were scrubbing pots and pans. You had to do your turn there. You had to do your turn on guard at night. Then out on bivouac that was pretty hard because it was the middle of winter in Cootamundra. And one thing I can always remember is you couldn't even go and have a wash in the morning because the water in the pipes was frozen. You couldn't have a shave. The

33:00 food was pretty rough and pretty awful but we survived. I think we had two weeks or three weeks out there. I can't remember now. We learned how to bayonet and dig holes and dig trenches and do night patrols.

**It sounds more like you'd joined the army?**

Well, it was all army training. Basic training was more army training. You learned the basics of

33:30 using a rifle and hand grenades and things like that.

**The bayonet drills, what was the training there?**

It was mainly stabbing dummies and things like that and running along. It was very basic. It was how to put the bayonet on the gun and we went through the drill of putting the bayonet on in the regimental way. "Place your bayonet," I can't remember how to do it now

34:00 but we had to sort of draw the bayonet out and pull it out and you had the rifle between your legs. And on the command you put the bayonet on and came back again and then you'd go back up to the slope with the bayonet on it. Then there was the reverse coming down again and taking the bayonet off and putting it back it. Don't ask me how to do it now.

**Were there fellows that didn't cope?**

Yes, there were. There were

34:30 some blokes that couldn't cope. Some of them didn't like the discipline but I couldn't say there was a large drop out. Most of them handled it all right. There was only one person on my course that had to drop out and he was seven foot something. He was over seven feet in height. He was a huge

35:00 man and he just could not keep in step. He could not no matter how hard he tried, he couldn't keep in step. Everything had to be made for him. They couldn't find boots for him and they couldn't find overalls for him and I don't know what the other problems were but I think eventually they discharged him. It seems sad why they would put him out because he couldn't keep in step. I didn't think that was a

35:30 very important thing.

**The education of some of these fellows would have been quite broad, those that were educated and those that were not so?**

Yes, we had quite a mixture. There were chaps off farms who had come in from farms and some with no education whatsoever.

**What friends were you making at the time?**

On recruiting? You

36:00 soon - from conversations and that you soon find out who plays football and who likes to play football and you'd usually mix with those types who similarly to you might have only just left school. There were a couple of others that only just left school like I had. You soon sort yourself out. I didn't drink by the way and I didn't smoke so I didn't go to

36:30 hotels with anyone. I usually didn't mix with anyone - smoking didn't worry me in those days. It was quite common. You would say eight out of ten people used to smoke at my age then. I didn't smoke. I never liked it. I took it up later anyway.

**It is 1944 and the war ends in a year's time. Did you guys think the war would**

37:00 **continue on for many years to come?**

Yes.

**What was your feeling at the time about the war?**

I thought the war would keep going on. The war stopped suddenly but at the time they had only just pushed the Japanese out of New Guinea and places like that. They were still pushing them out of the Philippines when I was in the air force and they were still going through some of the

37:30 Pacific Islands there. They were just starting to push the Coral Sea Battle and after the Coral Sea Battle they were just starting to push the Japanese back. But it looked like it was going to be a long war getting them pushed right back to Japan. I thought the war would go on for years. At any rate it didn't. One thing stopped it in a big hurry.

38:00 **Pranks - what pranks did fellow get up to during these early days of training?**

One of the common things was if somebody was asleep in bed you used to come up to his ear with two glasses, one full of water. And you'd start pouring the glass of water into the other and it would make him want to go out and want to go to the toilet. That was a common one.

- 38:30 Another one was if their mate had made their bed up they'd often tie the blankets so that when he left to get in he couldn't get in because they'd tied the blankets back. He couldn't get in. They are a couple of pranks I can remember.

**Were these played on you?**

I've had the water one played on me, yes.

- 39:00 **And it worked?**

Yes, it works all right. I can guarantee it. Haven't you ever tried it? It works well.

**What about jokes or pranks played on corporals and sergeants?**

No, I don't think too many were game to do much because nobody wanted to do an extra guard shift or another couple of days in the kitchen scrubbing pots. That's what you'd end up with.

- 39:30 Some of them took it all right but some of them didn't like it. I can't remember any pranks being carried out against the instructors. Drill instructors they used to call them.

**We'll just stop there and change tapes.**

## Tape 3

- 00:30 **After the basic training to get you used to air force discipline, what was the next step for your training?**

It was training for what I was going to be.

- 01:00 I was posted to Adelaide from Cootamundra and did the basic technical course where you learned to push a file and use a drill and do a little bit of welding and cutting metal for about three months. You learned a bit of technical drawing which I was quite good at and reading drawings. Then you had the

- 01:30 choice of putting in for what you wanted to be. If you wanted to be a fitter DMT [Driver Motor Transport] or a fitter driver mechanic or did you want to be a fitter electrician or did you want to be an electrician or a radio operator or a radar technician or did you want to be in the marine section or a fitter air framer or a fitter engines. You put down your preference. I think I put down radio as about my third preference. I was quite

- 02:00 surprised that I ended up on radios. I was chosen as a wireless assistant and started training on that at the School of Mines in Adelaide.

**You joined as a technical recruit into the air force?**

Yes.

**Did you have any plans or ideas about what that meant for you when you joined up? Did you want to do something in particular?**

- 02:30 I knew that I didn't know what I was going to be. I knew that it was going to be something technical and I hoped it was either air frames or engines or an electrician or something in the technical branch working on the aircraft. I had no idea that I was going to end up in radio or radar.

**Can you tell us anything else about the**

- 03:00 **basic technical training that you did when you went to the SBT?**

4 STBT [?].

**You mentioned using drills and drawing. What was that designed to do?**

I think it was mainly to see whether you could carry out the basic things that you do in a workshop. In a workshop you are using a guillotine and using a drill and filing a block. We made little objects, little metal objects,

- 03:30 and things like that. I think it was mainly to see if you had any skill in using hand-helds really. Some blokes were hopeless. Some couldn't even drill a hole. Some were absolutely hopeless. I hadn't ever done anything like that before either by the way. I hadn't been to a school where you did that sort of work. I did carpentry. We did carpentry as a subject at high school but never did any

- 04:00 metalwork or anything like that. Anyway, I managed to flounder through it.

**What did you enjoy about the technical side of the training that you'd started?**

I think reading drawings was a good part of it. We had to read drawings and having done technical drawing at high school I had no problem there. And

- 04:30 learning a little bit about what goes on in a workshop really. They were civilian instructors by the way. They weren't air force instructors. They were all civilians.

**What, old men generally?**

Men who probably had been in the trade for years and I think it was a case very similar to high school. They were very close to retiring age.

- 05:00 They were in their 40s and late 50s and had been in the trade for years and they'd probably come back to serve as these instructors. Most of them were very good too.

**Apart from your morse code training in the training corps, was there any other radio or wireless training given to you in the early stages?**

- 05:30 None, not at all, no.

**What was Adelaide like?**

Terrific. You couldn't go to a better city during the war. Adelaide people are very hospitable. They had a place there called the Cheer-Up Hut. It wasn't a hut - it was quite a large building. It was

- 06:00 provided by all the people of South Australia. You could get a bed there at night. They had, I won't say hundreds but you could get a bed at night and you could get a meal at any time of the day. You could walk in there and get a meal. I had Christmas dinner there in '44. They were served by women. Remember the nurses used to wear their white veil. Every
- 06:30 woman wore a white dress with a white veil. The whole place was provided by the people. The farmers provided the meat and other people all donated everything. Everything was provided. It was first class. You could walk in there and have a first class meal at any time and it didn't cost you a cent. They had entertainment,
- 07:00 top entertainment. It was right in the middle of Adelaide near where that Arts building is at the back of Government House there or the government building, Parliament House, that's right.

**You talked a bit before about how the war affected life in Sydney**

- 07:30 **with rationing and blackouts and everything. How did that affect Adelaide?**

Adelaide was the same. They still had the blackout type of thing. It was much the same as Sydney in that way but people were very, very hospitable. Anybody who was in uniform was taken home at weekends and entertained. They had organised

- 08:00 hikes into the mountain at nights on a Friday night or a Saturday night. They tried to get all the local young women to mix with the men and mix with the trainees because there were a lot of trainees. The air force must have had thousands going to the School of Mines in that central part of Adelaide. Where we were camped, we were camped in what they called the Emmanuel College which was an ex
- 08:30 girls' school. We had taken the whole school over. And we were living in tents. Even though we were in the middle of Adelaide we still had to sleep in a tent with a couple of others at the same time. That wasn't the best. War time was the same there. Everything was scarce.

**What about the presence of other services? Obviously there were a lot of air force recruits but who else was there?**

There were Americans.

- 09:00 There were Americans everywhere because Adelaide was the transit to Darwin. Anyone going up north going to Darwin most of them went via Adelaide. They either went up the centre or they flew from their main air force base. There were servicemen everywhere. It was everyone, the RAAF,
- 09:30 the army. There wasn't so much navy. You didn't see much of the navy but there was certainly plenty of RAAF and Americans.

**What was the relationship like between the Australian servicemen and the Americans?**

There was no problem there. There were Americans but not in the

- 10:00 numbers that there were in Brisbane. I know there was a lot of problems during the war up in Brisbane and around there and the army and the air force got stuck in. The Australian Army and the Americans got stuck into each other up there a lot but only because of the numbers. I never saw any problems in Adelaide, not in '44 anyway.

**What effect did your air force uniform have on your popularity on the**

10:30 **population and with women I suppose?**

Most young men in uniform were attracted by the young women then. I don't remember any girls fighting to get to me or anything.

**What uniform did you wear?**

I wore the blue uniform in winter time

11:00 and we wore drabs, what they called drabs, in the summer. You could wear shorts in those days. You were able to wear shorts with long socks.

**The air force cap?**

The forage cap, yes. You had to wear that; it was compulsory. You never wore your felt hat around the streets. That was only worn when you were in the

11:30 tropics or you were doing work on aircraft. You never wore a slouch hat, the felt hat. You never wore it in the streets, not in the air force anyway.

**You mentioned there was a preference system for what you wanted to do. What was your reaction when the preference came back and it was wireless?**

I was quite surprised.

12:00 As I said I think I only put it down as third preference. How they went through all these preliminary three months determined whether we would be more adapted to radio or more adapted to aircraft engines I don't now but radio didn't have any attraction to me at the time.

12:30 Now I must say I was quite pleased that I was selected. It meant staying in Adelaide too. All the radio trainees stayed in Adelaide whereas the engine and air frame fitters and all the other musteringings, they all went off to other states. Most of them went to Victoria, back to Melbourne.

**Were you able to get leave at any time?**

There was no leave at all. You could get local

13:00 leave to stay where you were but even Christmas '44 there was no way you could go home. You only had about a week off anyway or had a few days off. We finished the basic training course and then went straight into the radio course in early January '45. There was no way you could go interstate or anything like that.

**Can you describe the set up of the radio course in Adelaide and where it was?**

It was at the School of Mines

13:30 which was known as the School of Mines. Now it is part of Adelaide University. It was just like any other academic school. There were just normal desks. It was all theory by the way. There was no practical radio there at first it was all radio theory. We had civilian instructors, not RAAF instructors.

14:00 **Is it a simple thing to grasp the theory of radio?**

I found it a bit difficult at first but once I got on top of it I had no trouble. I thought I was going to be put off the course at one stage. I can always remember it. This has stuck in my head all my life. I was about three-quarters of the way through the course and we

14:30 used to have exams I think every week. Every week I'm sure we had an exam or it might have been every fortnight. And I got called up and they said, "It looks like we might have to put you off course." I said, "Why?" I can't remember what you had to obtain whether it was 70% or 60%. Anyway the instructor was turning my pages over and saying, "You've only

15:00 got 60 and 75 is the pass mark. We might have to get you to repeat or we might have to put you off course. We'll have to think about it." Anyway, he came back and as he was turning the pages over I was adding up my marks at the same time and he said, "You've only got 65." I said, "No I haven't. I've got 75." "Oh, I'll add them up again.

15:30 You have. You've got 75." Was he embarrassed. He was just about to put me off course I think. At any rate, I went on as normal.

**Were you among the better students or were you average?**

I was about in the middle, about average. I wasn't the worst and I wasn't the best. There were a couple of real bright people. A couple of

16:00 chaps there were very bright that went through. I was around average.

**You mentioned the different mix of blokes that went into the initial recruit training, how did the mix of blokes change when you went into radio?**



It was different. They were mostly the same as myself. They were ex students and most of them had a reasonably good education.

**16:30 Were there any particular good friends that you made at that training school?**

Yes. I've still got them, they are life members. I don't meet them much but we still exchange cards and still ring each other sometimes. One was a motor mechanic, Ian Muswellbrook. He stayed on in the air force and became and became a squadron leader.

17:00 Another one worked for the Department of Transport in Sydney and I still see him quite regularly or speak to him quite regularly. Another one became an engineer at Newcastle at the BHP [Broken Hill Proprietary] Steelworks. He became an engineer and lives at Wollongong. I still talk to him quite regularly.

17:30 Others I have lost track of but we managed to keep together all these years about four or five of us. The trouble was a lot of the students came from other states and only the ones that are in New South Wales have I been able to see regularly. The ones that come from Western Australia and other parts it's very hard to keep up with

18:00 them. Some are deceased. Two or three of them are deceased now.

**You said there was no practical training. What were you learning? Can you give us an idea of what the theory was that you were picking up at that time?**

We were learning basic electricity for a start and then basic radio theory about radio transmitters and radio receivers, the super heterodyne receiver, and

18:30 how a valve works and putting them together in circuits. It was all the basics of radio transmission but all theory; there was no practice.

**Were you introduced to certain types of equipment at a theoretical level at that time?**

We were later on. When we got through the basic radio

19:00 assistant course we did start to do basic practical work then using multimeters and how to use different instruments for measuring things like frequency and things like that.

**This might sound like a basic question, but it might be very useful for someone in the future. Can you explain how the radio worked in layman's terms, the valves?**

19:30 The valves? Well if you talk about the super heterodyne receiver, most radio transmitters in the broadcast band transmit around 1500 kilocycles. And most of the old radios had an RF [?] amplifier that would amplify the signal at the RF level or at the same frequency as received.

20:00 Then it was converted to a lower frequency called the intermediate frequency. And that was done with an oscillator and that was the basics for the super heterodyne receiver. The radio signal then passed through the intermediate frequencies, which in those days the common frequency was 455 kilocycles, until it would come to a detector which took the modulation or the voice modulation off the RF

20:30 signal and converted it into an audio signal. That audio signal then passed on to the speaker where it became audible. That was the basics of the super heterodyne receiver.

**Were you dealing with transmitters as well as receivers?**

Not much, very basic transmitters. We didn't learn too much on transmitters until we got onto working on

21:00 transmitters themselves. Even then I didn't do much on transmitters.

**What about radar? Were you given any idea about radar in the first training you did?**

No. We were selected for radar. First of all we were asked who wanted to do radar and so many people put in for radar. And then out of those people that put in for radar they selected people.

**Your**

**21:30 qualification at the end of that first radio course was as a wireless assistant?**

A wireless assistant, yes.

**What did that mean?**

It was just a rank. The air force had their different groups and the highest group was Group 1. There was Group 2 and Group 3 and if you were down to Group 5 - when I went in as a recruit I was in Group 5 on six and sixpence a day. It was the lowest level you could get,

22:00 AC1 [Aircraftman]. Different musterings had different levels of experience and technical qualifications. If you were a driver you would probably be Group 4 or maybe Group 3. If you were an electrician you

may get Group 2. A wireless assistant then was Group 2. That was the second highest.

22:30 **And Group 1 was?**

The highest.

**Pilots?**

No. This is only in the ground staff. These groupings were only in ground musterings.

**Was that already decided then by the time you went into the radio school that you would be a wireless operator on the ground and not in an aircraft?**

No. When we volunteered for radar it

23:00 depended on where the shortage was, and at the time it was the shortage of air radar mechanics, not ground radar mechanics.

**Did you want to fly?**

Yes. I wanted to fly. Every young man wanted to be a pilot. If he couldn't be a pilot he wanted to be a navigator. If he couldn't be a navigator he wanted to be a wireless operator. And if he couldn't be a wireless operator he wanted to be an air gunner. And that was the last, the lowest you could get.

23:30 **So even when you were training at radio school, was that something you were actively angling towards getting?**

Flying? Yes. I wanted to get into aircraft and work on them and I also wanted to fly in them, which I eventually did in time.

**Was there any time during your early training where you were taken up in an aircraft for any reason?**

Yes, when we finished our course at Ballarat I had my

24:00 first flight I'd ever flown. It was the first time I'd ever flown in an aircraft and that was on an Avro Anson. I've got a few photos there of the actual aircraft and the actual flight.

**The Ballarat course was after - When did that fall in relation to the training we've already talked about?**

Ballarat was when we finished our radar course at

24:30 Maryborough, we went back to Ballarat to finish off on a couple of other items which we had to finish to finish the radar course and specialise in.

