







Port Augusta – then and now Transcript – OH 704/3

Interview with Dr Ron Fitch, OBE, by Rob Linn on the 5th November 2004 at Somerton Park in South Australia for the Institution of Engineers Oral History Program.

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[Interview with] Dr Ron Fitch at his home in Somerton Park, South Australia, on 5th November 2004 for the Institution of Engineers Oral History Program. This is tape RJF1.

Ron, to start our interview, could you tell me your full name and when you were born, and where?

My full name is Ronald John Fitch. I was born in Victoria on 8th June 1910 by a quirk, an accident, which I think is worthwhile explaining. My parents were married in Kalgoorlie in Western Australia in 1901, and my brother and elder sister were born there, but it took me fifty years to find out why I was born in Victoria, and it turned out that two months before I was born my mother wanted to go to her younger sister's wedding in Surrey Hills in Melbourne, and I, as a foetus, had to go along too. And it wasn't until my aunt had her golden wedding that she told me that I was the youngest guest at that wedding.

Is that right?

That's right, yes.

So, Ron, your parents were Henry and Sarah -

Yes.

- and you had three siblings: Winifred, Harry and Jean.

Yes.

And tell me a little about your father ---. (doorbell rings, break in recording) Ron, we were talking about your family. Now, tell me about your father's occupation, because that becomes pivotal in your life.

Yes. My father joined the Western Australian Railways in Kalgoorlie in 1897. He was born in Homebush in Victoria and followed the Gold Rush to Western Australia in 1895, but instead of going straight to Kalgoorlie he spent some time prospecting at North







Dandalup, which is some hundred k's south of Perth and in those days was a gazetted goldfield, but nothing but a few colours were found. But I think it's the same spot where the present Boddington Goldmine is. Finally, he went to Kalgoorlie and instead of going on to the mines he joined the Western Australian Government Railways as a porter, and after a few years he became a signalman at Golden Gate, which was the station at the northern end of the Golden Mile, and for the rest of his forty-two years' service he was a railway signalman, first in Kalgoorlie and then from 1907 onwards – he retired in 1939 – he was a signalman in Perth and at the same time he was an instructor in what is known as 'railway safe working'.

I was the tenth in the railway hierarchy in

In your family?

Yes. My father had two brothers and two brothers-in-law in the railways, mostly in Victoria, I had two cousins in Victoria, one with Commonwealth Railways, and a brother-in-law in Western Australia. I was the ninth out of a family of ten, and then, to cap the thing off, in 1969 my elder son married Jill, the daughter of the New South Wales Railways Commissioner, Neil McCusker.

It doesn't sound you had a lot of hope of escaping it, Ron!

No, I was doomed to the railways almost from birth and never regretted it. My father used to sometimes take me to work with him of a Sunday in the signal cabins in Perth, probably to get me out of my mother's hair for the day, but my father and I had a very close affiliation and I saw the trains operating from close hand from the age of about five.

This would have been in Kalgoorlie itself?

No, it was in Perth.

In Perth?

I knew most of the signal cabins in Perth.

Amazing. So did you have a fascination with the railways from those days?

Always. As a matter of fact, my two sisters – now deceased – told me that when I was still in the pram I demanded that they take me in the pram to 'go and see Daddy's trains' as they went past.







So, Ron, tell me about your education. The first part of your schooling, was that in Subiaco?

Yes, I started my primary school in Subiaco and went on until what is now called Year 7, then I transferred to Perth Boys' School, which was the central school, at Year 8. From there I got a scholarship to the Perth Modern School, which was a competitive secondary school, but I hold the world record by only being there for one day. The point was that, when I enrolled in 1923 to go there, the headmaster, whom I did not seem to get on with, wanted to relegate me back and to repeat what was Year 8, so I left and went straight back to Perth Boys' School and stayed there till Intermediate standard, where I got a scholarship, and it was the Coombe Scholarship, open to state-wide competition, which entitled me to two years' studentship at one of the four Perth colleges, and I went to Hale School, matriculating in 1926, then I was admitted to the university under-age and started my five years' course of engineering.

So, Ron, when you were first admitted to the university, had you always had in mind to do Engineering?

(laughs) No, strangely not. Right up till the time I matriculated, I didn't have any particular bent, except it would be something in tertiary education. And my brother, who was a pharmacist, wanted me to become apprenticed to him and join the firm. And in those days the pharmacies were open from eight-thirty in the morning till six at night and somebody still on duty until eight-thirty, Sundays and weekends. I said to him, 'You work from eight-thirty till six: when I get a job I'm going to work from nine till five.' And it turns out (laughs) it was generally from 9am to 5am next morning!

So, at that time, my father came home from work one day and he said, 'The railways are calling applications for engineering cadets: you're putting in for one.' And I did. And on the first count I missed out, they appointed three and allegedly I didn't have any distinctions in my Leaving Certificate. That was a bit of a furphy, but they created a fourth position to which I was appointed. So that's how it started. My father just said, 'The railways are calling for engineering cadets: you're putting in for one,' and I never regretted it.

But, Ron, hadn't you already won an exhibition to the university in Agricultural Science?









No. About two or three days after I started my cadetship, I was offered the University Exhibition in Agricultural Science, and didn't accept it because I was cadeted to the railways.

Now, Ron, can you tell me about the Engineering School at the University of Western Australia in those years that you were there?

Well, it was wonderful. The University of Western Australia was established about 1913 in a dilapidated block between Hay Street and St Georges Terrace in Perth and facing Irwin Street, jammed between the two. Derelict galvanised iron or wooden buildings; everything crammed in together; but the Engineering School was out at Matilda Bay at Crawley about three k's away, where an old farmhouse had been used as the Engineering School. And we Engineering students had to do the Science subjects and the Arts subjects in Perth, so we had to commute by a little four-wheel electric tram between Perth and Crawley. The Engineering School was knee-deep in wild oats. The laboratory really didn't exist, it was just a few sheds with some unworkable machinery, and we students used to spend every Friday trying to make them work. It was very, very primitive, but in fact it was a wonderful start because we were forced to get our hands dirty, and do it right from the start. And the staff were so co-operative too, in the same way.

Tell me about the staff, Ron, who were they?

Well, the general subjects, we had Professor Murdoch, who was in English, and who was probably Australia's greatest essayist –

That's Keith Murdoch?

- no, Walter Murdoch.

Oh, sorry, Walter, his brother – yes, sorry, my apologies.

Yes. Oh, he was a lovely man with humility. And Alexander Ross, Professor of Physics and Chemistry, he was very good, too. He was there right from the start. Wilsmore in Chemistry – Wilsmore was a brilliant chemist, but he didn't have an ounce of humanity in him. We were all scared stiff of him. Geology, de Courcy-Clarke, who was a wonderful man to deal with. In Engineering, our main man on the civil side was Frank Blakey, who was a Master of Engineering from the Queensland University who, after









doing some practical design work in Melbourne, joined the university in 1927, and he was the best thing that ever happened to university for us.

Is Blaikie B-L-A --?

K-E-Y. His son, Lex Blakey, eventually finished up with a doctorate, and I think he was tied up with the CSIRO1. Now, Frank Blakey, he kept touch with his students right through until he died in 1952, and I left the university in 1931 and we were still personal friends right through. He did all the civil work, the mechanical work was handled by a man called - a Scotsman, Andy Bowden, B-O-W-D-E-N, who was a Gold Medallist from the University of Edinburgh, and he came out to Perth about 1926 and stayed there till about 1939 when, on a sabbatical back in England, war was declared and he stayed on to help the war effort and then stayed there for good. The electrical man was Paul Hermano Fraenkel, F-R-A-[E]-N-K-E-L, a Dane who studied in Germany, and he lectured to us out of a German textbook so we couldn't copy it. He was a very humane man, too. And hydraulics, WR Baldwin-Wiseman, who had been in the British army and had done a lot of good work on hydraulics. So they were our staff there. But it was very fundamental. For instance, I mentioned that we spent every Friday trying to make machinery work. In our fourth year, when we studied reinforced concrete, our laboratory there consisted of putting on our overalls one afternoon a week and handmixing concrete and laying concrete floors in the laboratories. (laughter)

Is that right!

Yes. So when we finished the course, pitchforked into the Depression, we were very scantily taught in theory but had the humanities and a broad education, and it suited perfectly being thrown into unemployment relief works during the '30s. It turned out to be the right thing.

Now, Ron, the style of teaching, was it very formal or informal in this farmhouse?

Oh, formal lectures, but with only small numbers and you could butt in and question anything on the way. We were never in awe of our lecturers, they were good, personal friends.

So how many in the course, Ron?

¹ CSIRO – Commonwealth Scientific and Industrial Research Organisation.









I started my first year with about twenty-seven, and picked up some on the way and dropped some on the way and we finished up with nine in the fifth-year course. The course, in those days, was organised so that we'd have a lot of practical experience. The first year was three terms, and then at the end of the first year we didn't start the second year until the start of the second term – had a six-month break with compulsory work in the field. And the third year was the first and second terms, and then there was a ninemonth break between the third and fourth years, and then a three months' break between the fourth and fifth years. And the idea was that we were compelled to work during that time and to do some private study as well.

So did you find it an arduous course, scholastically?

No. It was a hands-on course. (laughs)

Which suited you down to the ground.

Oh, yes. We had the pure science subjects, Maths, Applied Maths, Chemistry, Physics, Geology: they were like anybody else. And also three arts subjects were compulsory, and most of us took English Literature and two courses in Economics.

So having somebody like Walter Murdoch as a lecturer, is that – I mean, Ron, you still write very beautifully, so is that one of the things that you would actually put down to the way you write today?

I think so, because Murdie didn't use two syllables if he could do anything in one syllable. He used very plain English. And Murdie was known for his 'spot': when he lectured, he looked at a spot at the back of the lecture room to keep his eye on, so it was always known as 'Murdie's spot'. But he was quite an institution and well-loved, and I think that he was very simple with his English.

Yes. Well, his essays are still some of the most remarkable to read.

Yes, they are.

So, Ron, I'm interested, though, in the formation of the Engineers' Club and your part in it.

Well, the Engineers' Club has a bit of a history. It was before my time, because I joined up in 1927, but about 1919 to 1920 they started a bit of a fund to, I understand, pay for any damage the students did in their lighter moments, and it was given the title of a 'DBA', the letters of which are quite obvious. But after a couple of years the Treasurer











was getting embarrassed when he'd go to the bank to do banking and the teller would call out, 'DBA,' so it was changed to 'Engineers' Club', and that started about 1922.

So what did 'DBA' mean – excuse my ignorance?

'Dirty Bastards' Association'. (laughter) Which actually caused some embarrass-ment at the 1931 Engineers' Ball, when we had a model aircraft up in the ceiling. In line with the designations those days we had on its sides: 'UEC 1-9-3-1 - XDBA', and all the guests were saying, 'What's the "DBA" stand for?' We had to euphemise that. (laughs) Every engineering student was an automatic member of the Engineers' Club. And because we had broken terms, only two terms for most of the years, we could not take a very active part in ordinary university affairs and so, with our isolation, we became very much our own crowd and it was the most happy part of my university life.

Ron, why only two terms?

Well, they decided before my time to extend the course from four years to five years, but to throw in as much practical work as possible, so that the first year was three terms, the second, fourth and fifth years were only two terms, with some private study in between. The gap between the first and second year was six months; the second and third three months; and third and fourth nine months; and then three months between the fourth and fifth, and we were compelled to work in the field. And so the idea was to mix up theory and practice at the same time.

Well, can you tell me where you worked in those breaks?

While I was a student most of my time was in the Perth drawing office of the Civil Engineering Branch, but I spent a few months in Geraldton on one vacation, and nine months in Northam, another office, and another period camped with a survey party. But most of the time was in the drawing office.

So the drawing office, was that Western Australian Railways?

Yes.

So what was that like in those years?

Terrible. (laughs) When I say 'terrible', my introduction there was hard to believe. I was taken up by the chief clerk to the drawing office to meet the engineer in charge, a fellow called Lunt, and when I was introduced, 'This is Mr Fitch, he's an engineering cadet,' and my greeting was this: not 'good morning', but 'I don't know what to do with







him; send him in to Stewart.' Now, Stewart was the lands officer in another little office, so I spent time there. In those days, engineering cadets were looked upon as being just nuisances and we weren't taught a thing. And, in general, the attitude of the time was, 'To hell with academic qualifications, the only thing that matters is experience.' We had virtually no qualified engineers there at the time and it was a rather bleak period until, in 1931, the Railway Construction Branch, who built the new railways and were attached to the Public Works Department of Western Australia, were then combined with the railways and we did our own railway construction; and that brought with it some qualified engineers – including the engineer in charge of railway construction, JA Ellis, who became Railways Commissioner three years later – and the whole attitude changed straight away. But the early days there, we engineering cadets were just nuisances.

So was it mainly a drawing office, in effect, Ron?

Yes, it was basically design, architectural and permanent way design work.

And was that all done with squares and boards and that type of feature?