**We'll come to that and we'll talk about it but we'll stay in chronological order at the moment. It was very nearly the end of the war when you finished the radio school, although you wouldn't have necessarily known that, and you went to Ascot Vale?**

25:00 Yes.

**What was going on there?**

Everybody had to go through Ascot Vale to learn the basics of soldering resistor boards and things like that. It was only a two week course there. You went to Ascot Vale and then went on to the wireless mechanics course or you went to Maryborough as a radar mechanic. If you were going to

25:30 be a wireless mechanic you would have done that basic course that we had with chassis, bending up chassis and putting in valve sockets and wiring up resistor boards and things like that. It was really learning how to use a few instruments and how to use a soldering iron properly. And then the wireless mechanics, we stayed in Ascot Vale and they went to the tech college in

26:00 Melbourne. We went to Maryborough.

**According to the dates, and I might be wrong, you would have been in Ascot Vale when the end of the war was declared?**

I could have been, yes.

**Do you have any memories of that occasion at all?**

I can remember all the marches and all the cheering and all the people running out in the street and going silly.

26:30 It was the same in Melbourne or anywhere where you were when war was declared over. Ascot Vale - was I there then? Yes, you're right.

**What did you do? Do you remember what celebrations you took part in?**

I remember with a couple of my mates we went out into the streets the same as everybody else did and

jumped up and down and cheered.

27:00 We went all silly I suppose. We were just so relieved that it was all over.

**You mentioned before that your grandmother had shown an interest in atomic energy and told you about it early on, did you get a shock when you heard about the atomic bomb?**

I did. It made me appreciate my grandmother more than I really did. I thought she was just reading fiction

27:30 books and this was all fiction. She kept telling me about the atomic energy and what it could do and what it couldn't do. And I used to say, "Yeah, that's all fiction." Anyway, after the bomb went off I had a better appreciation of what she was trying to tell me.

**It's very easy today looking back to say, "Atomic bomb, everyone knows what that means," but at the time it must have been a completely**

28:00 **different piece of news to you?**

Nobody ever talked about atomic energy. The only time I'd ever heard of it was what my grandmother told me. You wouldn't have a conversation with anybody else on the street or anybody in the air force or anywhere about atomic energy. Nobody ever mentioned it because nobody knew anything about it. It was all top secret then of course. It was top secret as far as the bomb side of it goes.

**When those bombs dropped, what information was there in**

28:30 **circulation about what they were and what went on?**

Of course there was a lot on how they split the atom and what its affects were and how terrific the impact was on everything and what it did to the atmosphere. There was a lot in the papers but up to that time there was really nothing.

29:00 **You were saying before you expected the war would continue and it was cut short, what were your emotions at that point considering you'd already spent a year training in the air force?**

I thought, "What have I done all this training for?" I wanted to keep going in the radar side of it. The war was over

29:30 but everything just went on as normal. We kept training. They didn't drop our course. They just kept training us and I became a radar mechanic and I took a posting. I took a posting to Darwin and when I got to Darwin everything there was just the

30:00 same as if the war was on. There were all these shattered buildings and disorganisation. The air force was just sort of soldiering on as though the war was still going.

**Did it change your conception or what you were doing though, had you joined up to be an air force technician or had you joined up to fight a war?**

Oh no, I'd joined up to be a technician and to fight a war was a secondary thing I think. I don't think you

30:30 ever really wanted to get into the front line.

**Sorry, you were saying you joined up to fight a war as a secondary thing?**

It was both, I would say. I joined to do what was good for the country, there's no doubt about that, but I also wanted to learn something and become somebody.

31:00 **What about the other blokes you were with? Did people drop out at that time now the war was over?**

Yes. Some didn't want to go on. Most of my mates stayed on. They were like me. We had learned, we had done all the theory and done all the training but we hadn't done any practical work. We hadn't worked on aircraft. And as I say my first posting was to the

31:30 air sea rescue with the Catalinas in Darwin. My other best mate was posted to Japan. He went to work on ground radar. He was like me. He had been trained in aircraft radar but his first major job was working on ground radar. That's what happened to me too after a short period in Darwin.

**Just stepping**

32:00 **back to radar, what was your first introduction? You went to radar training school after Ascot Vale, what training did you undertake there?**

We went by troop train to Maryborough.

**And what did you learn at Maryborough?**

We started on radar theory. We did radar theory and radar equipment and how it worked. We were

working on all the present radar airborne

32:30 equipment.

**How long was that course?**

That was about three months I think. Three months I'd say.

**Was this the first practical hands-on training you'd had?**

With equipment, yes, with actual equipment it was. When we came back to radio assistance we were doing basic things.

33:00 Going back to Adelaide we had super heterodyne receivers and we had signal generators and we were putting signal in one end and measuring output on the other end and doing all those basic things and learning how to do mainly radio receiver transmissions. But after we had done most of the radar theory we started working on pieces of equipment.

33:30 **Can you give us an overview of the equipment you were introduced to at that stage?**

Yes. The first one would be IFF. Have you heard of IFF?

**Identification of friend or foe?**

Yes.

**What was it?**

It was a piece of equipment for identifying an aircraft to different radars,

34:00 mostly ground radars or from other aircraft flying in the same area. You usually had a code for that day and it was like a transponder. It would transpond and transmit the code for that particular day. It identified the aircraft as being friendly and not an enemy. Unfortunately a lot of pilots didn't have a lot of faith in it and they wouldn't turn it

34:30 on. Of course that caused a lot of trouble with the ground radar systems who picked them up and thought they were enemy.

**Going through the equipment, what came next?**

This is not in the order. I can remember it was IFF first and then a radio altimeter.

**What was that?**

It wasn't a radar system. It didn't work on pulses. It worked on a continuous radio, a continuous transmission. That was for

35:00 measuring the height of the aircraft above the ground. It worked to a height of 4,000 feet. It had two ranges: 4,000 or 400. It worked in between either one of those. Its advantage was it gave the direct height above sea level. It gave the direct height above ground level and it didn't rely on barometric pressure for getting its calibration.

35:30 As you probably know, most aircraft at sea level they have to set their altimeter to the barometric pressure to get their zero setting.

**What else was there? Was there more to the radio altimeter than you've already described?**

Well it was another piece of radio equipment that pilots didn't have a lot of faith in. I

36:00 specialised in it and I tried to bring the level up with several squadrons and it worked quite well. It was used very much in the mining, the Catalina mining of all the different places in the Philippines, and up in the north. They used the radio altimeter quite a bit because of its accuracy above the water.

36:30 **Was this still slightly experimental equipment at that stage that you were doing it?**

No. Experimental equipment?

**It had been accepted by all. You said some pilots weren't completely happy with it?**

I think a lot of them weren't very happy with it because some of them weren't maintained very well and they lost faith in it if it didn't work. They lost faith in the radio altimeter because it was inaccurate because it hadn't been calibrated properly.

37:00 That's how they lost faith in it. With IFF it was the same I think. They always thought that they'd be picked up by enemy radar.

**Continuing on with the equipment what else was there?**

LRAN, Long Range Aid to Navigation. That was the receiver side of the system. The system depended on

37:30 three ground stations to give you the timing. It wasn't a pulse system. They called it radar and they still gave it the name of radar and the radar mechanics like myself worked on it but actually it didn't use a pulse system. It used a continuous transmission system of timing.

**What exactly did it do?**

LRAN? It relied on two

38:00 stations and they were about 300 miles or it could be anything like 300 miles or 400 miles apart. One was called the master station and one was called the slave station. You are an aircraft out there and the master station transmitted and triggered and that signal went out there to you. The same signal went to the slave station and triggered the slave station off and it went out to

38:30 you. So the second one arrived after the first one but there was a time difference in the arrival. The navigator with his LRAN receiver could measure that time and he had maps which joined all the time differences on the maps. It was just like a contour on a map. It was the same time.

39:00 Say the reading was 300 coming to you on that particular line he knew he was on that line. Then he switched to another channel and he got the time reading from the other slave station which was this direct one. The one that goes out there triggers that and that gave him another similar time difference. The two contours then would cross each other and where they

39:30 crossed was the position of the aircraft. LRAN had its advantages and its most wanted use was over sea, over oceans, where there were no land marks and no homing devices to home in on, especially over places like the Pacific and out over the Indian Ocean on the south west Pacific Ocean.

40:00 It could give a very accurate position.

**That description is very good and it will come in very handy later on. We'll just stop before I ask any more questions about it because the tape needs to be changed.**

## Tape 4

00:30 **I'm just going to ask you a few questions about that, and excuse my ignorance but I'm sure people in the future might not know much about radar either. You mentioned pulse systems. What do you mean by that?**

Radar relied on a pulse being transmitted

01:00 and hitting an object and coming back. The radar system measured the distance or showed how far away the object was. It wasn't a continual transmission; it was always pulses.

**Whereas LRAN was a continuous...?**

It was continuous, yes. It was transmitting a pulse but it wasn't relying on -

01:30 I was incorrect there - it was a continuous pulse transmission but it didn't rely on a reflection back. It only relied on the timing that the pulse took to arrive at the object or the receiver.

**So to operate a LRAN system you really have no idea who is using it at the other end, you are just sending out free signals?**

You have no idea of the aircraft using it, no.

**So it's a bit of a lonely job in a way?**

02:00 It was. I have read articles put out by some other ground radar mechanics who got lumbered into the LRAN system at the end of the war the same as I did. And they were ex-radar mechanics who were used to seeing the aircraft reflections coming back and operating continually like that. Then they were frustrated by having to sit at and look at a cathode-ray tube with a

02:30 pulse in it and superimposed and just sit there watching it, not knowing whether an aircraft was using it or not. All they had to do was keep these two pulses in sync. They found it very frustrating.

**So how much operation did it involve? You had to keep the two pulses in sync?**

Once it was set up you could almost leave it alone. You had to set it up first but once you had checked all your binary circuits and all your binary

03:00 circuits were correct and you were putting out the correct pulse rate you could sit and watch it all day.

**What were you sitting and watching? Can you describe what it looked like?**

It was just a cathode-ray tube with a pulse or two pulses, because they both had to be superimposed

over each other. If one drifted off you had to phase them back in again.

**And what was the rest of the equipment that transmitted this? Was it an**

03:30 **aerial?**

It was an ordinary mast, yes. It was a mast that was about 150 foot high. It was just above the broadcast band. I can't remember the exact frequency now but it was 1850 or 1900 KCs [kilocycles]. Kilohertz I should say. I shouldn't say KC but I was brought up with KC.

**What is the difference?**

Everything used to be KCs but later it became kilohertz.

**The same measurement under a different name?**

04:00 **What did the C stand for?**

It was kilocycle.

**Interesting point. We've gone through the IFF and the radio altimeter and the LRAN system, what else where you trained on?**

The ASV [Air to Surface Vessel] beacon. We were radio mechanics air but we learned how to look after the

04:30 homing beacon. I don't know why we ended up with it and why the ground radar mechanics didn't end up with it but it's probably because our equipment worked into it. There was another piece of equipment called the ASV beacon. That was something similar to the IFF. It would respond to incoming pulses and transmit back out a code.

05:00 Every main airport had one of these beacons. It always transmitted the identification of the place. Like Sydney would transmit SY or Darwin would probably transmit DR or Morotai would probably put out MR or MT.

**Would the aeroplanes be able to hone in on that beacon or how did it work?**

Only aircraft that had

05:30 radar systems in them. Light aircraft and fighters and things like that wouldn't use it. But from about 80 miles out any aircraft carrying ASV or 729 - 729 is another piece of equipment which is the next one I'll mention.

**What was the 729?**

It was similar to ASV - it was just the American version really. You'd have a range of about 80 miles.

06:00 It had a central line and then it had an aerial on either side of the aircraft. So if you were flying straight out at the beacon the displacement out from each side the central line would be equal. But if you were heading off on an angle the signal coming in from this aerial would be stronger than the signal coming in from this aerial.

06:30 So the aircraft would line up until both signals were equal and then on the line it would be calibrated in miles.

**To give you a road to fly down in a sense?**

It was really a line to fly to the beacon, yes.

**These were systems that had been up and running in Europe during the war in America?**

All these systems that I'm talking about now were more American because we, the RAAF, especially heavy aircraft,

07:00 were using American equipment. The ASV beacon was an Australian design. That was designed by the Australians and that was the only equipment you'd find in the RAAF, but the RAF would have similar types of beacons.

**Is there anything else?**

Well the 729.

07:30 The 729 and what else was there. That was at radar school. That would be the lot I'd say.

**What about radar as it is commonly thought of for detecting incoming traffic from the ground. The stuff you were talking about with the pulse and reflection, did you deal with that?**

Ground radar.

**This was not**

08:00 **something that your course covered at all?**

Yes.

**I've just got to clear up one point on my behalf, you were air radar training?**

Yes, to work on aircraft, aircraft equipment radar. As I said the one difference was that we were responsible for the ground beacons, the ASV beacons.

**The ground radar training went on somewhere else?**

Yes there was ground radar being trained and I think the school was at

08:30 Richmond and they were trained mostly on the LWAW [Lightweight Air Warning], what they call the LWAW ground radar, which was an early warning system. It could also trigger the IFF on an aircraft too to identify it. There was also round control approach although the RAAF didn't take over that until after the

09:00 war. They started training on that up in Japan. One of my mates went on to that to work on what they called GCA [Ground Control Approach].

**And what did that do?**

That helped a blind landing. It guided the pilot down. The ground control approach took over and the pilot was virtually in their hands. He did what they told him. He did what they told him to do.

**Was it exciting**

09:30 **learning about these things for you?**

Yes, they were exciting. When we went to Maryborough, that was a fleet air arm base and we were just part of the fleet air arm. And there were a lot of aircraft there to watch and see. Radar was interesting. I found it very interesting and we knew we were going

10:00 to do something that was very important. Radar was the thing in the air force in the aircraft. Everyone thought it was the top secret. It was the in thing in those days.

**Was there still a sense that it was new technology that was going to help the world?**

I knew it was going to go on after the

10:30 war. I knew the technology was going to be improved. There was no doubt about that. Radar was the first to use these cathode-ray tubes. Cathode-ray tubes, well after the war cathode-ray tubes eventually went to television. That was the heart of the television set. I must also say that being in television

11:00 later I found most of the circuitry in television was the same as the radar systems I'd worked on. A good example of that was the binary circuit, the binary circuit that was in the LRAN. The sync pulse generators which made up the full television component, the transmission component of the sync pulses, was almost identical to a radar

11:30 system, particularly in the binary circuits. A lot of all the other circuits like deflection circuits and everything else for displaying the cathode-ray tube for television were almost identical to most of the circuits that were in radar before.

**Jumping forward a bit, what was the first time you came across television?**

When I was posted to England.

**What did you think having had the radar experience that you had?**

12:00 As I said, the first television set I saw was when we went to England to do another radar course actually. They had black and white television and I saw the first screen and I was quite taken by it. I thought it was amazing what I was looking at.

**Did you have an idea of how influential it would be?**

12:30 I thought, "If I ever got out of the air force, that's where I want to go." I wasn't anticipating getting out at that time but I thought, "That's my next step." The circuitry of television was so near radar system's circuitry I thought, "If I'm going to do something out of the air force, it will be television."

**It's a good question about what your**

13:00 **ambitions were. We already talked about the war ending and you were still in the air force?**

I was in the air force and had all this theory in my head but very little experience.

**What did you think you might be using this theory for when you were still training in the radar school?**

- I thought I'd be able to use it outside working on radios because we learned all the basics of
- 13:30 radio theory with the super heterodyne system and basic transmission. I thought there would be a job in radio somewhere even if it's just fixing up ordinary household radios.
- What about within the air force, did you know which different squadrons or units were using the air radar that you were training on and where you might go?**
- Yes, I knew they wouldn't post me to any
- 14:00 squadron that didn't have the radio system that I was trained on. My first posting as I said was Darwin to 112 Air Sea Rescue and that was Catalinas and it had LRAN and radio altimeter and IFF.
- Did you go to 93 Squadron before that?**
- I went to Narromine, yes. The only job I did there was pull a few IFF sets out of a Beaufighter.
- 14:30 **Let's move on. Before we leave Maryborough, was Maryborough an interesting place to be?**
- Yes it was a nice place. I had a chance to look around Hervey Bay and Fraser Island and it was a typical Queensland atmosphere with nice weather. It was a nice town, Maryborough, a
- 15:00 very nice town.
- Where did you go immediately after graduating I guess from that radar school and becoming a radar mechanic?**
- Ballarat.
- What happened at Ballarat? You mentioned it was the first flight you got?**
- We just finished off other practical – I think we did a bit more practical training on the LRAN. By the way, just as a matter of interest, the instructor for
- 15:30 LRAN at Maryborough was an ex Stawell Gift winner. He was the winner of the Stawell Gift, a bloke named Len Sprague. I think he won the Stawell Gift around about 1939.
- Was he still a fast runner?**
- He organised the athletics carnival we had up there in Maryborough when I was there. He organised that and he still looked as though he could run. I know that he's deceased now. I read in the paper some years ago that
- 16:00 he was deceased.
- Down in Ballarat you did some more LRAN training as you said. What else did you do there?**
- In training I only familiarised myself with their equipment. I think they had some 729 there.
- 16:30 We just finished off there. We got our first flight in an Avro Anson. We went for a flight in an Avro Anson and then we waited for our postings. I think I went to Narromine from there. I'm not sure. I can't remember now. I went to 93 Squadron – Where did I go? I went down to Somers, too, but that was more or less holding. Somers was a radio development installation unit. They had a whole lot of
- 17:00 mobile radio vans and things down there but we didn't do much work there. We didn't do much there at all.
- What did your first flight mean to you?**
- I had never flown before and to go up in an Avro Anson was quite a thrill actually. It was the only aircraft that you could look out on the wings and see them flapping. They used to
- 17:30 flap like that. The young pilot that took us up, he went out to a farm near where his girlfriend lived and he had to shoot up the farm while we were having our flight. He gave us a few thrills.
- Who was on that plane?**
- A couple of my mates and myself.
- Was there any**
- 18:00 **adverse affects like air sickness?**
- No. We enjoyed it. It was quite a thrill. Over Bacchus Marsh is where we flew. Do you know that part of the world? We flew from Ballarat over Bacchus Marsh where this young pilot's girlfriend lived and he did a few of these and we came back.
- 18:30 He allowed us to wind the undercart down for him. They used to have a manual wind down and we wound the undercart down. That was my first flight. My next one was a Catalina.