Drawing boards.

Drawing boards.

But not the mobile things of these days; just a flat bench top with a mobile drawing board.

So, in effect, it was still using nineteenth century skills.

(laughs) Oh, yes, completely! The nineteenth century skill went on until 1949.

Well, you know what I mean, Ron.

I know what you mean, yes.

And calculations were done, what, with slide rules and books, I suppose, log[arithm] books?

For surveying, our bible was the Chambers *Mathematical tables*, which were log tables and astronomical tables and all that sort of thing. And the other thing was a ten-inch slide rule.

I wondered. They were still using them when I did architecture.









That'll be right. I still used it for my ME² thesis in 1947.

So, Ron, what about in Northam, though, the nine months you spent there?

Oh, there, as cadets, when we went to the bush or the country depots, as cadets, we gained some experience by assisting the chainmen – indeed, acting as a chainman – so we learnt some practical work in the country. Not in the city.

But that tended to be more survey work, did it?

Most of the work was survey work.

In the country.

The district offices were responsible for maintenance and buildings and track, and minor construction works – small things – so a great deal of work was surveying on the tracks. When we went bush, in the country towns, we were able to do a bit of chainman's work and knew what was going on by watching the surveyors.

Now, Ron, when you were out with those survey parties as a cadet, what were the type of problems that you saw within the railways themselves, engineering problems?

Well, in my earlier years things were very prosperous in the 1920s and there was a lot of development going on, and at that stage in my youth I couldn't see the problems. But in 1930, when the Depression hit, it was a different story altogether. But then, when the Depression *did* hit, the Western Australian government arranged an admirable system of unemployment relief, whereby all sorts of things were done: irrigation, drainage, roads, railways. Everything had to be financially viable and had to pay an estimated return of bank interest – which was three and a half per cent in those days – before it was authorised. It wasn't just digging a hole in the ground and filling it in again. And, in the railways, we improved over a thousand kilometres of track by regrading and doing other improvements. The Depression gave Western Australia a fillip in the matter of improvement to roads and railways, drainage and so on.

So the	engineering	g problems	that you	would	have	faced	were	very	basic	ones,
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² ME – Master of Engineering.







Now, Ron, that's your supposed holidays in between your years we've been looking at.

Yes.

Tell me more about the Engineers' Club, though: was it just a social organisation?

Well, it was more than that; we were very close-knit people. It was really a social body. Every Engineering student was automatically a member, there were no entry fees. And we used to have one or two social events a year and the biggest one was, I think, the biggest social function of the university: it was the annual Engineers' Ball. And we used to participate in inter-faculty sport when it was possible, that is when we weren't in the bush. So, in the Club, the esprit de corps was remarkably high. As a matter of fact, it is, even to this day. Two years ago I was invited to the eightieth dinner of the Engineers' Club committee, and I was the oldest president present, so I was able to tell some rather good stories. Even then, when the engineers' song was sung, every engineer stood up as if it was the National Anthem and sang the engineers' song. And oh, it was a wonderful crowd! And the staff, Blakey, Fraenkel, Bowden, they participated in [it]. For the Engineers' Ball we cut lectures for a week, just to get the decorations going, and the staff were behind us. As a matter of fact, if we wanted to borrow an electric motor we just took it. So it was a wonderful feeling and we never forgot these people, and they never forgot us. And the Engineers' Club still goes in Western Australia, but I think it is more civilised than in our day.

So whereabouts would your balls have been held in those years?

Initially it was in a hired hall in the city, but in 1927 – alongside this old farmhouse, Shenton House, a new two-storey building was constructed consisting of two main halls and three rooms which were common rooms. The top hall became the new drawing office, which was previously in just a closed-in veranda on the old building. The ground floor did nothing else but supply the site for the Engineers' Ball and, till the Rowing Club had built their boatshed, we kept their racing 'eight' in it, too. So in my day the Engineers' Balls were held at Crawley in this new building, and the decorations were part of the show and so we worked on them for weeks.

So are you telling me that the engineers also had a rowing 'eight' that they used?









No. In 1927 for the first time – the Western Australian University Rowing Club used to use one of the Perth rowing clubs – won the intervarsity Oxford and Cambridge Cup in the Nepean River in New South Wales, and a local pastoralist, Everard Darlot –

Sorry, what was it?

- Everard Darlot - donated a new racing 'eight'. And because the Rowing Club didn't have a boatshed at the time, (laughs) it was housed on some trestles in our bottom floor.

I'm with you. So I guess Shenton House became a fairly famous place, did it?

Yes. I understand now it is a sort of a semi-archaeological museum, because there's a completely new Engineering School built on the main university campus now.

So, Ron, you graduate in early 1932 -

Yes.

- but you've actually already gained your first posting some months before that?

Yes. As a matter of fact, I finished the course in August of 1931, and the graduation ceremony wasn't till 1932, and almost every single employee of the Western Australian Railways in 1930 was given their notice because of the Depression. But my cadetship would have lasted until I graduated in the April of next year, so I shut up and didn't tell them I'd finished the exams. And one day the boss sent for me and he said, 'Have you passed all your exams?' I said, 'Yes.' 'Why didn't you tell me?' I said, 'I'm frightened of getting the sack.' 'Well,' he said, 'no, we're going to give you a job in Kalgoorlie.' So I got away with it, and I wasn't sacked.

Now, what was your job in Kalgoorlie?

The title was called 'Engineering Assistant' in those days, now it's 'Assistant Engineer'. The engineering staff consisted of a District Engineer, an Assistant District Engineer and me. And the job was surveying and that sort of work.

And did you have to work with gangs at that time, or not?

No, no. My association *closely* with gangs didn't take place until I joined the Commonwealth Railways. But I was mainly tied up on survey work in those days.

What was Kalgoorlie like in those years, Ron?







Oh, wonderful. (laughter) It was a wonderful place to be because the goldmining was the godsend of Western Australia during the Depression and there was a real resurgence in the goldmining industry. I was in a boarding house there, amongst about twenty other boys, and it was a wonderful place to be. I had one embarrassment, though, and it may be it shouldn't be for publication, but my parents, when they were married in 1901, their first home was in Hay Street, and after several months they shifted to the other side of the railway, a place called Piccadilly Street. Now, on my first trip to Kalgoorlie in 1931 I thought on Saturday afternoon I'd seek out my parents' marital home. And I got into Hay Street and got the shock of my life! Hay Street is now well recognised! (laughs)

I'm nodding my head.

Yes.

So you ran into a few prostitutes did you, Ron?

No, I ran for my life! I was only twenty-one years of age. (laughs)

So the house of ill fame didn't capture you!

No!

Yes, Kalgoorlie was renowned for that, wasn't it?

That, and the two-up school and the whippets.

How did you go at two-up, Ron?

I didn't. But the two-up school was out at Brown Hill, a few miles out of Kalgoorlie, and there were nominal raids every now and again. And the boarding house included the local police sergeant, who was a bachelor, Sergeant Ryan, and one day, Sunday, he made a raid and he caught, amongst others, one of our boarders. And the sergeant said to him afterwards, 'Jack, I ran as slow as I could, but still you couldn't get away from me!' And the whippet race was halfway between Kalgoorlie and Boulder. They used to have sort of trial runs on a Thursday night and then that would give them a clue who was going to win, and then on the race on the Saturday night generally every dog that was not the favourite was given a meat pie before a race, just to make sure that it wouldn't win! (laughter)

Oh, dear.

Kalgoorlie was a wonderful place in those days!









Was it full of characters, Ron?

Full of characters, yes. And also booming. For instance, I played football for Kalgoorlie City for two years up there and we had fourteen A Grade footballers, because it was the Depression and people out of work would go up to Kalgoorlie to get a job on the mines, and for that reason our standard of football in Kalgoorlie was virtually equal to Perth in those days.

I should have mentioned you actually did play for Subiaco, didn't you, in Perth –

Yes.

as an A Grade player.

Yes. And, matter of fact, I could have been sent back to Perth from Kalgoorlie to play again because the Minister for Railways, Jack Scaddan, turned out to be life patron of the Subiaco Football Club and they said, 'We'll get Jack Scaddan to get you transferred back to Perth.' And I said, 'No, you won't, there's a Depression on and I'm staying where I am.' So I had to give it up for that reason.

Ron, the railways that you were working on surveys with, where did they go to from Kalgoorlie? Was that into other parts of the eastern goldfields?

Yes. Our district started from Merredin, which is back towards Perth and went right up to Leonora and Laverton and down to Esperance – and of course round through to the mines – and there was a small branch line to Kanowna, which was pulled up. My first job when I went to Kalgoorlie was in connection with the pulling up of this Kalgoorlie-Kanowna railway. It had gone dead.

Where's Kanowna? I know all the other places.

Twelve miles east of Kalgoorlie.

Oh, really?

Yes.

So it was a mine site, basically?

Oh, Kanowna was a famous mine in past years. It was a very busy mining place. But it was gone dead, the mines were closed in my time and the railway closed, too.







So, Ron, the time in Kalgoorlie, I notice during the 1930s that you shifted very regularly, but it appears to be in areas around the eastern goldfields, is that right?

No.

No, I'm sorry. You came back to Kalgoorlie and then ---.

Yes, I was in Kalgoorlie from the end of 1931 to the middle of 1932, when I was transferred away to the Murchison for nine months, back to Kalgoorlie early in 1933, until towards the end of 1933, then I was transferred again away and didn't go back there for eight years.

So you went in the early '30s to Hillman and Bunbury, that area?

No, first I went to a place called Wurarga -

Wurarga?

– in the Murchison.

Yes, that's in 1932, that's right. Then in '33 to Hillman?

Yes.

And then to Bunbury in '35.

Well, actually, Hillman and Williams, two jobs together there, and Bunbury was only a stepping stone for a few weeks, and then I was sent to Meekatharra.

Now, were you involved in relief works at all in those years, Ron?

I worked on unemployed relief works, except for six months in Kalgoorlie in 1933, continuously from about July 1932 until about July 1937, and then again when I was at Narrogin in the 1940s, another relief job, so I was on unemployed relief works almost continuously right through the Depression years.

Now, Ron, can you tell me about those times, because they seem to have played a very important part in your life?

They were the most rewarding part of my working life. The men would go into the dole office of a Monday morning to pick up their dole – which in those days was, in current money, seventy cents per week per dependant, with a maximum of four dollars ninety a week for a man, wife and five children – and they would be given a train order to go to a job to work part-time to give them an average weekly earnings of two dollars a week







above the dole. And if they didn't take the job they lost the dole. I've had men sent a thousand k's to Meekatharra to a job and leave the family behind. No option. And, in all the years on those jobs, I never heard one complaint but, rather, gratitude for having a part-time job which was only worth two dollars a week above the dole; and when a man was batching in the bush, he'd use up that two dollars in food. It was a remarkable time. And I camped with them and I lived in a tent most of the time, exactly the same as the men, and cooked my meals over an open fire just like the men; just the same hard conditions. It was a most rewarding experience, I'll never forget it. It developed a great respect for those people who went through that Depression.

I had one case in a camp at Hillman, right out in the bush, seventy miles from the doctor and three and a half miles from the siding; and I had about seventy men working for me including seventeen families — man, wife and children. One man had wife and eight children. And they were a happy crowd, no troubles at all. I was the only unmarried adult in the whole camp and was twenty-three years of age; and because I had a first aid certificate they must have thought I was qualified in obstetrics, because six o'clock one morning two very agitated females burst into my tent and said another woman, seven months pregnant, was having labour pains and sought my professional advice! (laughs) But I wouldn't have known the difference between an umbilical cord and intestine, or labour pains and colic. So there was a goods train due to pass through on the way to Collie, seventy miles away, so I got her down to the siding and put her on the train. Thank goodness it was a false alarm, because I'd hate to think what the guard of the train would have had to do if it had not been.

But it was a wonderful time. And when I was up in this place called Wurarga in the Murchison, they were mainly single men on twenty-five shillings a week, less sixpence Financial Emergency Tax. They used to work one week out of three and stand down the other two; weren't allowed out of the camp, weren't given a train fare home. One period, in February 1933, we had a stretch of ten days, nine of them forty-eight degrees Celsius, and when a cool change in the middle came along, the thermometer plummeted down to forty-two degrees! Three men died on us with the heat on that job, one in the camp and two just left it and died. And just after we got over that, we had a thunderstorm in which we had two hundred and twenty points – what's that, about fifty-odd millimetres in twenty minutes, and I'm sinking a dam. It filled to overflowing!

Really?









Yes. But we didn't just quite finish building the dam.

Oh, so that was the task, was it?

Yes, it was a railway water supply job and it was on the side of a creek bed. And I had one square yard of concrete to finish the job when the water came down. That square yard of concrete's still not done.

Ron, when you said at Wurarga, where you were doing that railway dam, was it all done with hand scoops or horse scoops? How did you do it?