**Was there a strange atmosphere among the aircrew in the air force at that time having such a lot of qualified blokes and I guess there weren't so many jobs available when the war wound up?**

19:00 We didn't mix much with aircrew. When I got to Darwin they were on air sea rescue duties but I didn't see much of them. I think there was a lot of aircrew that wanted to stay in but they were virtually told that there was no jobs for them. There were a lot of experienced men too

19:30 and there was a lot of sitting around for aircrew with nothing to do.

**What about aircraft? What aircraft particularly inspired your imagination?**

Well Catalinas always got us. That has always been my favourite aircraft not so much of course for the equipment that's in it but for how fascinating it is to fly in one. They have got two blisters up the back and you can go up the back and

20:00 look out you can see everything. There aren't many aircraft where you can get in and look in the gun turret where the blister is and see right along the aircraft and have a good view of where you are flying. My first flight in a Catalina was from East Arm in Darwin and we went out over Kakadu. We did a lot of low flying over there too. I got another pilot who wanted to show his skill.

20:30 I only went along for the ride. I wasn't there for any radar thing but that was my first flight. And I think I remember mostly the thing that stuck in my mind was when we were coming back to land the noise of the aircraft hitting the water. It was really frightening because inside they have no lining. They have no lining and all they had was catwalks between the bottom

21:00 shape of the aircraft. And boy, when they hit the water, it's a crash!

**Their engines make an incredible noise too?**

Yes. They were Pratt & Whitneys and they made a fair bit of noise, but nothing like when you hit the water. I was with them for a while and as I

21:30 said I got that call. The radar officer asked me if I had any experience on LRAN and being a big mug I opened my mouth and said, "Yes."

**Just move me up to there 93 Squadron. Where was that that you went for a short time?**

Narromine.

**What was going on there with the Beaufighters?**

They were coming back from most of their islands and stripping them. I can remember taking

22:00 IFFs out of them. They had a detonator in them but the armourers always removed the detonator first. They had a destruction detonator in them in case they ever crashed in enemy territory. They had a toggle switch there which was supposed to explode and destroy it. So the armourer always had to take the detonator out of the IFF and then we just

22:30 removed the sets. They were only about that big. They were about the size of a butter box.

**What controls did they have?**

They didn't. They just stored them.

**What was happening to the Beaufighters? Were they being scrapped?**

Most of them were I think, much to the disgust of a lot of people. I can always remember there were a lot of

23:00 Mosquitos there too. There were a heap of them. Some of the Mosquitos hadn't even flown or hadn't even done any service at all and they just ripped the engine out of them. They were brand new aircraft.

**They chopped them up for firewood?**

Virtually, yes.

**Was it depressing for you?**

Well I suppose it was.

23:30 Nobody likes to see brand new aircraft being destroyed but it was going on everywhere. Even all over the [Pacific] Islands they were pushing aircraft into the sea and dumping aircraft engines and everything. The Americans had this system that was

24:00 lend lease. Anything that was lend lease got dumped, although these Beaufighters weren't lend lease, they were Australian made, but they still destroyed them.

**What was the atmosphere like in the general Australian society at that time waking up after**

### **the war and changing back from a war time footing?**

I think it as mostly relief. Nothing really

24:30 changed, like rationing. All of a sudden everything didn't become available. Petrol was still rationed and clothes were still rationed. I think the main thing was that everyone was relieved and knew their son or their daughter or their father was coming home. Everyone was talking about discharge. Everyone in the air force was talking about discharge. It didn't matter where you went. When I went to Darwin no-one was interested in flying

25:00 aircraft, everyone wanted to go on discharge. It came right down to the cook or the lowest. It was, "When is my discharge going to come through? I want to go home." That's all you ever heard. Actually the air force was pretty disorganised in 1946.

### **In what way? What criticisms can you make about the air force in '46 and the way it was operating at that time?**

25:30 Nobody cared about anything really. And I felt the brunt of it later when I was out on Bathurst Island. We couldn't get sense out of anybody or couldn't get service. We couldn't get anything. It was disheartening. It almost came to a desertion on one of the other islands. They were even threatening to desert the island

26:00 unless they could come up with something.

### **What was morale like in Darwin when you arrived there?**

It was all right amongst the few air force blokes that were there. Most of the air force blokes - We were out at East Arm, I wasn't in the main 'drome, and there were a little clique of air force people. They were still servicing their aircraft and most of them were reasonably happy from what I can remember of it.

26:30 Things were still fairly crude and most of them were living in tents and huts. Morale didn't seem to be too bad amongst the people that I mixed with. All I can say is the organisation was deteriorating rapidly.

### **You described Darwin earlier as being a bit like**

27:00 **a war was almost still going on. There was lots of activity and destruction?**

All the buildings were still in ruins and everything was - there was nothing there. There was no beer. The hotels had all run dry. The hotels would be without beer for weeks sometimes. The wharf labourers would go on strike. As soon as the beer ship came in the wharf labourers would go on

27:30 strike. And as soon as they had enough beer unloaded they would go back to the pubs and drink to make up for the lost time. Then they'd come back and unload the ship. They later woke up to it and they put the beer load - Everything came up from the southern states and nothing was produced in Darwin. No food or anything was produced in Darwin. No bread or milk or anything it all came up.

28:00 They might have baked bread in Darwin but everything else like milk and fresh vegetables and meat were all shipped up to Darwin. They woke up to the wharf labourers in the end and they put the beer at the bottom of the load in the hold and then stacked everything on top of that. So when the ship came in they had to unload all the other stuff. I can always remember that. I can

28:30 remember it being a tough time. All the crocodile hunters would all come back into town because crocodile hunting became a pretty big thing in those days. There were a lot of people up for the war surplus sales that were going on in Darwin. Trucks and everything like that were being sold.

### **Where were you based in Darwin?**

29:00 East Arm.

### **Can you describe that for us. What was there?**

It was just a typical camp with tents and basic huts. It was very crude. You had to go to the toilet at a certain time of the day otherwise you'd get your bum burned off. I can remember going when I first went there and I didn't know. I went to the toilet and sat down and that was

29:30 just when they were burning. There were trenches. They had these toilet seats all along these trenches and at a certain time of the day they burned them. I nearly got caught there one day. I can't remember much of East Arm because I wasn't there that long.

### **It was 113 Air Sea Rescue?**

30:00 112.

### **112. Sorry. It was a Catalina squadron?**

It wasn't a squadron; it was a unit. It only consisted of half a dozen aircraft and they were there for air sea rescue. They did other things too, but mainly it was air sea rescue standby.

**With Catalinas it must have been on a harbour?**

Yes.

**Can you describe that for us?**

30:30 **Where did the aircraft sit?**

They were moored just off the shore there. I suppose we had about half a dozen then and also crash boats, the 02 and the 08 crash boats. There were a few barges and a few maintenance workshops.

**Were there**

31:00 **hangars to work on the aircraft as well?**

No. We could pull the aircraft up into a sheltered area, yes.

**What was your job there. You are now a qualified air radar mechanic, what did you have to do?**

Mainly finding out what was required really. There were a couple of other radar mechanics there too who were there before me. They were sort of showing me the

31:30 ropes.

**What equipment did the air sea rescue Catalinas have that you worked on?**

They had the radio altimeter and LRAN and ASV, an ASV that I hadn't worked on. It was a different ASV and some equipment I hadn't worked on at all.

**What was different about the ASV that the Catalinas had?**

32:00 It was an English version that was made in England; it wasn't American. Basically it was the same as the 729. I didn't get much work on it.

**Were they busy? Was there much work for them to do in Darwin at that time?**

No. They were virtually waiting for a call really.

32:30 They were doing their inspections as normal. Like the air fitters and the air frame fitters and the engine blokes they'd be still doing their routine maintenance work the same as the radio blokes but they weren't overly worked.

**What else was going on in Darwin then? Was there anything else exciting at that time for you?**

Probably the

33:00 disposal sales. There wasn't much exciting in the town.

**What were the disposal sales?**

They were sell wartime surplus like radio equipment and trucks and aircraft pieces and boxes of things that they didn't even know what was in them. People were buying cases of spares not even

33:30 knowing what was inside them. Some of them were real lucky dips when they bought them and some of them were a bit of a shock.

**Where were these sales held?**

In Darwin not far from the airport.

**Why did you go along?**

I bought some radio equipment actually. I bought an old

34:00 AT5AO8 transmitter and receiver. I was going to get into the amateur radio side of it. The receiver wouldn't have been bad and the transmitter, it could have been converted to the amateur bands. I was going to do a bit of amateur work when I came home. I had it shipped home down to Sydney. I bought that for a song.

**Was it difficult for**

34:30 **you being up in Darwin? The atmosphere was pretty different from where you'd grown up?**

No I don't think so. It was a tough town and a rough town and the people who were living there, like the ones who had come up to take over the town again, were pretty tough. Most of them were crocodile shooters and people who'd come for the sale. I can always remember a crocodile hunter staggering out of the hotel. I was telling Elizabeth one

35:00 day. I was walking down the main street in Darwin late in the afternoon and a drunk crocodile hunter came staggering out of the hotel and he had his pet crocodile on his shoulder, carrying it. It was a pretty

tough town.

**What contact did you have with the Aboriginal population?**

In Darwin?

**In Darwin.**

None. We had no contact at all with them.

**Were there many around?**

35:30 Yes, they were everywhere. They were around but I had no contact with them. I never had any contact with them until I went out to Cape Falkroy.

**What happened then for you? How long were you with the 112 Air Sea Rescue?**

About a month.

**Can you explain what happened at the end of that month?**

Well as I said the radio officer came there one

36:00 day and asked if I knew anything about LRAN. I said, "Yes, I did LRAN on the course." He said, "Ah, I want you." I said, "Why?" He said, "We've got to get a replacement out to Cape Falkroy in a hurry." I said, "Why?" He said, "There's a chap out there that's got to be taken off. He's taken ill." I had to be down at the wharf at five or six o'clock in the morning

36:30 to pick up a lugger, a pearling lugger it was, with all my gear to take me over to Cape Falkroy. And that's what happened. I spent the day chug, chug, chugging over to Cape Falkroy. It was I suppose a hundred miles or a hundred and fifty mile trip by sea.

**Bathurst Island, is that Cape Falkroy?**

37:00 Yes.

**Can you describe what your first impressions were of arriving there?**

I didn't know what it was all about really. There were a couple of RAAF blokes there that had been there a little bit longer, before me. One was a flight sergeant and he was in charge of the place. He was a radar operator but he was still in charge because of his rank. And there was a Fitter

37:30 DMT, a Fitter Driver Motor Transport called Bluey. They welcomed me and just sort of showed me around the place and showed me where my tent was and basically what there was in the station. I went in and had a look at the transmitter and the LRAN equipment which was in

38:00 a supposedly air-conditioned room but the air conditioning didn't work too good. I had a look at the basic camp where we ate and where we were going to live. I had no idea. When I went up there I thought I would only be up there for a few weeks. I thought, "I'll relieve this bloke and I'll be relieved myself." I ended up being out there six or seven months.

**38:30 Who was on that island with you?**

A chap named Hewlett, Joe Hewlett, Flight Sergeant Hewlett. He was an operator. Another bloke, I can't remember his surname now, he had to be taken off after a while because he went a bit funny. I can still remember him as Blue. We used to call him Blue but I

39:00 can't remember his surname. But Joe Hewlett, I can always remember Joe because Joe was a terrific bloke.

**So there were three of you, is that all?**

There were three RAAF men and then there were half a dozen natives. Three were actually employed by us and three were hangers on.

**What was your introduction to them?**

Quite all right. They were very good. They were a very

39:30 happy type of native. They were very happy. There were a couple of the elders who were a fair age. One was named Tipperary and then there was another one, Raymond, he was only about seventeen. Jacob was another one and who was the other one? Ray, I think, but I can't remember now.

40:00 They were very happy. I wouldn't say they were good workers but the air force gave them tobacco and basic rations to help around the place. They swept the mess out and made our beds and we gave them another

40:30 extra few bob to do our washing and clean our tents out.

**We'll take that as the cue to stop because we're just out of tape.**

## Tape 5

00:30 **Can you describe for me I guess the layout of Bathurst Island and where the facilities were?**

The station was right on a tip of the cape. They called it

01:00 Cape Falkroy but actually it wasn't Cape Falkroy it was actually Cape - it was a cape further north. Cape Falkroy was used as the name because the wartime 38 radar was stationed at Cape Falkroy. But the LRAN was another 8 miles further north and they

01:30 still retained the same name so it was a bit confusing in location. It was right near the mouth of a river and there was a reef that extended right out. You could almost walk out quite a way at low tide. There were fairly sandy beaches and a lot of growth,

02:00 fairly thick growth and trees. It was a nice spot actually for a holiday, a short holiday. There was nothing there. There was nothing on the island. There were no houses or anything. The nearest habitation was the mission station which was about 80 kilometres away on the southern side of

02:30 the island. But all the time I was there I never saw one person from the mission. They never came near us and we never had time to go around there for anything. The only way you could have got there would have been by - we had a Duck [amphibious vehicle], a Duck, and we could have got around there but that would have been at least a day's trip to do it.

**So what**

03:00 **buildings did you have such as accommodation and places of work?**

We had American bell tents for sleeping in. There was a mess hut with just a normal cement floor and fibro walls and a fibro roof. That was the main mess hall. When the Americans who built these stations were there they had a crew of about

03:30 fifteen to twenty because they operated twenty-four hours a day. They had cooks and drivers and bottle washers besides the radar people who would run the station.

**You had a mess hall?**

When you call it a mess hall, it was only a large hut really with a cement floor and a table down the middle of it.

04:00 **Did you have a roof or house or place for the radar?**

The camp was about 400 or 500 metres away from the transmitter. The transmitter was down on the water's edge right on the tip of this part of the island.

**Could you just describe to me the layout of that?**

The transmitter?

**Yes.**

04:30 From my memory I think it was fibro as far as I can remember and it was partly sunk into the ground, like built into the ground. It had been excavated and it was built into the ground I suppose for protection, for bomb protection. It had been air conditioned. It wasn't air conditioned for the operators, it was air conditioned for the equipment.

05:00 It had two transmitters and two what they call LRAN timers, the equipment that did all the timing, and a few operating benches and that's all. There wasn't much in there. There were a few maintenance benches and a diesel hut about fifty feet away with two Cummins

05:30 diesels, two large Cummins diesels were operating the transmitters.

**You mentioned the Americans were running twenty-four hours, what was your time frame?**

When I went out there we had come back to daily operations. After being there for some months we came back to one day a week or on

06:00 request. Quite often we got a request to operate on a particular day.

**Forgive me so I can understand, why were you there at Bathurst Island?**

Why were we there?

**Yes.**

The main reason - What happened originally was the war ended and the Americans said, "Well, the war

is over. We're going home." The RAAF apparently said,

06:30 "No. We want the system to keep going because we've still got a lot of aircraft in the area," and they did. They had all the POWs [prisoners of war] to bring out from the Pacific area and they had the occupation of Japan, the, the BCOF [British Commonwealth Occupation Force] operation. At 86 Wing at Schofields where I finished up the next year they were flying three aircraft to Japan a week plus all the other flights to Singapore and surrounding islands.

07:00 So the air force still had plenty of aircraft in the air flying in that area and they still needed LRAN for flights over the sea. I believe, I didn't see them, but I believe the Liberators were still flying from Exmouth Gulf across to Ceylon and they all flew on LRAN across the Indian Ocean.

**So as far as operating you were saying**

07:30 **it was day time and then once a week, is that right?**

Yes.