It was the Murchison, and the rock is known as Murchison cement. There was a full layer of soil and then it's a sedimentary rock, I suppose you'd call it. The surface was broken with a single furrow plough and loaded by hand into trolleys on a little railway line and pulled away. It was all manual labour. And later on, when I was with Hillman and Williams, we had two-horse wheel scoops for those jobs. But mechanical plant, certainly not.

So the job at Wurarga was by hand?

Yes.

What sort of – how many gallons would have been in that dam? Just give an idea of the volume.

Two million gallons.

That's a big area.

Oh, yes, big area. It was a two-chains square at the bottom and about fourteen feet deep.

And you say that was all concreted?

No. There was only a bit of concrete in the spillways running into it. We did not have to concrete the dam at all, it was self-sealing.

And it was at that time you had the run of that terrible heat, followed by the storm?

Yes.

Amazing.

The fellows were working in that hole in forty-eight degrees.

And you were living under tents, Ron?









No. The men were. I was living in a bit worse than that. It was a little cabin with a weatherboard dado round the bottom and old, used, black, railway tarpaulin sheeting on the top. Imagine black tarpaulin in the sun! So I slept out of doors the whole time. And then the problem was to beat the flies. (laughs)

So you were in charge of that group there -

Yes.

- of the party?

Yes.

To tee up a job like that, was that very difficult? Did you use theodolites, or what did you use?

Oh, yes, had to use theodolites and levels.

But still, very basic equipment.

Very basic equipment. Well, my theodolite, as luck would have it, in the whole twentythree years that I was on the Western Australian railways I used the same Cook, Troughton & Simms theodolite dated 1897.

Now, what was the brand called?

Cook, Troughton & Simms.

Obviously English.

Yes. And it was made in 1897.

Gracious. And was that a railways one or yours?

Yes, railway one. (laughs)

Obviously did its job.

Oh, it did.

And, Ron, just tell me a little bit more about these blokes and their families you worked with: did they come from all walks of life?

All walks. And they were labourers, farmers, tradesmen, clerks, even an ex-locomotive engine driver. On this Wurarga job, one Friday night when the train lobbed in from Perth, a chap – well-dressed man – got off the train and introduced himself and he said, 'I've been sent up here to work with you.' He mentioned he'd been recently working with









the State Treasury on the State Budget and I thought, 'Oh, cripes, this looks like an auditor.' He wasn't, he was out of work. He said, 'I'm here to work for twenty-five shillings a week.'

Really?

He couldn't take it, he couldn't last it. He'd never pushed anything more than a pen in his life. But he went up there. Oh, there were all sorts there. And there were no complaints whatsoever; they just worked.

So in terms of leading those men and their families, did you find that a difficult task, or did you learn to get alongside them, Ron?

I got alongside them. And I was the youngest person on the job! (laughs) My foreman, Bob Henderson, he was sixty-two years of age while I was twenty-two.

Bob Henderson.

Henderson.

Henderson.

And he was a past master at his job, and he carried me in the early days. And we finished up doing three jobs together.

So what was different about the Hillman and Williams job against Wurarga? What were you doing there?

Those two were also reservoirs, railway reservoirs, and the Hillman one was five million gallons, but it was in heavily-timbered country and –

In the South-West?

- about halfway between Narrogin and Collie. Narrogin was much closer to Williams, which was a big city to us: it had about two pubs and a couple of stores! I met my wife there.

Unexpected?

Yes!

Totally unexpected?

Quite unexpected, yes. She was living there at the time.

Well, that would have been a good time for you then, Ron.









Oh yes, it was a good time. (laughs)

And you said you were using horse scoops then.

Yes.

Now, were they something you had any knowledge of prior to this?

Yes. The well-known scoop in those days was known as a 'tumbling Tommy', which was more like a large grocer's scoop with a couple of wooden handles at the back, and the horse pulled them and you just pushed the leading edge into the ground. When it filled up, then you tipped it over. The two-wheeled scoops were more like Roman chariots with a scoop in the middle which you lowered down with a lever. And two horses worked them, and they were very simple things to operate. I had fifty of the most beautiful Clydesdales you ever saw in your life to pull them. They were *wonderful* horses.

Was that difficult, finding their provisions at the same time? Did you have to organise all that?

When I was at Wurarga, except for the railway gang, there was only an old combined pub, post office and store. It was a derelict place, but the store was very small but we used to get stores in from Mullewa fifty miles away. And when I was at Hillman the nearest village was Darkan, which was about eight miles away, and twice a week the storekeeper would come out, take orders and bring them back on his next visit. And a local farmer used to bring the meat. And another fellow, with a very poison-infested farm with not much else on it, decided to bake bread for us and he built a mudbrick oven on his property and baked bread. And the bread was not without its peculiarities. At one time, my timekeeper's wife said to him, 'Oh, Mr Strickland, I found a piece of wood in the bread last week.' Next time he came along he said, 'Well, you didn't find any [wood] in the last lot, did you, Mrs Reid?' She said, 'No, but I found a beetle!' (laughter) But at Williams, with its two stores, it was quite handy to get the stores there.

But what about in terms of the stockfeed, Ron, did you have to organise that?

Yes. We used to call tenders from local farmers for chaff, and then placed orders with them by contract.

So had the blokes who were looking after the Clydesdales any previous experience with horses?









Some of them did. They had some very good horsemen and an excellent stableman, yes. They were lovely horses, beautiful horses.

I was just thinking, Ron, logistically, today, you couldn't imagine anything further removed, could you?

You could not. As a matter of fact, I hadn't finished the job at Hillman when we had to start the job at Williams, but the excavation work had been done so we shifted the horses and plant up. And instead of putting them on a train, the teamsters rode them up the twenty-five-odd miles, camping overnight on the way. You wouldn't believe it possible these days.

And, Ron, it appears to me that in this time of Depression, particularly in 1935, you just went from one place to another, from Bunbury to Meekatharra to Allanson –

That's right, yes.

- and to Cue within another twelve months. It was just constant moving.

Yes. I had nineteen postings in Western Australia, seventeen of them by direction and two by application. And then I had one with the Commonwealth and one with the South Australian Railways. But we just went. You went where you were told, you didn't ask. You had a job.

So when did you marry, Ron?

Married on Boxing Day, 1936. (laughs) Matter of fact, our courting was done by remote control because we were limited, for most of the eighteen months we were engaged, to letters twice a week and perhaps meeting at Christmas, Easter and occasional other times.

Who was your wife, Ron?

Her name was Doreen Cowden. Her father was on the line section of the then PMG³ Department and he had charge of the section of telephone and telegraph lines on the Perth-Albany road and was stationed in this place called Williams, and that's where I met her.

So your courting, as you said, was done for a couple of years on remote control, basically!