**So the system would run automatically by itself?**

Once it was set up you could let it go and it would run itself really. All you had to do was check the phasing of the incoming pulse. It's got to be phased in with your own pulse which is going out. There had to be a time difference between the two. There had to be a definite delay. There was a delay in the pulse coming from the master station and then we had to

08:00 add a further delay. So that delay was the same no matter which LRAN chain you went; that delay was always the same. There was always a difference in distances and the difference in time was made up with delay circuits. When you come to the receiving side the two pulses from the master and the slave station were set up one underneath the other and there were two traces. The top trace

08:30 represented that distance from one station to the other and then with the pulse underneath the slave station that was starting from zero so the time difference could be measured. I don't want to get too technical, but that was the reason for the delay.

**Okay, so it can**

09:00 **set up and run itself. But as far as your work and your involvement initially, what hours were you working in respect to the station?**

I'd get up early in the morning and go down and switch everything on and make it work. You had to do that. It had to be there in case it was required. You always had to go through the timer and do all the LRAN timer checks.

**So you were switching on the whole system**

09:30 **or you were just switching on aspects of the system?**

No, I was switching on the whole system and checking it out.

**So the system wouldn't run through the nights?**

No. Before I went there they were doing twenty-four operation and then they came back to daylight operation and then they came back to one day a week operation and after that it was on request. We couldn't get anyone out there. They didn't have anyone to send out there.

10:00 **As far as other personnel?**

Well relief personnel, you know, to relieve us from our duties or somebody to take over another shift. They didn't have anyone. They were still trying to keep this chain going.

**If you would talk me through a day when you are actually working on the system, what you'd do from waking up to the end of the day?**

The first thing would be to start the transmitter up and do all the alignment and let it

10:30 run. Then I might go back and have breakfast. Then we'd decide who was going to sit there all day and watch it. It would either be me or Joe, or we could even put the driver in there because we taught him how to do the fundamentals and what he'd have to do if the phasing shifted. He could sit there and do exactly the same thing. There always had to be somebody there.

11:00 Then we'd have to think about our other chores that we had to do. One of them was to go and get water. We didn't have to go and get water every day but we had to go and pump water out of a swamp about four or five kilometres away. That was half a day's work. We had an old pump at the swamp and we'd pump it into a water tanker. There might be a photograph there of the

11:30 water tanker. And then we'd bring it back and pump it up into our tanks over the top of our shower recesses. The islands were provided with a water distilling set-up, but at Bathurst they decided not to put that one in because they thought there was enough water there in the swamps. But both Sir

Graham Moore Island and Champagny Island they distilled their water from the sea.

12:00 They had no choice. The other thing was mainly doing our own normal working on the trucks. We had bad refrigeration and we had bad lighting. When the Americans went home they left everything. They left everything as it was and they never fixed anything. They had an attitude of if it breaks down you just get another.

12:30 There were a terrible lot of things there that were U/S [unserviceable] and nothing worked. Even the transmitter, we found some funny things in the timers in the LRAN equipment and some of the funny things that they did. The main thing was none of the trucks - all the trucks we had were in a bad condition. Some of them only had a couple of gears.

13:00 We got our fish trap going because we needed more food than what we were getting sent out and barramundi kept us going for a fair while out of our fish trap. We looked after the natives there. If they had a few problems we tried to help them out with some of their problems, mainly their health problems.

**What sort of health problems?**

13:30 They had sores and things on their feet. They all had the big tummy, the large tummy. We gave them medical supplies and bandages and some of our own medicine which we thought would help them. It was only the ones that worked there, not the general ones that would come. We had a few hangers on that used to

14:00 come. We tried to keep them clean and make them shower and have a wash. They were handling our food and our things so we were trying to keep their hygiene up a bit.

**There is a photo of you and a couple of islanders there - Jacob and Ray?**

Yes.

**Can you tell me something about**

14:30 **them?**

They were very loyal and very happy-going people. They were always laughing. They were very happy. Ray was like a typical teenager, like an ordinary white teenager. He was into everything and everything was a joke and he was very happy-go-lucky. They were part of the Tiwi

15:00 tribe which is on both Bathurst and Melville Islands. They were very, very happy-go-lucky. They would do anything for you. They were all a bit lazy and you had to drive them at times but they would do anything for you and were very loyal. We never saw their families. They never stayed in the camp at night. They all disappeared off down the track. Where they

15:30 lived we still don't know. I don't know where they went they just disappeared into the night. They never brought their family near us. The only ones that they brought near the camp were some of their children, some of their younger children. You've seen some of those photos. I never saw a lubra all the time I was there.

**So fellows like Ray and Jacob they'd do odd jobs around the place?**

Yes.

16:00 They'd light the fire - we still cooked on a wooden fire at times - and they'd sweep the mess out. They'd make our beds and sweep our tents out and do general jobs on the trucks like refuelling and changing a tyre. They could even change a tyre and change a wheel. They could do things like that. At anything where they didn't have to use their brains too much they were pretty good at.

16:30 Generally they were just like general roustabouts really.

**How would you pay them for their work, in food?**

The air force paid three of them with tobacco and some rations, which was mainly flour and a bit of rice, and they might give them a couple of cans of bully

17:00 beef. But the air force never paid them. And we paid them I think two and six or five shillings out of our own money to do our odd jobs.

**Who were the three other fellows?**

There was Raymond, Tipperary and Jacob. They were the three official ones. The others, I can't remember their

17:30 names, but they hung around and helped sometimes and did the odd job. I think they just hung around because the other three were there.

**So how long were you on Bathurst Island?**

Right up until December. I went out there in April and was there until December.

**The changeover from days of the LRAN system to one day a**

18:00 **week when did that actually happen?**

I can't remember now.

**What did you do with yourself when they cut back on the activity?**

There was always something to do. We'd go for trips around. We went down to the old radar station site once. I remember going down there. Joe took us down there because he was stationed there. Joe, that's the radar operator, and the flight

18:30 sergeant. We drove down there once on a track we found. It was still driveable and we had a look around the old radar station. And we went exploring. We explored the island as far as we could. We went inland and we either went in the GMC [General Motors Corporation] truck we had or we went in the Duck. You could go almost anywhere in one of those Ducks. They were four-wheel drive and if you came to a swamp or

19:00 anything or you came to a river you could cross it all right.

**What animals did you have to watch out for there?**

Snakes were the worst. There was the odd croc there but we didn't see many of those. There were snakes. There were plenty of snakes. I had them in my tent a few times at night. The worst thing was going down to turn the lights off and turn the diesel off at night.

19:30 The auxiliary lighting plans, none of those worked so we had to use the main transmitter diesel. We had lines running up to the camp and we ran our lights in our tents from the main diesel. But somebody had to walk a quarter of a mile down the track and turn it off at night and then walk back. I can remember walking back at night with a torch and it was quite common to find a

20:00 snake in front of you.

**Did anybody ever get bitten by them?**

No, nobody ever got bitten but it was pretty close a few times. That was the worst thing because once you'd turned that diesel off everything was black and there wasn't a light anywhere. And here you are on this pitch black island and you've got to find your way back to the tent

20:30 and climb into your bunk and close your eyes because there's nothing you can do. Once you've turned the lights off there is nothing you can do.

**So when you were in your tent, was this when you were bedding down?**

I think once I discovered one in the bed in my tent when I came back from turning the lights off. I think I heard another one when I was asleep and I was in my bunk.

21:00 **What about malaria? Was that a problem there?**

No. We took Atebrin but it wasn't a problem. We all took Atebrin and it wasn't a problem. There was a bit of hookworm there. I never went around anywhere without shoes on.

**How would the hookworm get in?**

Well it is a worm that screws into your foot.

21:30 Some of the natives had it but most of them didn't complain about it anyway. It was a problem there.

**Supplies - What supplies were being brought to you?**

That was one of the main complaints about the lousy rations they used to send out to us. They were supposed to come every two weeks but at times it stretched to three weeks.

22:00 And the main reason it stretched to three weeks was they got back to only having two Catalinas. The 112 Air Sea Rescue moved from East Arm into Darwin itself onto the 'drome and they only had amphibians then. They scrubbed all the others and they kept two amphibians in at RAAF Darwin. They were on standby for air sea

22:30 rescue all the time, but if one of those aircraft went US our priority wasn't high enough to fly out and leave Darwin with no air sea rescue. So we had to wait until there were two serviceable aircraft before we could get our rations. So quite often it went to three weeks, and I tell you what, at the end of the three weeks we were scratching for food. If it wasn't for our

23:00 barramundi and a few crabs that the natives brought in for us and a few turtle's eggs - you could make a good meal out of turtle's eggs. You'd whip them up and they were good eating. We were scratching at times. We still had the emergencies. We had bully beef and we had a stack of tinned food left there by the



- 23:30 Americans but most of it was contaminated. We had tinned pork that the Yanks left there. Tinned pork, mind you, and we ate that a few times and I tell you what we were violently ill. I only did it a couple of times. The rations they sent out – We didn't have the best of refrigerators.
- 24:00 The big fridge we had was one of these mobile fridges that had been brought out because all the American ones had all packed up. You couldn't freeze anything in it. It just kept our food reasonably cool. We couldn't keep bread. Like you can go and put a loaf of bread in a freezer now and you can keep it for weeks but bread was the hardest thing to keep it from going
- 24:30 stale. And after about seven to ten days we had no bread. We had to go and make damper or try and bake some bread ourselves if we wanted to. We always ran out of meat and the rest of the food we had was mainly tinned. There were tinned pilchards. We had powdered egg and powdered potatoes
- 25:00 or something like that. We scratched there a few times to get by but complaining to Darwin didn't seem to make any difference. We complained and we weren't the only ones. The other two islands were going through the same problem and they were complaining. We complained that much that they finally decided they would bring the catering officer up on one of our daily
- 25:30 schedules. We had a daily schedule, radio schedule, with Darwin every day letting them know we were still there and we were still alive. The catering officer came up one day and starting quoting over the air how many ounces of butter we were entitled to and how many ounces of sugar. Because every person in the air force, if they have fifty airmen, they're entitled to so many ounces of everything.
- 26:00 This catering officer was quoting us how many ounces we were entitled to but we couldn't get over to him that if we ran out of food we couldn't go down to the local store and buy something. We didn't have any alternative or anywhere to go. It was not like in Darwin where you could go into the café if you didn't like the RAAF food. That caused quite a stir and even the Sir Graham Moore Island

26:30 people they were threatening to leave the place if it didn't improve.

#### **Did anything change?**

Nothing changed then but it did change later, but it took the crash of an aircraft to do it. He just quoted us what we were entitled to and said we weren't going to get any more.

#### **So what happened in respect of the crash of this aircraft to change it?**

- 27:00 First of all, while we are talking about rations, if the aircraft couldn't land they used to toss it out to us from about one hundred feet up. Our beer ration, we were waiting desperately for the half a dozen bottles of beer we were entitled to. If the aircraft couldn't land because the sea was too rough they just used to toss it out to us in sugar bags and we had to wait another fortnight.
- 27:30 Of course no mail went out then either. They didn't land so we couldn't send our mail out. There was one time they did land – I'm sorry with one delivery they didn't land with us because the sea was too rough and they tossed it out. When we came up on our schedule in the afternoon they'd
- 28:00 struck the rough weather down at Champagny. They used to go to Sir Graham Moore after us and then from Sir Graham Moore to Champagny and then fly back to Darwin. When they got to Champagny they attempted to land and they took the float off in landing and then put the wing in and she took water in. At the same time the aircraft was being swept away by the tide.
- 28:30 So the Champagny blokes chased them in their Duck and got them off the aircraft and picked them all up and the aircraft just continued on in the sweep of the tide and finally sunk. So the aircrew had to spend the night there, one night or two nights, I can't remember now. Of course all the rations were lost; they didn't get those off.
- 29:00 They had to eat what rations were still there. After the aircrew were rescued a couple of days later and went back to Darwin they let a few people know what these airmen were putting up with and from then on the rations were almost doubled. We had Salvation Army blokes flying out on the flights wanting to know, "Is there
- 29:30 something we can do for you? What else? Can we bring out hampers?" It caused quite a stir and it all came from the aircrew who went back and said, "Listen, these blokes are doing it tough and it's about time you improved it," and they did.

#### **So they didn't listen to your complaints whatsoever?**

They didn't want to know about it. We were complaining all the time about the

- 30:00 lack of rations we were getting. It was bad enough having to wait the extra week sometimes when no aircraft was available but the quality of what they sent out there was unbelievable.

#### **Besides food, what other provisions were you receiving, such as gasoline?**

Most of that was still there from previously. There were big diesel and

30:30 petrol storage there. Some of it got knocked off even while we were there. The Indonesian fishermen were always hanging around there. We had trouble with them a couple of times. They got into our diesel store down on the beach once and knocked off diesel.

31:00 We had a tent that had been opened up and split down the back and there was quite a lot taken out of it. I'm sure they were Indonesian fishermen. Our tower was a bit of an attraction. It was about one hundred and fifty foot high and you could see it from well out to sea, so any passing fishing boat would know that there was somebody there.

31:30 That's how we lost a bit of fuel too. We threatened them a couple of times. We had to otherwise they would have taken the whole place over.

**Can you talk me through some of these occasions that you took them on?**

No, it was only one time we saw them on the beach and we just fired a few

32:00 shots in the air. We had plenty of .303 rifles and we had Thompson submachine guns left there. We rattled a few of those off and they never came back.

**But they'd already taken provisions before?**

They had taken provisions, particularly at night time. They would come in there at night and take them when we were asleep. There was no way we were going to sit down there guarding a fuel dump at night.

32:30 We lost a fair bit through Indonesian fishing boats.

**Are you talking about several occasions that they came?**

On odd occasions, yes. They had even been there when we were unaware of it. We know from the missing drums and that that they had been there.

**What about the local sort of Aborigines on the**

33:00 **island, did they encounter the Indonesian fishermen at all?**

I don't know of them ever having any trouble with them. Although as I said to Elizabeth I don't know whether it goes back to the pre-war days but I never saw a lubra there. I don't know if this goes back to the pearling days, the pearling lugger days, when the Japanese used to come ashore there which they did

33:30 or it may have been the reason why they never brought any lubras around in our area at any time. I think there could have been trouble going back. I'm talking about going back years before, not possibly during the war but in the years before the war.

**So the other provisions that the Catalinas would bring in besides food?**

It was only food and mail, no. It was food and mail and that's all.

34:00 They'd land and we go out in our Duck and try and hold off. We'd have to be very careful if there was any swell in the Duck because it didn't take much to damage the aircraft if you came alongside. We'd take a couple of natives out with us to hold them off. You might have seen a few photos there. Similar to Champagne holding the Duck off. No, they never sent anything other than rations of food out. There was nothing else.

34:30 I must say, the spares, for the LRAN there were plenty of spares. We never had any worry about spare parts. We might have needed a spare part for a truck or something and they might bring that out. We might have needed a new tyre or something like that. But spares for the electronic equipment, there were spares for the spare and that's how good it was.

**Given you were obviously in a hot climate out there, what technical problems affected the LRAN system?**

35:00 Not much. We managed to keep the air conditioning going when it was operating and it worked in a sort of a way. The wet season was a bit of a problem when it rained and things like that but the gear was protected pretty well. The transmitter hut was pretty well protected.

**And you didn't get any sort of problems with the**

35:30 **rain or the heat or humidity?**

Not in my experience they didn't. Whether they did prior to me I don't know but I never had any problems.

**There is a photo you showed us earlier of you climbing the tower. What was the point of you doing that? What were you doing on that occasion?**

I was probably changing an insulator. I did at one stage have to change an insulator after a storm when it got damaged

- 36:00 and later on, after that, when we dismantled the tower. We would dismantle the towers ourselves. They were in four or five sections and bolted together with guy ropes out. I'd climb the tower to put the gin pole on to take the first section off. Do you know what a gin pole is? It is a pole with a pulley on the end. And you climb up to the second last section
- 36:30 and then you tie the gin pole to that second last section and then you feed a rope up through the pulley and tie it around the top section. And then the rope comes down to another pulley at the bottom of the tower and goes out to a jeep or a weapon carrier that we had. I can't remember which one now; it was probably the weapon carrier. Then I undo all the bolts on the
- 37:00 last section. And then they lift the top section off and lower it down. Then the next section I think I had to let the guy ropes go. I had to get rid of the guy ropes. I think they were on the second section. Then we'd just drop the gin pole down to the next section and bolt it on there and go through the same operation again until we'd finally dismantled it.

**Given it is a metal structure and it is hot out there, did you have protective**

- 37:30 **gloves or anything to wear so you didn't get burned by the heat?**

No, we just had a normal issue of clothing and that's all. They issued us with sunglasses and things like that but not with gloves or anything. They didn't expect us to dismantle the tower when we first went out there. This is something that happened later. They asked to pack it up when it

- 38:00 all came to an end. Some of the other islands didn't dismantle them because they weren't game enough to do it but we had a go at it and did it.

**Before we actually come to the packing up of the island - the fellow who got sick and you replaced, what did he get sick from?**

The one that I replaced?