-

³ PMG – Postmaster General['s].







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Yes! (laughter)

Up and down the railway.

Yes, very much.

So, Ron, the subsequent postings in the Depression times, were they all mainly doing dams or work like that?

No. After I'd finished the Williams – and the time in Bunbury was only a formal transfer, it wasn't really a job – I was sent to Meekatharra where a railway dam had been built by my predecessor a couple of years before, and it was not watertight, so my job was to concrete-line it. I'd just finished concrete-lining it when I got twenty-four hours' notice to go to Perth. I didn't know what was going on and, when I got to Perth, they said, 'Oh, you've got to go to Allanson,' which was down near Collie; and that was a railway construction job. It was actually a deviation – the grades were very stiff through the hills, where they used to haul the coal, and so they surveyed and built a deviation which shortened the length and improved the grade. I was sent down there as assistant to the resident engineer. Before that was quite finished I was sent to Cue because we had to build the Cue-Big Bell railway, which was an urgent one for the goldmining industry.

Cue to ---?

Big Bell, about nineteen miles out of Cue. So the second two big jobs were railway construction.

Now, how did those construction projects work, Ron? You already had plans drawn up, I guess?

Yes.

So the survey had been done.

The survey done and the plans were prepared in Perth and they were just sent to us, and we had to go on from there.

So that would have involved an enormous amount of, what, shifting and excavation and ---?

Well, the one down at Allanson, which is through the Darling Ranges, involved very heavy earthworks, very heavy indeed, and that was still done with horse and manpower, no machines. On the Cue-Big Bell it was almost on the surface. And we had a peculiar









problem with that one: the American Smelting and Refining Company wanted to develop this mine and they had an agreement with the state government, and one of the conditions was that a railway would reach the mine by Christmas 1936. When the bill was put before Parliament to build the railway, the Opposition dillied and dallied around until eventually – we couldn't start work until the act was passed – we were given fifty-seven days to build the railway. Nineteen miles. The survey had been done. So most of the way we just laid the rails on the surface, and where there was a small cutting we'd deviate round it. And we got to the mine on the fifty-sixth day, beat it by one day, and then after that was all over we started doing the earthworks. We ran out earth and lifted the rails through it. Half of what we did was what was called 'sunken road'. In the Murchison, where the water goes all over the land and you don't where a watercourse is, we'd sink a trench into this Murchison cement, just wide enough to hold the sleepers, and when it was filled in with ballast the rails were almost at ground level so the water just went over the top. So in that particular job it was hell for leather to beat the fifty-seven day deadline and we made it in fifty-six, and then did all the work afterwards.

That was an amazing feat!

Oh, I thought it was a great time. (laughs)

So what were your tasks on a job like that?

I was offsiding a chap about my own age who was a few years senior to me, and my job was to make certain that I kept ahead of the tracklaying people on the surveying – and I got pretty close. Sometimes the rails got very close to my heels. I did all the survey work and all the measurings-up and all that sort of thing while the resident engineer did the supervisory work. I was outside all the time, surveying and everything else tied up with it – bridging and all that sort of thing.

So, Ron, were you putting in pegs the whole way, basically, were you? (hissing sound)

When the survey is done, the line is pegged in the centre, but when the earthworks start they will disappear, so, before they finally got the track in the right position, you had to re-peg it six feet to the left, clear of the rails and the sleepers.

Now, in terms of the material used to build the railways, was it all jarrah sleepers?





No. (hissing sound) In the Allanson job we used wandoo, which is white gum, which is a very tough timber. Sometimes jarrah, but wandoo if we could get it. In the Cue-Big Bell railway it was a different story. A few years before, a company called the Western Australian Manganese Company had built a railway from Meekatharra north to a place called Horseshoe, where there was a manganese deposit. (hissing sound) The venture was underwritten by the state government. When the show went broke the government took over the railway to get its money back and a chap called Frank Carter was given the job of pulling up about ninety miles of rails and sleepers and stacking them in Meekatharra. When we built the Cue-Big Bell railway, we used those rails and sleepers. (hissing sound) Because the sleepers had already been bored and dog-spiked, we used them upside down. They were all stacked at Meekatharra, and we had to go up there – had a gang working there, adzing and boring the sleepers and loading the rails. Every night a train would come down from Meekatharra to Cue ready for the tracklaying next morning.

So was that railway iron, was that Australian or ---?

Broken Hill stuff.

Broken Hill.

BHP⁴ Rail, yes.

Now, what about gauges in those years⁵?

All three foot six.

So that made it easy enough.

Yes. (laughs)

So, Ron, before we go on to your move away from Cue, we might just turn to a new tape, if that's okay.

Yes.

END OF DISK 1: DISK 2

[This is] Rob Linn interviewing Ron Fitch at his home at Somerton Park, South Australia, on 5th November 2004 for the Institution of Engineers Oral History Program. This is tape RJF2, the second tape in the interview.

⁴ BHP – Broken Hill Proprietary Company.

⁵ Question refers to Australia's notorious variety of railway gauges during the 1930s and beyond.









Ron, we've been talking about these really marvellous times that you had (laughter) prior to your marriage, and how you learnt to work with men and also on a variety of engineering projects that really were of the era. And obviously, if it hadn't been a Depression, you may never have done those works.

That would be quite right.

Ron, the move from Cue to Northam and then on to Perth, could you tell me how they occurred? Northam was – first time you were told to go, but after that you had to apply, didn't you?

Yes. When we finished the job at Cue I just spent two months in Northam just filling in a gap whilst somebody else took some leave, and then I applied for a job on the design staff in Perth. I went to Perth then for about three years.

Now, the design staff: by this time there was a new Commissioner of Railways, is that correct?

Yes.

So things had changed - I hope!

Yes, yes, yes. Oh, yes, different altogether, quite different altogether, yes.

Well, can you tell me the atmosphere in the design unit by that stage?

Well, I spent virtually all my time on what is known as 'permanent way' design, that is, station yard design, station yard improvements, but most of it was the preparation of the plans for the many railway deviations and construction work that was going on toward the end of the Depression. The surveyors' field books would be sent down to me and I'd work from there, prepare what was known as the 'plan and section' and calculate the earthworks and so on.

So, again, very much in the tradition of the great nineteenth century –

Yes.

– railway engineers?

That's right. No computers, no satellite surveys, everything was all done by pick and shovel and –

On the ground.

– on the ground.









And did you find that fulfilling work, Ron?

Very fulfilling, yes, very much so. You're doing something constructive.

And what about people you were working with in Perth? Who were some of those folk?