**Yes.**

I don't know. I've never heard what it was. If I had to have a good guess I'd say probably

- 38:30 food poisoning if I had to guess because we all went through the same thing. At some stage or other we had food poisoning and were crook. And I suffered from ulcers after I came back from those islands. I don't know whether the ulcers were from the food or from worrying about keeping the transmitter on the air. I was only 19 then and I turned 20 out there. I had very little experience
- 39:00 but I had the responsibility of looking after those transmitters. I didn't get much technical help from the other two.

**You described earlier that one of the blokes was a bit funny. What did you mean by that?**

I think it was getting to him, the life was getting to him. That was the driver, Blue. He started acting

- 39:30 funny and he wouldn't let us drive any of the trucks. He wouldn't let us drive any of the vehicles. He wanted to do everything. He even took the rotor out of the distributor so that we couldn't drive them and kept them. In a place like that with only three of us, everyone has got to drive a vehicle. For your water run or just general running around the place,
- 40:00 everyone has got to be able to drive a truck or even drive the Duck. I even drove the Duck. By the way, I learned to drive there. I had never driven a car or a truck in my life. At my age it was very uncommon for an eighteen year old to have a driver's licence because cars weren't as plentiful as they are today. I learned to drive on a jeep and then I progressed up to the weapons carrier and the
- 40:30 Duck. I think he might have had family troubles at home. He never told us but I think that might have been getting to him too.

**We'll just stop there.**

## Tape 6

- 00:30 **What did you do to pass your spare time on the island?**

I did a bit of swimming and exploring the island a bit and a bit of fishing.

- 01:00 There wasn't a lot you could do really. They did leave a good library of books, of paperbacks, which a lot of good stuff. I studied too. I decided I was going to do my Leaving Certificate by correspondence and I did a bit of study for that.

- 01:30 I listened to short wave radio a lot. We had an SX28 Hallicrafter receiver which was the Rolls Royce of all the communication receivers in those days. I had one of those in my tent. There were a couple of

spare ones and I put one in my tent. I used to listen to Radio Australian and the Voice of America, which was the army version of Radio Australia

02:00 to entertain the troops that were still in Japan and all those other places. When I say we played - we played football with the natives. We kicked an old football around and things like that. The natives took us to some of the best places for crabs and for spear fishing. They spear fished for us.

02:30 They stalked the fish and speared them. We went on some of those sort of trips. We didn't have a lot of time. By the time we got the transmitter going in the morning and came back and did our few chores around the place we didn't have a lot of time. We couldn't go far anyway because there were no roads to go anywhere anyway and no tracks to go anywhere.

**How boring was it?**

03:00 It got boring at times, particularly at night. And of course the only people you ever spoke to were the other two airmen. Luckily Joe was very entertaining and a very interesting bloke and a bloke that could fix anything and do anything. I don't think I would have stuck it out there as long if he hadn't have been there. He was

03:30 a very entertaining bloke and a very jovial sort of a bloke. He is deceased now. If I knew how he died he probably died of cancer because he smoked one cigarette after another and that goes back to the days when he was operating on LWAWs during the war.

04:00 We did a bit of fishing and a bit of swimming but not much, and the rest of the time we were trying to fix things and make things work. A lot of things still didn't work. The Americans had everything. They even had an electric washing machine there and an ice bubbler. None of them worked because they had all been trashed and were broken down, but they had a lot of conveniences - even an electric washing machine.

**04:30 In what way did the isolation affect you?**

I think I got a bit introverted. I think I got a bit shy and quiet. I noticed it when I came back from being up there. My

05:00 girlfriend stopped writing to me. That disturbed me a bit. She obviously found another boyfriend I suppose. It gave me a good education anyway.

**When people speak of 'going troppo', is that something you can understand from your time on Bathurst Island?**

It didn't happen to me.

05:30 I don't think I went that way. I know the driver did. He went queer and did silly things and stopped talking to people. He wouldn't talk to us and things like that. I don't know if that's 'going troppo' or not. I don't think it happened to me.

**What did you put Blue's behaviour down to at the time?**

Just being out there too long.

06:00 He just couldn't stand the loneliness of it. Joe and I mixed well. I didn't side up with Joe and make him my friend but not the other one. We were all three fairly - The conversations between Joe and myself were different to the conversations with Blue. He'd be talking

06:30 trucks and cars and things like that whereas Joe and I were interested in other things. He might have felt a bit out of it but I don't know.

**What did you do about that situation when Blue started behaving in that way?**

Joe had to report it. He had to report it on one of his schedules. He also made a recommendation that he be removed from the island.

**07:00 What happened?**

He was removed. We had a replacement for him sent out in a couple of weeks. I can't remember how soon but he was replaced by another chap.

**What was the chain of command between the three of you? Did Joe outrank you both?**

Yes. I was a LAC, leading aircraftsman and he was a flight sergeant and he was in charge of the station. There's no doubt about that.

**Was he a good leader in that respect?**

He was excellent.

07:30 He was good, yes. There was no, "I'm the boss." There was none of that. He had a good way of treating everyone.

**With just the three of you out there how important was it to get mail?**

Very important. And newspapers, too, to see what was going on because we had no

08:00 news of what was going on. We had Radio Australia on which we got the ABC's news and things like that, but newspapers were also important. I was very keen on seeing how my team in Sydney was going, St George. I wanted to know the results of the football matches and things like that. Letters and newspapers were very important but when you got them they were always a fortnight old, of course. The newspapers were more than a fortnight

08:30 old and the letters were probably three weeks old.

**Who was writing to you and who were you writing to?**

Mainly my mother and my brother and I had one girlfriend who was writing a few times. She was an ex school girlfriend.

**When you say she stopped writing, did she explain the situation?**

No, she suddenly stopped writing altogether and I never heard from her

09:00 again.

**You mentioned before a bit of resentment with being put out there and in a sense being forgotten by the air force, is that what you were getting at?**

Yes. First of all I don't think the air force knew what was out there. The people who were in Darwin, none of them had ever been out there. I don't think they realised how complicated and how big the

09:30 system was out there. The people we had to deal with didn't understand our problems. They just put us down as whingeing airmen when we complained about things. To tell you the truth, why I know they didn't know what was out there is on today's values each station would have been worth

10:00 millions of dollars today. There was millions of dollars worth of equipment there and they had no idea what was out there, the RAAF. The Americans went home and the RAAF sent these people out to train with them and learn how it operates and then the Yanks went home and the RAAF took over. But the people in Darwin had no idea what was out there, no way, and how

10:30 complicated it was. When we finally heard that we were going to pack up - this is to show you how much they knew. A radio officer came out on one of the Catalinas and he came out to work out how much bulk we had for the shipment back to Sydney. He brought an exercise book and a

11:00 fifteen-inch ruler with him. He was going to measure up the sizes of the equipment to go back on the ship. That's how much he knew about what was out there. I think he got a bit of a shock when he got there. He threw his ruler away.

**What visits did you get during your time out there?**

11:30 I don't think anyone came out. I don't ever remember any air force person coming out. The Salvos [Salvation Army] came out on some of the trips and asked if they could do anything for us. They never got out of the plane. As we were taking our rations off them they just talked to us and asked if they could do anything for us, which they did. They were good for sending out parcels and things like that. I can't ever remember getting any

12:00 RAAF out there at all until they decided they were going to pack up and then a couple came out to see what was involved. We had the navy visit us. They had to come and see whether they could get the LST [Landing Ship Tank] up on the beach or not. They sent out a corvette, I think it was, to do some depth sounding to see if they could get the

12:30 LST up on the beach, which they found they could. They never stayed. They only came for a day and went. We never had anyone come and stay overnight.

**Was the job you were doing a worthwhile one do you think?**

I think initially it was, yes. I think when they were flying it was then. But you never knew whether any one was using it or not.

13:00 You were sending out this LRAN system but you never knew whether an aircraft was using it. I assume it was still being used because we often got the odd request for it to operate that particular day. Obviously some aircraft were flying out over the Indian Ocean or somewhere doing something.

**What happened when the**

13:30 **order came to pack up? Can you explain that situation for us?**

We were pleased. We were probably given nearly a month to pack it all up. We even made our own packing cases out of the transmitter hut. The transmitter hut was lined with a lot of timber that we could use to make packing cases up.

14:00 We stripped it all down and packed it all up ready to be loaded when the LST came.

**When did it arrive?**

It was somewhere near the end of November.

**What happened then?**

Well the navy did most of the loading. We didn't

14:30 do that. They did all that. They took it all out by barge and lifted it on. They did all the heavy work and lifted all the diesels off their foundations and things like that. They took all our vehicles. I can't remember much of that now, the packing up and leaving. I do always remember the first night on board the LST.

15:00 We sat down to our first baked dinner. I can even remember today that it was roast pork and peas, which tasted beautiful. I remember that, sitting down to our first cooked meal from somebody else.

**What were your emotions on leaving the island? Obviously you were relieved but what else?**

I was a bit sad.

15:30 We had good relations with the young natives and I think they were sorry to see us go too. They would probably end up going back to the mission station I think because there was nothing there to keep them there. It was a very adventurous - me being a young person it was a very adventurous period. There were not many young people that would have had the

16:00 same adventure as I had in that period.

**Were there any parting words or gifts exchanged between you and the young fellows?**

Gifts - we gave them everything we didn't need. We gave them all our stretchers to sleep on. We gave them all those and the tents and everything like that.

16:30 Whether they used them or not I'd be very surprised. They probably ended up being broken up or burned.

**You didn't go straight home on that landing ship though, where did you go to?**

I went to Sir Graham Moore Island. The first night as I said we enjoyed that beautiful meal. We hadn't had anything like that for a long while. We slept on the decks of the LST because it was so hot.

17:00 The LST was a British tank landing ship and it had no air conditioning downstairs. The heat was stifling down below so we all slept on deck. At about midnight we were woken by the firing of these Beauforts. I thought, "God, the war has started again!" What had happened was the barges that they had brought out, they had brought two of them

17:30 out, and one of the front doors on one of them they couldn't lock so they tied it up for the tow down to the next island. During the night it fell down and it filled up with water and they had to break the tow line off and the barge wouldn't sink. It was sitting straight up. So they decided it was in a shipping lane and they'd better get rid of it so they started

18:00 firing these Beauforts to try and sink it. They didn't tell anybody. They just went ahead and did it. That was a pretty adventurous few weeks we had with the navy. It was six weeks we had with them all together.

**What were conditions like on the landing ship?**

Pretty good. I thought they were good. You mean the meals and things like that?

**Your accommodation if you like, can you describe that?**

The accommodation was pretty

18:30 crude. You wouldn't sleep downstairs. It was only hammock accommodation in the hot cabin rooms. But upstairs on the deck was quite good.

**What did you do to pass your time on that journey?**

I mostly read. They made us do duties. They didn't use us as passengers. They made us do normal duties. I had to work in the galley a couple of times and

19:00 I even had to wait on the petty officers. Joe had petty officer status because he was a flight sergeant. He ate there; he didn't eat with us. We ate with the normal lower ranks. A thing that amused me, and one of the things I've never forgotten about, was when I was working in the petty officers' mess and it was an ex

19:30 British ship. Apparently they had a big distinction between chief petty officers and petty officers

because in the mess they shared one table along the length of the mess and it had a dividing curtain that came down between the two, over the top of the table. I said to one of the Australians, because the Australian navy weren't using this, I said, "What's that dividing curtain for?"

20:00 He says, "That's because the chiefs eat there and the petty officers eat there and that's the dividing curtain."

**Were there any other funny things about the navy and the way it conducted itself?**

No. We got into a lot of trouble on this trip but I wouldn't say it was funny. We got fresh fish when we got down to Sir Graham Moore Island because they used

20:30 hand grenades and the old method of killing fish with hand grenades. Fish was fairly plentiful down there and they got plenty of fish from hand grenades. One of the crew - the skipper got dysentery and they had to fly a doctor down to him. He broke out with dysentery, the skipper, so another Catalina came down while we were there and brought a doctor down and

21:00 treated him. I think there was a fair bit of dysentery on the boat. It wasn't only the captain, there were a few of the other crew. We didn't have any trouble. At any rate, we loaded Sir Graham Moore up and they got up on the beach there I remember. And we loaded it up over time and we headed off for Champagny Island. Somewhere between Sir Graham Moore Island and Champagny one of the crew broke his

21:30 leg. I don't know how he did it but by the time we got to Champagny we had another Catalina coming down to pick up this sailor with a broken leg. We hadn't finished the pick-up trip yet and we'd already had two Catalinas flying out to do rescue jobs.

**Just before you get to Champagny, what was on Sir Graham Moore Island? Can you describe that?**

22:00 It was fairly barren and rocky and it was a fairly desperate sort of an island. It was just off the coast from Truscott, I don't know if you know that part of the world, or the Bonaparte Cape there. It was just off the Cape. It was fairly barren and there was nothing really there. It had a bit of a sandy beach but there was nothing on the island really.

**What did you see of the**

22:30 **LRAN set up there?**

It was just a repeat of where we were although it had more gear. It had been the master station and it had four transmitters and two timers because you'd have the pulse to each slave station so they had double the equipment. All the gear was the same. The mess huts and the tents were all identical. Everything was identical. Their conditions looked as though they were in bad a condition as ours. They were all falling

23:00 apart.

**Had they dismantled their gear?**

They hadn't dismantled their mast. They had left that for us. They hadn't packed all their gear in packing cases like we had. A lot of it came back on board unpacked - just the transmitters with loose packing around it.

**What were the guys that were working on**

23:30 **Sir Graham Moore like? Were they the same ranks and situation as you?**

It was the same, yes. They had a flight sergeant in charge but I can't remember his name now. One of them, the other one, the technician, was on my course or a course behind me. I've got a photo of him there. Les Hubbard, he was the technician. I don't know the driver, I can't remember the driver, but they only had the three the same as we did.

**Was there any native**

24:00 **population or people to help them as there were for you?**

No, I believe they didn't have any. Yes, they did. They did have a couple, I'm sorry, they did have a couple. Champagny didn't have any.

**What happened when you got to Champagny? Can you again talk about the third island and what was on that?**

Well Champagny was desolate. There was no vegetation on it at all. It was all

24:30 rock. It was like going to Devil's Island. It was just an outcrop out in the middle of the Indian Ocean. I felt sorry for those blokes because they had the worst island and having no vegetation and having nowhere really to go. All you could do was go around the rocky island in your four-wheel

25:00 drive or your Duck, your Duck. All they could do was the same thing as we, fish or swim or something like that.

**What happened when the Catalina arrived? Did it just land and take the sailor?**

Yes, they got him on board and took him back to Darwin.

- 25:30 Other than that it was an uneventful loading. Champagne wasn't any problem with loading. We were there for a couple of days or two or three days. I can't remember now but it must have been about three days. It would take about two or three days to get it all on board. Then we headed back to Darwin.

**You showed us earlier some of the information you had**

- 26:00 **involved an account of the people on Champagne Island. How did you come across that? You were telling us before about the blokes on Champagne?**

How I got in touch with them? I decided that I would like to write a history of LRAN in Australia because I got involved in it later in my air force career too. Nobody seemed to know anything about

- 26:30 LRAN. Everybody you spoke to they'd say, "What's that?" even within the air force. I said, "Well one day I'll write a history of LRAN." Another thing that annoyed me is when I applied to [Department of] Veterans' Affairs for a couple of things of course they looked up in your records. And I got the answer saying,

- 27:00 "You were never out there. You were never there." I said, "What do you mean I was never there?" "You were in Darwin." I got the answer, "You were in Darwin. Your records show that you spent nine months in Darwin." I said, "No, I spent very little time in Darwin. I spent my time out on the islands. They said, "We've got no record of that." The trouble is, if you were stationed in places like Darwin or Townsville, and his happened a lot with radar people, and then you were

- 27:30 attached away to an island, there was never any record kept of the attachment. So they had no record of you even being there. So I had to write several explanations saying I wasn't in Darwin I was on these three stations. It came up again when

- 28:00 I applied for the ASM, the Australian Service Medal, the ASM 45/75. I got the same feedback. "No, we've got no record and you're not entitled to it." I said, "I think I am entitled to it." They brought out the regulation and of course there was nothing mentioned about LRAN in the regulations. It mentioned it everywhere else like East Timor and some of the islands out in the Arafura Sea and places like that where a lot of the

- 28:30 navy staff and that. A lot of people did a lot of operations around that area in 1946 and the dates they had was the 15th of August, the end of the war, to some time in December in 1946. I said "Well, we were entitled to it as much as any of these other people were because I think we did it as tough or tougher than some of the other people who went round moving naval ships and things."

- 29:00 Anyway I took it up as a challenge and I finally convinced the medal people or the authorities that these men were entitled to the ASM 45/75. And they are now receiving it.

**In your correspondence with the other people you spoke to in doing that research, did you come across**

- 29:30 **stories of their time operating on islands that were interesting and worth recounting here?**

Yes, I've got copies of it there. A lot of it was put out by Horrie Fenton, who was a researcher in radar. He put out a lot and he also did a research on LRAN but he couldn't find anybody who'd been to Bathurst Island until he told me he met me. And he put

- 30:00 out a thing on LRAN that covered Champagne and Sir Graham Moore and he had a lot of stories of those men who served on those islands during that period. I've got some of the copies of some of the stories here. They are very similar to our story in the way that they were treated. A lot of those men were there from the early days and some of them were even there with the Americans when they were training them. They had the same problems, the same problems with

- 30:30 rations and lack of recognition.

**What was going to replace the system that you were dismantling?**

Nothing. The only navigational aid over the water was, well, they had radio compass. Most large aircraft had radio compass and of course they were still using the astro navigation system by the stars if they were flying at night. That is up in that

- 31:00 area, in the Pacific area. They still retained the LRAN from the Philippines on to Japan. That system was kept going because that's how most of our aircraft flying to Japan still flew, with the LRAN system. In fact they wouldn't fly without it across the China Sea and those areas.

**Where did you end up on this**

- 31:30 **journey, on this landing ship?**

I stayed on the ship right through to Sydney.



**What was the route you took?**

Back to Darwin and unloaded some vehicles there. I don't know why they went there. I don't know why they were offloaded but it caused a strike in Darwin. The wharf loaders went on strike because the navy were unloading vehicles and taking their work away from

- 32:00 them. So they had to let the wharf labourers come and unload the ship and unload the trucks. We were there for about a week I think and then we came on to Sydney across the Gulf. That's when the fun started. They were a terrible ship to sail in because they had a flat bottom.
- 32:30 They were made with the flat bottom to get up on the sand when they landed. When we got into the Barrier Reef we struck something in the Barrier Reef and put a hole in it and took on water and the thing started to sink. So we finally made Cairns all right with all the pumps. They had a whole heap of pumps going and we made Cairns.
- 33:00 We stayed in Cairns for about three days while we waited for some more pumps, bigger capacity pumps, to be flown up from the south. When they got these pumps installed they decided that they would go on to Sydney which we did with these pumps going madly all the way down to Sydney. We made Sydney all right and they started to unload the
- 33:30 ship and it was still taking in water that much that they only got it half unloaded and had to race it over to dry dock because it was sinking. It would have sunk in the harbour. Anyway, when they got it up into dry dock it had a hole in it big enough for a man to crawl through. So the gear could have easily gone to the
- 34:00 bottom, the whole lot could have gone to the bottom of the sea in the Whitsunday Passage or somewhere up there.

**You said in today's terms it would be very expensive this equipment, what was it going to once you returned to Sydney?**

It went to the stores depot, 6 Stores Depot. It went into store because the RAAF had ideas that they were going to reinstall it on the east coast of Australia.

- 34:30 I went to other squadrons after that but when I was at Richmond I got called in to take over the job of reinstalling it, of reconditioning it and reinstalling it. By then I had risen to the dizzy heights of flight sergeant.

**So you came across the same equipment again later on in your career?**

I had to go down to the stores depot and identify it. They had no idea. They had no paperwork and they had no idea how much.

- 35:00 All they had was so many boxes of LRAN and no itemisation. I had to go down to stores depot in Sydney and identify all this gear to have it shipped up to Richmond for reconditioning. That was in 1951 I think.

**We'll touch on that when you did reinstall it a bit later.**

- 35:30 **It seems a strange choice of ship to do this job, an LST. Did that ever occur to you at the time?**
- No. It had to be a ship that could take in bulk. The idea the ship was to come up on the beach. That was the idea. The navy had only just taken these LSTs over after the war. They were Pommy and I think some of them had even been in the D-Day landing in Normandy. I think some of them might have even been
- 36:00 part of that. The idea was to run up on the beach and open the doors up and drive all the trucks in and drive all the gear in to load them. Any other ship would have had to probably stay even further out to sea and we'd have to bring it all there. There were no wharves or anything. We didn't have a wharf to bring it out and winch it up on board.

**So apart from the hole in the hull it worked in**

- 36:30 **practice loading it this way? They got up on the beach with no problems?**

They didn't get up on the beach at our place. They got up at Sir Graham Moore I think and they didn't get up on the beach at Champagny. They had these landing barges. They had two to start with but they ended up with only one and that made the job even bigger because they only had the one. They lost one coming out of Falkroy on the first night, the first night out.

**You were now back in**

- 37:00 **civilisation. How did it feel to be back in the modern world again?**

It took a bit of getting used to. I found it a little bit unusual at the start. Yes, I didn't do anything silly. I was glad to get back to be able to watch the football again. I missed the football and I started playing straight away in the next

- 37:30 winter. I started playing with an air force team. I felt strange for a while but I was posted to a squadron not so far in Sydney at Schofields. I was posted to 486 Maintenance Squadron and that was the 36, 37 and 38 Squadrons who were doing all the flying for the air force then. We were doing all the Japan runs and the Singapore runs and all the
- 38:00 island runs. They had about 50 Dakotas there. There was a lot of radar work to do there. We had a big radar section and about a dozen radar technicians there. We were doing work almost conveyor belt type maintenance. We were doing one system after the other and doing all the maintenance for all the aircraft and all the major overhauls. Of course the three major equipments in the aircraft were the ones that I'd been trained on.
- 38:30 I was at last working on something I'd been trained on.
- We'll go onto Schofields in the next tape. Just a last question on this one, did you miss anything about Bathurst Island when you were back in Sydney?**
- Did I miss anything?
- Yes.**
- I think I missed the life with the other two blokes. Joe mainly, but the one that replaced Blue, he was okay. He was a married man.
- 39:00 I missed the comradeship of them, yes. You get very close to blokes when you live with them all the time and you get to know them. You get to know all their problems and all their life. I missed Joe very much. He was such a jovial and likeable bloke. But, you know, I would always love to have gone back there. I would love to have gone back and had a look at the place. As a matter of fact
- 39:30 I had a phone call from somebody only 12 months ago who was going out there to do some survey work. He asked me a lot of questions about the place and where everything was. I said, "How are you getting out there?" He said, "I'm going by helicopter." I said, "That's the only way to go." He said, "I'm going to sleep overnight and then come back." Anyway, I heard from him later and he didn't sleep there, he
- 40:00 found out all he wanted to know on the day trip. He was going out there to do a survey for putting a ground radar station out there. I read something in the paper where they have done one in the Torres Strait islands and I think it is all to do with this illegal immigrant thing. I think there is one going to go right where we were. He didn't give much away because it was semi secret but he said it looked like there was
- 40:30 going to be a radar station placed there.
- An interesting historical cycle there if that happens. We'll stop and change the tape.**

## Tape 7

- 00:30 **You have arrived back in Australia and you next went to Schofields?**
- Yes.
- Where's that?**
- It's just near Blacktown. If you know Blacktown it is the other side near Marayong, it's not far out at all.
- 01:00 The Fleet Air Arm were there during the war. The Royal Navy Fleet Air and the Australian Fleet Air Arm were there and then the RAAF took it over as a base for 86 Wing. Now 86 Wing was all Dakotas. There were about 50 of them made up of 36, 37 and 38 Squadron. They all had about 20 aircraft each, all Dakotas. They were doing all the runs to Japan for the occupation, taking
- 01:30 personnel and goods to Japan three times a week. They were flying to Morotai and New Guinea and Singapore in regular runs. There were all those islands too. It was the biggest airline in Australia it was more busy than any of the other civil airlines.
- Just before I ask you a few more questions on this, Bathurst Island and the pack-up there, what replaced the system**
- 02:00 **that was running?**
- Nothing, not in that area. Flying into places like Morotai and Darwin they still had the ASV beacon and they still had radio compass. The aircraft had radio compass but no system took over. If you went further north to the Philippines and Okinawa the LRAN system carried on there. So the aircraft
- 02:30 could get to the Philippines quite easily without LRAN because there were plenty of islands to navigate by, particularly during the day. Most of the Catalina pilots, not many of them ever used LRAN. It only came in late in the war and a lot of the navigators weren't trained in LRAN so they didn't use it. They were still flying all around that area up to the Philippines without LRAN. Once they started

03:00 flying from the Philippines to Okinawa to Japan they needed the LRAN to be kept in operation for those long hops over the ocean.

**Coming back now what was your role with the squadron at Schofields?**

I was an LAC, leading aircraftsman, when I went there and I became acting corporal while I was there.

**What were you doing work-wise?**

03:30 Mainly radio altimeter and LRAN. I did a lot of 729 work because the Dakota had LRAN for flying to Japan they had the radio altimeter and it had the 729 for homing in on a beacon like the ASV beacons. That was its three main radar equipment.

**Given that you were on the island, had you fallen behind in respect of technology?**

Yes, I had.

04:00 I hadn't worked on any of that gear till I left. I did a little bit at East Arm in Darwin but not much. They were only an operating squadron; they weren't a main maintenance area. I hadn't done much since I'd left the course. Luckily, when I got to Schofields there were plenty of people to get information off and training. You were given jobs, certain jobs to do, and there was

04:30 plenty of tuition there.

**Were you heading somewhere in a career sort of thinking?**

No. I had decided I wanted to stay in the air force. I decided that if they called for permanents, we were still in what they called the interim air force, the wartime air force, we weren't in the permanent air force.

05:00 It was rumoured that they were going to start for the permanent air force in a few months time. It ended up it was 1948 before they signed us over. I was determined I was going to learn as much as I could in radar so that even when I got out of the air force I had some good qualifications.

**So in respect to radar, were you**

05:30 **learning the technical side and how to pull it apart and put it together again or the operational side or both?**

Both. You had to know the operational side too. Oh yes, you had to know the operational side. You had to know how LRAN worked and how the radio worked on the operational side. You had to go on test flights. I often went on test flights from Schofields. I've been on radio altimeter tests from

06:00 Cronulla sandhills to Wollongong at one hundred feet or less. I have flown in Dakotas that have gone up over the Cronulla sandhills and down fifty feet and then flown to Wollongong looking up at the escarpment as you go. When you tell a pilot you wanted to do a radio altimeter test, that was their cue to go and

06:30 do a bit of low flying. It was hard to get sometimes. I did a few of those trips.

**I think you've touched on the radio altimeter but in respect of the plane how would it work and how would you do the tests to work out whether it was working?**

The only test I would do was check it against operationally the height for accuracy. In other words when you come back

07:00 after checking it out over the water - they had limit lights too. You could set these limit lights. So say if you are on the 400 foot range - in other words, if you went 50 foot above or 50 foot below a red light or a green light would come on. While you were flying at 400 feet the amber light would be on but if you got into a position that was 50 feet below the 450 level the

07:30 red light would come on or vice versa for going above. They had limit lights like that so you could test all those things. But the main test was when the aircraft actually put its wheels on the ground. It was nice to see the aircraft come in and put its wheels on the ground and see that altimeter touch zero at the same time. That was as good a test as any.

**This particular altimeter,**

08:00 **did it have anything to do with radar or is it to do with flying?**

It is radio. It wasn't radar. In other words it didn't use a pulse technique it used a continuous transmission. It was frequency modulated. It was a frequency modulated system. The difference between them is the aerial is pointing down to earth and it is transmitting at a

08:30 certain frequency. At the time the wave goes down and strikes the earth and reflects back up and mixes with the frequency that is being transmitted then is a different frequency because it is frequency modulated. So the higher you are the greater will be the frequency difference. And that is what is used

when calibrating the height of the aircraft, that frequency difference.

09:00 **How would you tune something like this if it was out?**

We had test equipment for it. We had workshop test equipment for calibrating.

**Which is what sort of equipment?**

Well one piece of equipment was a heap of cable that was a certain length for calibrating. Also there were other things for your modulation, checking your 120

09:30 cycle modulation of the frequency. You had to check the main transmitter frequency and the modulation side of it but that was all done with this specialised test equipment which was made for that equipment only. It was an American system. It was an American radio altimeters.

**So this test equipment is something you take on board with machinery?**

10:00 No, it was all done in the workshop. On board all you are relying on is the altimeter mainly when the aircraft touches the ground or if you've got something special that you can calibrate against when you are flying. It doesn't matter, the main thing is that when the aircraft touches zero the altimeter touches zero. It only went up to 4,000 feet. After 4,000 feet it was useless.

10:30 A lot of aircraft didn't even fly as low as 4,000 feet. It was very good for flying over undulating country because the altimeter would change with the variation in the mountains or the terrain below you. If you are on a barometric altimeter you set the barometric altimeter at sea level and then you fly out. It doesn't

11:00 allow for any mountains or anything in between. All it gives you is the height above sea level. It doesn't give you your height above mountains. All the altimeters in those days were barometric but the radio altimeter gave you the true height above land. In other words if you are flying over a mountain it gave you the distance between the aircraft and the top of the mountain.

**So that is the whole point of it, if you are flying through**

11:30 **fog you can detect what is ahead of you?**

No, not ahead of you, below you. The radio altimeter was used a lot in those mining drops up in the islands. The Catalinas were dropping mines in in the Philippines and around those other islands. They had a datum point that they had to find for the start of their mine run, to drop the mine.

12:00 Usually it had to be an accurate height of say 100 feet above the sea, above the water, and they used the radio altimeter to get that accurate height. The altimeter where it had been set back at their base and it could have been three or four hundred or five hundred miles away and set at sea level there. It may not have been the same

12:30 zero at the point where they were going to drop the mines. The barometric wasn't as accurate as the radio altimeter.

**If sea level is sea level then the barometric would still be based on the same system from where it left to where they were going to drop the mines?**

Yes, but barometric pressure may not be the same say 500 miles away. If you set your altimeter in Sydney it may not be the

13:00 same at sea level in Melbourne. It wouldn't be far out but it may not be the same, especially when you are looking for accuracy at that low level and you are looking for accuracy between zero and a hundred feet.

**The second system you were working on was the LRAN system, was that similar to what you were doing at Bathurst Island or completely different in the Dakotas?**

No, the aircraft

13:30 equipment some of the circuits were the same in the binary circuits. The binary circuits which divided down to the basic transmission pulse rates, those circuits were almost identical to what were in the ground LRAN but for the rest of it there was no similarity at all. The transmitters were big, bulky, high-powered transmitters for

14:00 transmitting pulse whereas the receiver was a receiver only for measuring the pulse that came from the transmitter. There wasn't much relation between the two at all.

**So who taught you the differences so that you could work on the ones on board the Dakotas?**

I did that on the course. I did that at radar school. I did a LRAN course.

**This was years before?**

Yes, when I was at radar

14:30 school I learned how to work on LRAN. That is why I said when I was in Darwin I opened my mouth and somebody said, "Has anybody here worked on LRAN?" I said, "Yes, I've worked on LRAN." "Right, I want you. You are going to Bathurst tomorrow."

**Right, but the Bathurst Island system is completely different to the Dakota system?**

The electronics was, yes, except for these binary circuits, which were very similar, but all the rest of it was all

15:00 big and bulky whereas the aircraft was all miniature. It was miniaturised to get it into a small area. There were miniature valves, etc., to carry in an aircraft but the LRAN was a big bulky transmitter for high power. The transmitter had valves on it about the size of a football, about that big.

**It being therefore different to what was on Bathurst Island, can you talk me through you operated it on board the Dakotas?**

15:30 Yes. Well if you were a navigator the system worked on the time difference to the arrival of the pulses, the one from the master station and the one from the slave station. The master station transmitted a pulse and that came to the aircraft. The same pulse went to the slave station and was retransmitted. It was transmitted again out. So it arrived

16:00 later than the first one. In the operator's cathode-ray tube it was two traces. The first pulse was placed on the top trace, at the beginning of the top trace and the second one was placed underneath on the second and it would measure a time difference between the arrivals. That time difference was transferred to a map. The navigator had a map of the

16:30 area and all those time differences which were the same were like a contour line you would see on a map with the different heights on a mountain. They represented the same time. The navigator would do the same thing with the other pair of LRAN stations and he'd get another time and where the two crossed was the exact position.

17:00 **So basically, these pulses, the further you travelled forward towards the slave station from the base station the pulses would differ in their timings indicating where you were?**

Yes, depending on where you were in relation to the two, the master and the slave.

**Excellent. Okay.**

The one coming direct from the

17:30 slave could be very close to the master one depending where the aircraft was.

**So Bathurst Island and Champagny, they were slave islands.**

**Both slave, yes. Sir Graham Moore, in the middle, that was the master.**

**Okay. Terrific. Your**

18:00 **role with the Dakotas in 486 Squadron, were you just technically taking care of the LRAN system? What were you doing with that?**

I was working with all the equipment. I was working on the LRAN, the 729 and the radio altimeter. I was working on those three plus the ASV beacon. We had an ASV beacon at Schofields and we had to look

18:30 after that. That was up in the control tower. I had to go and service that sometimes.

**And that beacon was for the sake of?**

Schofields.

**It was Schofields's radar?**

Yes. I think its code was SC, I can't remember now. I know Sydney was always SY, Mascot. I think Schofields was SC.

**So basically each airport or aerodrome has its own radar and its own signal code. Is that the way it works?**

19:00 They did, yes. It had its own transmitters. It transmitted SY or SC accordingly. Melbourne or Essendon was probably ES or MB; I don't remember what they were now. Morotai would have probably had MT and Darwin would have probably had DR. These ASV beacons were stationed all over Australia and in most of the islands in New Guinea and in the north.