Well, the man that I had most to do with there — and in later years, too, a man [for] whom I developed a great deal of respect — his name was EW Morris. Now, Ernie Morris was on Gallipoli in the First World War and he came back and he was an engineer with the railways, and he was in charge of the drawing office when I was on the design there and we were quite close together in many ways. Then he became the District Engineer in Kalgoorlie. And then about 1941 he had an accident with the rail motor inspection trolley, which had a collision with a motor truck on a lonely section of the Esperance railway and he had both his legs broken. And Ernie Morris was in Kalgoorlie Hospital for a long, long time and he came back to work in a state where he could barely walk. And I had been stationed in Narrogin at the time and was very happy there, but I was very promptly transferred to Kalgoorlie — against my wishes, because I wanted to stay in Narrogin — but when I got and saw how Morris was standing up to his injuries I developed a remarkable admiration for him: he showed all the guts in the world. And he was the man I had most to do with there, and I eventually worked with him in Kalgoorlie during the war years when we had a very good relationship.

And so he was a practical engineer, was he, or ---?

Yes.

Not a trained engineer as such?

Oh, yes, he was a qualified engineer.

Oh, okay. So, Ron, was most of your work then really done with labourers in those years? There wouldn't have been too many of trained staff, would there?

Trained staff? Well, in the field it was virtually all gangers and suchlike. You might have a draftsman or someone like that, but by and large you were dealing with the labouring staff all the time then. In the construction days we had men who had spent their whole working life living in a tent. They were absolute experts at their job, on pick and shovel and that sort of thing. They'd come up for work next morning, after having a heavy night before, sober as a judge, never missed a day's work. And their eyesight was so









good that I think their final result of lining up the track was better than the machine. They were marvellous, these men. Oh, they were tough customers, but it was an honour and privilege to be with them.

Yes. But in head office, of course, most of the staff there were trained, I would have thought?

No, mainly draftsmen.

Draftsmen.

Yes, who were self-taught, more or less.

Ron, come September 1939, what happens to you on the declaration of war? Do you recall that time?

Yes, I was on leave at the time, matter of fact, with my wife and young son at Williams, where her parents were. And, incidentally, we were very friendly with Mr and Mrs Colin Craig. Now, Mrs Colin Craig was Lord Birdwood's daughter, Nancy Craig, Nancy Birdwood, and she married Colin after World War I and settled on their property out at Williams. And I quite remember that weekend Mrs Craig was very worried, knowing how things were. Personally – and there was not much variation in activity at all – we were manpowered straight away. In 1941 I got on the reserve of officers and was still manpowered. But that had little effect on me at all until, in a minor way, after I went to Narrogin in 1940; and just after Japan declared war, they decided to prepare the railway bridges and jetties for demolition should the Japs come. And we were concerned with those at Albany and out on the Denmark line. And so we arranged to drill the piles of what is known as the Deepwater Jetty at Albany and prepare the gelignite plugs, all set up with fuses, so that they could be inserted and blown up if necessary. The other was a small river bridge over the Hay River on the way to Denmark. The town bridge at Albany they decided not to drill then because it was so weak that they reckoned if the Japs landed there and marched off four abreast it would collapse. And just after that time is when I was sent to Kalgoorlie to help Morris, and the same thing happened to the jetty at Esperance; and our biggest job was to stop the Esperance people blowing the thing up right from the start! They reckoned if the Japs came, the first place they were going to land was Esperance. They didn't realise that after they'd landed at Esperance they'd die of starvation and thirst before they got to the populated parts of Australia.







Port Augusta
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I had a rather unique experience in Easter 1943. I was in Kalgoorlie and just before that they'd decided to station some of the Armoured regiment in Western Australia and they were going to bring some General Grant tanks over, which, of course, on present standards are only babies; but we had to strengthen our rolling stock to carry these tanks and also alter some buildings, because they were fouling the clearance gauge. Also, when any train had a tank on [it] had to bypass certain sidings. Well, on Good Friday night 1943 somebody came to my home in Kalgoorlie and just said, 'Military special's off the road down west of the Southern Cross.' So I went down to the station and found out what was going on. Three General Grant tanks had taken to the bush. So next morning I got on a goods train to go down to see what we could do. The Inspector for permanent way had the gangs there, and by partly train and partly motor vehicle I got down to the derailment site a bit after midday on Easter Saturday. And at that time we heard that the Western Australian contingent of the Railway Construction Unit that had built a railway in Syria was returning from home leave and were held up at Merredin just thirty miles away, so we said we'd get these boys along to help us. Well, those boys - I knew most of them from the old days - had spent eight hours in Merredin on the loose: imagine what their level of sobriety was like when they reached us!

Merredin's not that big but it does have a couple of pubs!

(laughs) Yes. I knew most of the boys. Anyway, we set them to work and it's a wonder somebody wasn't killed. One man would be on his hands and knees like a cheerleader getting on with laying the rails, another fellow would be driving dog spikes and so on. The only two possible accidents would have been Inspector of Permanent Way, Charlie, Josh and me. One inebriated sapper took to us both with a shovel because we weren't in khaki! And as a matter of fact the sergeant in charge of them was a fellow called Arthur Jackman, who afterwards came to Port Augusta with me; and I told Arthur, 'You fellows nearly lost your engineer that night.' (laughs) And of the General Grant tanks, three of them took to the bush, but two on their sides and one upright. They just switched on the upright one and it started up straight away, put a chain onto the others and pulled them onto their feet, towed them to the siding about a mile or so away called Noongar, put them on a railway wagon and off they went.

That was that.









Yes, that was that. But it was a pretty exciting Easter for me. (laughs)

In which you nearly got a shovel.

And just before that I'd asked permission to be released to take up full-time, get into the Army, and knocked back. And when my chief engineer came up shortly after I said, I told him, I said, 'I was attacked with a shovel down there at Noongar by the soldiers because I wasn't on duty.'

Ron, just backtracking to those days you were at Albany and Esperance and you were drilling the pylons –

The piles.

- piles, right - was it a difficult task to do that?

It was a hand auger.

A hand auger?

Yes.

Really?

Yes. We used to do all our sleepers with a hand auger, drilling the holes for the dog spikes.

So how far down did you go with those piles?

No, we did them horizontally –

Oh, horizontally.

– yes; somewhere between the three and the five fathom depth of water where the ships couldn't come in and work, and beyond the damaged part, too far out. Something like that. They were drilled horizontally into the piles just to blow them up.

So, Ron, in those days was Albany still a whaling station? I suppose it was.

No, I think it started again after the War.

After the War.

For a while it was out, but I think it started up again.