**What was the most**

19:30 **difficult thing that occurred during your time at Schofields in respect to your job?**

I don't know. Difficult in what, technical?

**Yes, technical?**

I can't think of anything. They

20:00 weren't easy equipments to work on. We had problems with some tests we did. Lining up the LRAN was a fairly long thing to do. I can't think of anything really.

20:30 If you didn't know there was always somebody in the section who could get you out of trouble or help you. Everybody helped everybody.

**Did you have someone of a higher rank that you could talk to if you didn't understand or had a problem?**

Yes we had several corporals. I was there as an LAC. There were several corporals and a couple of sergeants and a radar officer.

**Who would you speak to if you had a**

21:00 **technical problem?**

A sergeant probably. He went on to become a wing commander later. He was a chap named Bernie Robertson. He was a sergeant there.

**So what sort of technical problems did you have that you would speak to him about?**

You might have a fault and you mightn't be able to get to the bottom of the fault. You might ask him has he got any ideas where it could be. You can do so

21:30 much diagnosis and still not rectify the fault so you get someone else's brains and have a go. Usually between two or three of us we'd finally work it out. We didn't have a lot of serious problems. I took on the radio altimeters because I always thought they were the ones that were the most complained about by pilots and I made up my mind that I was going to get to the bottom of making them work.

22:00 **What were the pilots complaints concerning them?**

It was not that they used them a lot on the Japan run and that, they didn't use the radio altimeters much. Those pilots, you'd say to them, "Did you use your radio altimeter?" "No, they never work. They don't work." They had a similarity to what the IFF was during the war: "IFF doesn't work so don't switch it on," and things like that.

22:30 I sort of determined that I was going to take the radio altimeters work as they should work.

**Were there any technical advances during your time at Schofields, new equipment?**

In radar, no. I was there about eighteen months I think and I don't think anything changed much. We got some new test

23:00 equipment in and things like that but there was no changes really.

**Where did you go after Schofields?**

To Rathmines, 11 Squadron.

**What was your role there?**

Much the same, although there weren't as many and there wasn't as much flying going on there. We had about 12 Catalinas in flying condition.

23:30 We were still doing air sea rescue work and general reconnaissance. I struck a new radar. That was the one that you see on the model downstairs. That was called the ASD [?], not ASV, ASD. That was my first experience of centimetre radar. Centimetre radar, that's the microwave radar, against the old previous radars which were up above the

24:00 VHF [Very High Frequency] band about 170 or 176 megacycles.

**So centimetre radar, can you just talk me through that?**

Well centimetre radar fed through a wave guide like a rectangular tube. The centimetre is referring to the wave length because you were talking in megacycles then. Either

24:30 3,000 megacycles or 10,000 megacycles so the wave length came back to centimetres so they called it centimetre radar. And this was the first centimetre radar that I'd ever struck.

**So how was this system different to what you'd previously worked on?**

Well when it worked it was more accurate, when it worked.

**What was the problem?**

It had a lot of problems. It had a pressurised modulator.

25:00 The modulator was pressurised and we had terrible trouble pressurising these modulators and getting it to work but when it did work it was quite accurate and quite good. It is different to other radars which only gave you a pulse and the pulse depended on either side of the trace which was you were flying. This gave you an outline of the coast or wherever you were flying

25:30 towards. If you were flying in from the sea and the coast comes up well the shape of the coast and the rivers would appear on the screen.

**ASD, what did that stand for?**

I can't remember now.

**So in a sense it gave you -**

ASV used to stand for Air to Surface Vessel.

26:00 It probably stood for something similar to that. Air Surface - no, I don't know what it actually stood for.

**What it did is it gave you an image of the landscape below?**

In front, yes. It swept in an arc of about probably 120 degrees. It wasn't a circular radar' it didn't give you a

26:30 PPI what they called a Planned Position Indicator. They circled about 120 degrees each side of the direction the aircraft was flying.

**Given that this was a new system, how did you learn the technical and operational side to it?**

Other people there had worked on it and I got the handbooks out and read them. There were always good handbooks. The Americans always put out good handbooks. It was more American equipment of course.

27:00 **So the RAAF didn't send you on courses as such?**

Not at this stage of the war, on. I went from there to a course. My next posting was to Ballarat for an H2S course. That is the centimetre radar that was fitted to the Lincolns, the long nose Lincoln bombers. That was my next experience of centimetre radar. There was no course. If you hadn't been

27:30 trained on that you found out the best way you could.

**So this particular system, the ASD, actually didn't operate with a master and slave?**

No. It was a true radar system which sent out a pulse and was reflected back. Depending on the time delay of course was the distance away that object was. You always had a graduated scale in miles to tell you.

**So by this time the**

28:00 **LRAN system had really been superseded?**

By this time the LRAN was still sitting in the stores down in Sydney. LRAN was still going, I believe, up in the Phoenix Islands. The Phoenix Islands are up in the Pacific and it was still going in the Philippines and those places but it wasn't a navigational aid in Australia, no.

28:30 It wasn't until 1951 that they decided they were going to put it back in on the coast of Australia to try and cover that area on the NSW and Queensland coast.

**Do you know what the reason for that was given that it was a superseded system?**

Well the reason for putting it back in again?

**Yes.**

29:00 No, I don't, I was surprised although all over the world LRAN was still the main navigational system. And the only place you couldn't fly by LRAN was on the east coast of Australia or the north west of Australia. You couldn't fly anywhere in Australia on LRAN in 1949 and 1950 but if you went out of the Australian area into the Philippines or to

29:30 Honolulu or up to the Antarctic - not the Antarctic but up to the Aleutian Islands - all that area was all covered by LRAN. And of course they got more sophisticated LRAN receivers where the operator didn't have to look into a cathode-ray tube and do all his time delay readings himself by manipulating controls. The time read out was automatic. It was done automatically for him. So the LRAN got more sophisticated. I think

30:00 LRAN did become, although there is LRAN in some parts of the world now, but I think it was superseded by the Omega system. They put a big Omega station down in Victoria and that probably decided why they didn't go ahead with it in Australia.

**Was it with 11 Squadron that you went to Japan?**

No, 86.

30:30 I didn't want to go into that because that was very unofficial.

**What do you mean by that?**

Well I sneaked up on a trip unofficially.

**Can you tell me that story? How did you get up there unofficially?**

I worked my way onto an aircraft and went as part of the crew.

31:00 **Just so I get the timeline right. You had moved on from 11 Squadron, had you?**

Yes, that was later on. From 11 Squadron I went on this H2S course at Ballarat. That is the centimetre radar that was fitted to the Lincolns.

**How did that actually differ from the ASD?**

31:30 The ASD for a start only scanned about 120 degrees in front of the aircraft whereas the H2S circled 360 degrees so it gave a 360 degree pattern or map of what it was flying over. It was 3 centimetres, they were both a 3 centimetre load length. The H2S was made in England. It was English and it was pretty

32:00 hard to work on. You couldn't compare English radar with American radar. The two were so much better. The equipment in America was finished off and made so much more sophisticated. The H2S that we had, a lot of it had been pulled out of bombers in England after the war to fill a contract the RAAF had taken over.

32:30 When the RAAF wanted this H2S equipment installed in Lincolns they had to be satisfied with more or less secondhand equipment.

**So H2S and also ASD were made by the English?**

ASD was American and H2S was English.

**And they operated on the same system of?**

They worked on the same system. As I said, one had a

33:00 scanning radar to 360 degrees and the other had a scan of about 120 degrees out in front of it, but they all displayed the outline of the coast or the land that they were flying over.

**The American systems were generally better but the H2S system made by the English in this case was better because it was 360 degrees?**

Oh yes, it was better in that way. It was a 360 degree pattern, but I wouldn't say it was easy to work on.

33:30 It was a heap. Nobody liked working on it.

**What sort of technical things annoyed you about it?**

It was just the way it was made, like a lot of English radar systems. They were all hard to get at and hard to fix and hard to follow their books. Even their instruction books weren't as

34:00 good. If you couldn't find something you'd read it up in the instruction books and their explanations weren't as good as the Americans. If the Americans brought out a handbook you'd find everything there. I did the H2S course but I never worked on it. I did the course and then I was posted back to Dakotas again.

**Which was still on the**

34:30 **LRAN system, is that right?**

I went back to Richmond. The Dakotas had moved to Richmond in this time. They had moved out of Schofields. When I left from Schofields they were breaking up Schofields. They were shifting out and that's why I went to Rathmines and 86 Wing was moved up to Richmond. I found myself back at Richmond again working on Dakotas. The same old aircraft and same old equipment but I was

35:00 trained on H2S.

**Just as an overview of the systems that you actually worked on - given that none of these systems were actually made by these Australians, did you fellows try and update them and improve upon them?**

Modify them? Yes, modifications came out. Some of the modifications came from the actual manufacturers and other modifications came from recommendations from people that worked on the



35:30 gear and found that if you changed a certain resistor or changed a certain circuit that you could improve it. That happened a lot with H2S. A lot of modifications came out with the H2S which did improve certain things in the equipment.

**Can you give me a couple of examples of how even the LRAN system or**

36:00 **H2S was modified?**

I don't remember ever modifying LRAN. LRAN was improved. It went from two boxes, two back boxes like your receiver and the cathode-ray tube, that was the APN4 to one box with a 3 inch cathode-ray tube with a magnifying glass on it which brought it up to a five inch. So they were able to cut the whole LRAN

36:30 unit down to one unit by having a smaller cathode-ray tube in it with a magnifying glass which blew it up to a five inch which was in the old APN4 type. There were things like that. I don't ever remember any major changes in LRAN but I know there were a lot of changes made on H2S, mainly from recommendations from people who had been working on it continuously.

**Does anything come to mind?**

37:00 I didn't work on it enough to do anything but I know there were some changes made by radar technicians, Australian radar technicians, who had been working on it.

**You mentioned when we last left off that you ended up in Richmond?**

Yes.

**What year was this?**

1950.

37:30 I was in '48-'49 11 Squadron and '49 in Ballarat doing the H2S course. At the end of the H2S course I went back to Richmond in 1950 back to 86 Wing again and back on Dakotas.

**The Korean War was starting up then. Did you have any thoughts to try and move to some sort of operations there?**

38:00 No, I didn't. I did volunteer for Japan when Japan first stated because my best mate went there and I wanted to go with him, but I didn't. I ended up going to Darwin instead. I don't remember volunteering for Korea, no. Korea was something that sort of crept in ,and not only that, what went to Korea was mostly fighter aircraft, Canberras and Mustangs

38:30 and aircraft like that. A few Dakotas did go there but not many. It was only two or three I think. Meteors went too. It was Meteors and Mustangs, Canberras and all aircraft that didn't carry any radar other than IFF. They only carried IFF so I never volunteered for anything there.

39:30 I don't even remember them calling for volunteers. Most of the RAAF that went across to Korea came from Japan. They were already in Japan on the occupation force and the Mustang squadrons were already stationed in Japan. All they did was move across. Not many of them went up from Australia.

**Okay. We'll just stop there and continue on.**

## Tape 8

00:46 **Why were you interested in going to Japan unofficially?**

I wanted to see an LRAN system work on an aircraft and I wanted to see how navigators were

01:00 using it, but it was all very unofficial.

**What did you do to make this possible?**

It was just to see that they were doing it right, some of the navigators. You had to use your trailing aerial and a lot of them weren't doing that. You had to use your trailing aerial for the LRAN. Do you know what a trailing aerial is?

**Can you explain it for the archive?**

It is like a fishing line. It has got a big lead

01:30 weight on it and it drags out a big stainless steel cable and you can drop it one hundred feet if you like. It has got a little electric motor that winds it in. When you are working on this band, just above the broadcast band, and the wavelength is long, you know you need a long aerial to go with it. Just switching to fixed aeriels is not much good if you are trying to pick up a land station several hundred miles away.

**So why weren't they**

02:00 **using these trailing aerals?**

I don't know whether they were or not. It was just a thought that went into my mind to see if they were. As far as I know they were but I think there was the odd one that wasn't.

**So how did you go about getting an unofficial passage to Japan?**

I just remember working it as well as I could sometimes and knowing the right people.

02:30 **Were the right people the officers or the aircrew?**

They were aircrew. I don't want to talk about it because it was very unofficial and it was something that you couldn't normally do, but I managed it.

**I wouldn't discourage you about mentioning it on the archive. I'm sure no one will get into trouble for it if that's what you're getting at?**

What it boiled down to was

03:00 I wanted to see how the LRAN system was working up in the Japan run and I went along just to see how it worked and how the navigators were using it.

**What did you find on that journey?**

I found it was quite good. Most of the navigators were very experienced on it.

03:30 **Where did you end up in Japan?**

Okinawa - no, Iwakuni.

**Were the 77th Squadron or 76th Squadron still flying out of Iwakuni at that stage?**

I've got no idea. I didn't stay long enough. I was in there and out again.

**How long was in and out?**

A few

04:00 days.

**Did you get up to Hiroshima?**

No, I didn't go anywhere. I didn't have a passport.

**So where did you spend that couple of days?**

With the RAAF in Iwakuni.

**Was there anything interesting from a tourist perspective about going to an RAAF base in Japan.**

No, not that I can remember. I can't remember much about it really,

04:30 it was that long ago. It was 1950 or '51 or somewhere around there. I was still with transport squadron then. I was still with 86 Wing.

**Were they flying to and from Japan on a regular basis or was it a one-off?**

No it was only a one-off this one. 86 Wing were still flying up there on

05:00 occupational, BCOF flying, but they weren't doing a three-day-a-week job. That all finished when Schofields folded up.

**Where were the LRAN stations for the Japan run?**

There was one at Okinawa and the other one was at the Philippines.

**Was there a third?**

Not that I know of, no.

05:30 I think there was only two.

**While you were with 86 Wing in Richmond, was this when you were called upon to get the LRAN system out of storage?**

I was first of all posted to 2 AD, 2 Aircraft Depot at Richmond. And the reason I was posted there was to take over a bunch of radar mechanics who had just come off course,

06:00 ground radar mechanics, and give them the job of getting LRAN stations working again and doing a full recondition job. I was a flight sergeant then. I got my sergeants in Richmond in 1950 and I think flight sergeant was about 1952. So I think I started on the LRAN about '52 – yes, probably '51 to '52.

06:30 It was in that period at any rate.

**So what were the steps that you had to go through to set that up again?**

First of all I had to go to 6 SD in, Storage Depot, and identify all the gear – nobody knew what it looked like – and arrange for it all to be transported to Richmond. Then we started sorting it out,

07:00 trying to sort all the gear out. Some of it needed a lot of valves replacing and minor things. The crystal ovens had been damaged. They had a crystal oven. For the main countdown they had a 100kc crystal which was in an oven and kept at the same temperature all the time by a thermostat and some of those were damaged. A lot of the

07:30 big transmitters had some damage in them with valves and things like that. There was a good stack of spares. The Americans had plenty of spares and we had no worries there as far as spares go. We started and I got the young blokes who were just off the course and they got into it. They didn't know anything about LRAN but they got their heads into the books and

08:00 started to learn what LRAN was all about. Under my tuition we gradually did them one by one and reconditioned them. First on the timers that was heart of the LRAN system, the LRAN timer. And then we started on the transmitters. We also brought all the aerials back, the masts, and we had some galvanising done by the plating section and also a lot of repainting and things like

08:30 that. They had them all repainted. It was mainly with the timers themselves taking out a chassis, a unit, taking all the electronics out of the chassis and checking every component in that chassis like resistors and condensers and if they weren't up to the tolerance we'd change them. Most resistors had a tolerance rating of either

09:00 ten per cent or twenty per cent and if they weren't within that tolerance rating you'd change them. You'd then get that unit going on its own and then if it was a power supply making it work and then you finally brought all the units back and put them all back together. All the cabinets that they were in we had them all repainted and resprayed so that they all came back to looking like new again. They were all black crackle finish on all the cabinets.

09:30 All the fans were all rejuvenated. That took two years to go through the lot. We were there for two years working on it. Some of the units were pretty good and still in pretty good condition. Then they told us the installation was going to be on the New South Wales coast and we were rubbing our hands thinking,

10:00 "We'll be involved in the installation." One of the stations was going to be at Lord Howe Island. I'm not sure whether that was going to be the master or one of the slaves. It was probably the master, I would say. Of course everybody wanted to go to Lord Howe Island. At any rate, later on it came through that the whole lot was scrubbed and they weren't going to go ahead with it. I have an idea that the Department of Civil

10:30 Aviation didn't want it. The Department of Civil Aviation in those days ran all the ground stations for civil aircraft and I don't think they wanted anything there that was run by the RAAF. And I don't think they were prepared to take it over themselves because they had no experience with it. The main reason for it being scrubbed I never really found out, but I have an idea it might have been the Department of Civil Aviation not wanting it.

11:00 So all our two years of good work went up in the air.

**What was your reaction on hearing that news?**

I had got to that stage where I couldn't care less. We returned it all to stores depot. I know it all went back down there again. I felt very disappointed because I knew I'd put in a lot of good works and I know that a couple of the young blokes that me put in a lot of good work

11:30 there too. They found it fascinating because they were straight off course and they all thought they were going to work on either ground control approach or LWAW and here they are stuck and sent here to work on LRAN, ground LRAN. It was good experience for them anyway and at least these young chaps all got experience out of it, good experience. Some of them were very good.

12:00 **Was this sort of political side of things something that you found a little bit tiresome – that you'd worked for something and had it taken away?**

It was disappointing. When you've worked on something for two years you'd like to see the fruits of all your efforts. You'd like to see it go into operation. It was a nothing thing that I think a lot of people in the RAAF

12:30 didn't know anything about it anyway. It was another one of these mysteries where only so many people seem to know about it. Coming up to that period why it didn't go in, I don't know because all aircraft coming in from American, coming in from Honolulu, there were no navigational aids over the Pacific

Ocean. I'm sure they needed it. I'm sure a lot of the

- 13:00 airlines like Qantas would have liked to have used it. Because Qantas was even using LRAN then on some of the runs further out in the Pacific when they were doing that area. They were using LRAN and I'm sure they would have liked to have had it. But what the politics were why it didn't go in, I really don't know.

**What was your personal state of mind at this stage? Was your enthusiasm for the air**

- 13:30 **force still strong? How did you feel?**

I probably felt a bit frustrated. You go through all these stages in the air force. The air force is renowned for disappointing people. One of my most disappointing – I didn't tell you when I was at Schofields – probably my most disappointing period then was

- 14:00 before I went to Rathmines they called for volunteers to go to Berlin to do the Berlin run. We were going to send five Dakotas to England to do the Berlin run. I was a volunteer and picked and chosen to go and had all my equipment and all my overseas needles. I had all the overseas needles and I had all my equipment to

- 14:30 go and at the last moment they said, "We're not taking ground staff. We're only taking aircrew." And we said, "Well who is going to maintain their aircraft?" They said, "They won't be flying Dakotas they'll be flying DC6s, Skymasters, when they get there." I thought that was a bit strange because you don't go from a Dakota to Skymasters in a few weeks. They'd have to have special training. Anyway, when the aircrew got

- 15:00 over there they flew Dakotas, RAF Dakotas. And we were scrubbed. We didn't go. It was very disappointing. That was one disappointment, but things like that were happening in the air force all the time.

**Just as an aside, what was the role of radar in the Berlin airlift? Do you know what they were using then?**

It would only have been the radar that was in the Dakotas. If we had gone over we would probably have been working

- 15:30 somewhere in England. They would have still be using the radio altimeter and they probably were using LRAN. I think LRAN was still going over there. During the war they had a system called G system. That was what LRAN eventually came out of. LRAN came out from the design of G. G was used for the bombing of Europe during the war. They would have only been

- 16:00 using the altimeters and the 729 and they could have been using LRAN but I don't know. It was very disappointing anyway.

**I'm sure it was. Moving back to your own career then, after having suffered a couple of disappointments were you starting to think about life after the air force?**

No, I was still happy to be in the air

- 16:30 force. I couldn't complain about promotion. I was sergeant in 1950 and I was a flight sergeant in 1952. I was going up and I was looking forward to being a warrant officer. When we got rid of the LRAN gear we took over the full maintenance of the Neptunes, doing the major overhaul. 11 Squadron was right

- 17:00 alongside us and I was with 2AD but we were doing all the 11 Squadron work. And of course the Neptunes were loaded with radar and it was new systems, nothing that we'd been trained on. They did have LRAN in them but they had a lot of other sophisticated radars as well. We had to do the major overhaul but we had no training. We never had any training on them. Some of the 11 Squadron radar mechanics had been to America, plus a mate of mine who'd been to America, and they did courses on the

- 17:30 equipment over there. They came back and were stationed with 11 Squadron but we never got any courses out of it.

**During this time you were involved in setting up a flight to go to Antarctica, is that right?**

Yes, that's about the same time. It was around about '51 or '52. While we were doing the majors on the Neptunes we had a

- 18:00 task of fitting two Austers out with radio compass. We installed those all right and we were then asked – There was also a rumour that they would want one of us to go to the Antarctic with them as a radio mechanic. I was asked if I would like to go but I had only just met my wife and I didn't feel like going off down

- 18:30 there for another twelve months. In the end they decided not to take a radio mechanic at all. The two Austers, once they got down there they got completely wrecked in a storm. All they could do was make up one aircraft out of the two. They took an air frame fitter down. I'm not sure that they took an instrument bloke but they didn't take a radio bloke anyhow. Anyway, I

19:00 didn't go to the Antarctic because I didn't really want to go.

**You got married in 1955? Can you tell us about your courtship? Where did you meet your wife?**

I think I met her at an afternoon tea party or something. At the time my mother was living in Earlwood. She was renting a house in Earlwood and

19:30 she got to know one of her neighbours a few doors down and her son was in the air force too. He was a navigator. And like all mothers, they all skite about their sons. And one Sunday we got invited down for afternoon tea to meet her son and somehow my wife

20:00 happened to be there as a visitor, as a guest, and I met her there. And we got talking and decided to meet again. We ended up getting married probably about two years later.

**Your career then took you to England after you were married? What was that all about?**

20:30 I worked on Neptunes for a while and was in charge of quite a large group of radar mechanics. I didn't actually do the work then. I was more of a supervisor than an actual person working on the job. We got married in 1955 and I was still at Richmond. We got married in October, I think it was 1955,

21:00 and the radio officer came down and saw me just after I was married and he said, "How would you like to go to England?" And I said, "Why?" He said, "Well, you've been posted there and you are going on a secret radar course in England." I thought, "Oh, gee, I can't leave my wife behind. I only just got married." At any rate they wouldn't pay her

21:30 fare because I wasn't going on a full posting for a couple of years. They said I'd be away nine months at the most. I had a car at the time so I sold the car and paid for the air fare for my wife. She followed me over a couple of weeks after I'd left. We had to go by an RAAF Hastings from Edinburgh in South

22:00 Australia. I was quite pleased to go on the course. I was selected amongst a lot of other radar mechanics and only two others went. Another officer went, a young officer, and two other radar people were selected to go on it. We did a nine day trip to Lyneham on

22:30 an Avro Hastings. It was one of the most harem-scarem trips I've ever done in my life. I was never so glad to put my foot on the ground after we got there. I don't know if you know the Hastings aircraft. It flew during the war. It was a transporter. It was a transport squadron and they had a regular run like we used to have a regular run to Japan during the occupation. They had a regular run between Edinburgh and

23:00 Lyneham in Wiltshire. That was a weekly run or two-weekly run. They were having that run because of the atom bomb at Maralinga. They were flying boffins and equipment between Australia and England. We had to go on their aircraft which carried transport and it carried

23:30 equipment and even a spare engine. It had seats that faced the back of the aircraft. This was a safety precaution they had. All the seats were facing the rear of the aircraft. We took off and Edinburgh to Darwin was pretty uneventful. We only flew during the day. We didn't fly at night. It was a terrible aircraft. It shook and you'd see all the

24:00 vibrations start out on the starboard wing and you'd feel the vibrations come right through the body of the aircraft and out and then it would start again. Then it would start again and that was all the way over to England this vibrating. It was noisy. At any rate we got to Darwin all right and there were no problems there. We stayed overnight. We took off for the next day for Changi, for Singapore, and we only got about an hour out of Darwin and we couldn't get

24:30 through the weather. So it came right down low and you couldn't see a thing, nothing outside the aircraft. Anyhow, we decided to come back to Darwin. And before we got back to Darwin he got another weather report and he decided he'd have another go. So he goes back again and finally gets over the weather. Then he finds he hasn't got enough fuel to get into Changi so he goes to Jakarta. So we had to go to Jakarta to refuel.

25:00 We refuelled there and took off for Changi and then we got over Changi and we couldn't get into Changi for the rain storms. Here we are flying around Changi and there is all this rain pouring down. You could hear it because the aircraft had no lining in it. At any rate, we finally got into Changi and I was never so glad to get onto the ground after flying into there. Then we had engine trouble and we ended up staying two days I think it was, two nights at

25:30 Changi, while they did an engine change. All the time the pilot had no automatic pilot. Normally aircraft when they get up they do their settings and then they go to automatic pilot and the pilot takes his hands off and sits back and has a rest. He had to fly this aircraft all the way. He never got his automatic pilot fixed. He couldn't get it in at the intermediate places. After we

26:00 left Changi we had to fly up the Malayan Peninsula. In those days military aircraft weren't allowed to fly over Indonesian territory. So we had to fly up the Malaysian coast and then head up over the Indian Ocean to Ceylon, a place called -

- 26:30 I'll think of it in a minute. All I can remember is going across the Indian Ocean and there were all these spirals coming up from the ocean, rain spirals, twisties, you know? All we did was go like this all across the Indian Ocean until we got to Ceylon. That was a pretty
- 27:00 harem-scarem trip. We stayed the night there at - What was the name of the place? It was an RAF transit depot anyway. The next day we flew on to Karachi and stayed overnight in Karachi. We slept in some tin hut there at the end of the aerodrome. Karachi wasn't a very inspiring place to stay
- 27:30 overnight either in those days. The next day we flew out of Karachi for Habbaniyah in Iraq. Habbaniyah is just north of Baghdad. We got into Habbaniyah all right and stayed overnight in an RAF transit station. By then the navigator and the pilot were at loggerheads.
- 28:00 The captain was a pilot officer and the navigator was a wartime squadron leader pathfinder. He had about three rows of ribbons on his breast and the pilot officer
- 28:30 captain had none. He was only a post-war pilot. They were at loggerheads over something. I don't know what but they had a go at each other in front of the crew and in front of some of the passengers on the ground there in the morning before we took off. They ended up apologising. I think the navigator didn't like being under a pilot officer because the pilot officer captain was the pilot of the aircraft and he was a very, very experienced navigator.
- 29:00 Anyway, we went from there to a place near the Suez Canal where we refuelled. It could have been what is called Bahrain now, but I'm not sure. We refuelled there and then headed up to Tripoli. We were flying across the North African coast and trying to get over these sandstorms. These aircraft couldn't fly above 12,000 feet because they weren't
- 29:30 pressurised in any way. We flew to Tripoli across the North African coast trying to dodge these sandstorms which were going right up to at least 10,000 feet. And we landed at Tripoli and stayed overnight in Tripoli at another RAF transit depot. The next day we took off for Lyneham. We had come from the
- 30:00 middle of summer at Edinburgh to the middle of one of the coldest freezes they'd had in England for about 20 years. I flew over mostly snowcapped mountains all the way to Wiltshire and came out of the aircraft in covered snow.

**What had you been sent to England to learn? What was the substance of this secret course?**

- 30:30 It wasn't a radar system; it was a navigational aid and it was going to be installed in our Canberras. It was equipment called Green Satin. And the English aircraft the Avro Vulcans were using it and it gave the navigator the ground speed and the drift angle.
- 31:00 The ground speed and the drift angle were fed into the equipment and there was what they call a ground position indicator which indicated onto a map exactly where you were. So you had a map with a light on it and wherever the aircraft went this ground position indicator would follow it. So the navigator knew where he was all the time. He didn't have to do any calculation because the equipment
- 31:30 did it for him. That was worked on the Dobler system. It was pretty secret. I think it was pretty secret. I know I had a fairly rigid test before I left there. I know they did a lot of enquiries about your background before I left. I found out later when I came home from some of my relations and relatives who had been queried on my background so I got a clearance to
- 32:00 go. I went to their radar school at Yeatsbury in Wiltshire and did the radar training there on this particular equipment. They were all RAF instructors. This equipment was made by Marconi in England, at Chelmsford. We went to the factory and we spent another two or three weeks in the factory seeing the gear manufactured and also
- 32:30 tested. The testing was the main thing. After that they sent us to different RAF squadrons to get the experience. We weren't working on Canberras. We had to get the experience on Avro Vulcans.

**What did you think of the Vulcan?**

Terrific. It was so far ahead of anything we had. All it was was a big delta wing with four big jet engines underneath

- 33:00 it. We spent a bit of time there on the equipment and getting some experience on how it worked.

**The Vulcan was England's nuclear delivery system was it not at the time?**

It was.

**Was there high secrecy surrounding access to this aircraft?**

Yes there was. We had trouble getting near it. But they were flying out of

- 33:30 these bases every day supposedly on training trips. You can't keep everything secret and some of the

people I was working with said they were heading to Europe on training exercises and it is also believed that they were loaded. They all came back but they were loaded. And this was going on almost every day of the week.

**What was**

34:00 **the Cold War atmosphere like in Britain at the time? Did you feel it yourself?**

No, I didn't feel it. The Yugoslavia problem broke out while I was there. The problem in Yugoslavia broke out then, but no, there wasn't any. I didn't notice any at any rate.

34:30 The security around these Avro Vulcan bases was very strict. We couldn't go anywhere on our own. We had to be escorted all the time. They were interesting aircraft, very interesting.

**Did you take that technology back to the Canberras at home or was that the last you saw of it?**

When I came back to Australia I

35:00 had to go on instructional duties at Ballarat. But all I could do was instruct on theory because I had no equipment to instruct on. The equipment still hadn't arrived. And even twelve months after I had come back to Australia they still hadn't given us any equipment to instruct on. All I could do was instruct out of the book.

**Did your instructions include this Green Satin?**

I was only instructing on Green Satin.

35:30 That was why I was sent to Ballarat to be an instructor on Green Satin. But as I said, twelve months after I'd come back I still had no equipment to work with. I only had a handbook.

**You left the air force shortly after that? Was that your last job in the air force?**

Yes, as an instructor.

**Take us through your decision to leave? Why did you get out at that point?**

I was frustrated. First of all, as I said, I was

36:00 trying to instruct on Green Satin, which I'd been trained on, but I had nothing to show anybody and nothing to teach anybody with. All I had was a handbook and all I could teach them was the theory of how it worked. This went on for month after month and it never looked like we were going to get the equipment to work on. We had no priority at the radar school. I think they were installing it in Canberras. At any rate at the same time I had built this

36:30 house before I went to England. It wasn't the whole house - it was like half the house which has been extended on. I built the house and never lived in it. For two years it had been empty. I didn't want to live in Ballarat for another two or three years so I put in for my discharge. I must admit that I was interested in television and I had been offered a job in ABC Television.

37:00 I finished up on the Friday and started at ABC Television in Sydney on the Monday.

**In hindsight now, did you make the right decision? Were there any regrets about leaving the air force?**

I was offered a commission before I left if I'd stay in. But staying in would have meant being posted to Ballarat and making a home there and being posted to a Canberra squadron probably, and making a home

37:30 there. It wasn't my idea of married life. I decided that - I was interested in television. That was a new thing. That was 1956 and 1957 and television was just starting and there were some good jobs going. I started at the ABC as a supervising technician. I only got the job because of my microwave experience.

38:00 They were looking for somebody who had microwave experience for their link section. That's where I started in Sydney.

**Unfortunately we don't have time to go into your television career although it would make an interesting interview in itself. There are only a couple more questions left just to wrap up. When you look back at your air force career that we've talked about it today, what achievements are you most proud of? What are the highlights of it for you?**

38:30 My achievements in the air force? I would say the LRAN, the LRAN at Bathurst Island and the reconditioning of it again, although it was a disappointment.

39:00 Even though Bathurst Island was hard and difficult, it was an adventurous and exciting seven or eight months. Being selected to go to England to do the course was another achievement. I managed to see a lot of England while I was there. I think they were the

39:30 two major things.

**How do you feel about war in general?**

I think a lot of it is not necessary. I think particularly the present war, the Iraqi War, is an unnecessary war with an unnecessary loss of life. I think it could have been handled better.

40:00 In the case of the Japanese bombing Honolulu, there was no choice there. We had to go to war. I think we might have to go to war in the future if somebody tries to invade Australia, which could happen. I think it could happen. We've got too much land here and we're not going to always have it. I think we could be defending it. I don't know if in my time or your time, but it will eventually

40:30 come.

**With that in mind and thinking about the future, are there any last words that you'd like to put down on the archive for someone watching it in fifty or one hundred years time?**

Anything I'd like to put down? About the air force?

**Any piece of advice for someone you've learned about war or the air force?**

I never regretted one day of the air force service. I had 13 years.

41:00 It was only the last day of my service, that was the one time that I was bitter was when I was discharged and after 13 years' service I had to pay my own fare home. I had to pay my own fare from Melbourne to Sydney. They wouldn't give me a rail ticket and the reason they wouldn't give it to me was because I was discharged at my own

41:30 request. That was a way of getting back at me. The other thing is that I believe my warrant officer came through while I was in the process of being discharged and they never gave it to me. They never granted it to me. I only found this out later in life. They were the only two things that I really regret. With the rest of it, I

42:00 enjoyed every minute of being in the air force.

**INTERVIEW ENDS**