Sorry for the deviation, but coming back to your exciting days at Merredin, was there a time during the War that you nearly went to Tasmania, is that correct?









Yes; the Tasmanian Railways were advertising for engineers and, not realising what their railway system was like, but they were offering fairly high salaries and I thought, oh, well, I'd give it a go, I was appointed to a job there and Manpower wouldn't let me go. And it was one of the best things that ever happened to me because Tasmanian Railways were in a fairly small way, and a few years after this I went back to Perth for some years and then with the Commonwealth Railways. A couple of other of our boys applied and they didn't stay there very long.

So you weren't allowed to go, though, is that correct?

Wasn't allowed to go. And thank goodness I wasn't.

So the war situation with what was called 'manpowering' in effect kept you in Western Australia.

It did, yes.

And you didn't have to work on some of those unusual railway systems in Tasmania.

Yes.

But your return to Perth in June 1944, Ron, what was your task from that time on?

I was sent to Perth to work in connection with the inquiry by Sir Harold Clapp into the standardisation of the Australian railways. EJ Ward became Federal Minister for Transport and he persuaded the Curtin Government, as it was then, to have an inquiry and they got Sir Harold Clapp who was then Director General of Land Transport, but formerly the Victorian Railways Chairman, to undertake it. Two other fellows, Syd Raynes, an engineer, and Glen Robinson, a draftsman, and I were given the job of preparing the Western Australian case. And nominally I worked on that thing for four years, but in between times I was doing a bit of relief work in Kalgoorlie and Geraldton, and got caught up in the Western Australian Royal Commission preparing the case for the state. I was officially there working on preliminary work for the standardisation on the Harold Clapp report and then I was appointed engineer in charge of design for standard gauge, but the job was virtually a sinecure because things fell flat when the then Premier of Western Australia, Frank Wise, still had the inferiority complex that Western Australia had at the time that anything beyond the Nullarbor Plain was foreign to them; and he just threw a spanner in the works. But I was supposed to work with









these two other fellows, Syd Raynes and Glen Robinson, on the preparation of the state's case for rail standardisation.

So this was the Western Australian secessionist view coming back again, was it? (laughter)

Oh yes!

Glad to see it still existed then. Ron, those years, though, did that allow you to go on with your Master of Engineering?

Yes. What happened was about 1947 Professor Frank Blakey, whom I mentioned before, asked me would I do a course of lectures in railway civil engineering to his students. It was a non-exam subject, just an extra one. And I did that. And he mentioned at the same time that he would like more batches of graduates to do a master's degree, and he'd like to make it not just an academic degree but a practical one as well: in other words, for experienced people. So I thought I'd give this a go. So I put up a proposition to them that I could present a thesis for master's degree. It was accepted and I did this at home over eighteen months, with the availability of information from Western Australian Railways. I submitted the thesis late in 1948 and it was accepted and I got my master's degree in 1949.

So you did this in the time 'off' that you had from the railways?

At night-time.

With your young family.

I did it – in those days no television, of course; only radio – while the radio was going very quietly in the lounge room I was sitting at the card table doing pocket calculations. (laughter)

So, Ron, did that help your career at all, having that master's degree?

I don't know, it might have. Just about the time, the Commonwealth Railways advertised for a Chief Civil Engineer, and I applied for it and another fellow, Jack Horrigan, who was senior to me in the railways in Perth, also applied. And he was interviewed and I wasn't, but I was told my name was in the ring. And it turned out that the appointee for that job was meant to succeed Pat Hannaberry, who had gone from Chief Civil Engineer for the Commonwealth Railways to the role of Commonwealth Railways Commissioner.







Pat - - -?

Hannaberry, yes.

Hannaberry, is it?

Hannaberry: H-A-double-N-A-B-E-[double]-R-Y. A fellow called George Bennett from the Victorian Railways was appointed but he didn't stay, and Jack Horrigan was offered the job and he declined it. And I happened to be in Melbourne on behalf of the Western Australian Railways at an engineering committee meeting, and Pat Hannaberry got in touch with me and offered me the job. So maybe the ME might have made a bit of influence, but I'm not certain.

And just before we move on to those wonderful years for you at Port Augusta, Ron, could we talk about the railway civil engineering lectures that you gave for your professor?

Yes.

What did they entail, do you still recall that? (telephone rings, break in recording)

[Just before the] tape stopped for you to take the 'phone call, I was asking you what was the subject matter of that series of lectures on the railway civil engineering that you were asked to give.

Preliminarily it was one lecture on location and how surveyors went about locating a line, and then followed up by the preparation of the plans and the estimates. And then another series of lectures on the constitution of the permanent way and its effects – its influence on the operations of the railway, such as the axle loads you can put on a certain weight of rail and how, if the axle load is increased, the efficiency of the train is increased because they can pull heavier loads; the constitution of the principle of points and crossings, of how you can divert the vehicles from one to the other; and some elementary information on signalling systems. So in general that was mainly tied up with the practical side of railway engineering. But I did also stress – and it turns out to be a hobby of mine – the relationship between these civil engineering factors and the efficiency of operation of a railway.

Could you explain that to me please, Ron?

This became part of the basis of my thesis. Those were the days of steam; it applies the same with diesel power now. A locomotive can pull a load behind it, dependent on the









traction between the wheel and the rail, called the 'factor of adhesion'. And if you have a combined axle load on a locomotive, on say three different axles, totalling sixty tons, you could say that twenty-five per cent of that is available for pulling the train. That means you've got fifteen tons' traction which can then be applied to the resistance of the train. The point is this, that the heavier the axle load – which means the heavier the track – the more powerful is the locomotive power and therefore the larger the load it can pull, which means that in operation it's more effective. The same thing virtually applies with diesel locomotives, except that instead of being twenty-five per cent of this adhesion factor it's generally about twenty per cent. In other words, if a diesel locomotive power wheels are sixty tons, you can get a tractive effort of a fifth of that, which is twelve tons. So that's really the basis of it. It's really very basic. It's always been an interest of mine, my father being an operating man.

And in the end, I guess, that's what it comes down to, doesn't it?

Yes. And it's surprising the number of railway engineers who do not understand that and don't follow it.

Isn't the outcome of that, then, the expense of building a certain type of locomotive or of –

Yes.

- and they would be the engineering outcomes at the end of that?

That's quite right. It's a combined thing. For instance, you design a track or a bridge to take a certain load, and that ultimately governs the power that you can put on. You can put on two loco engines, one behind the other, but for each individual locomotive the limit that you can haul is based on the strength of the track on which it's resting.

So, Ron, you're saying that this really came out of your father's very practical job with the railways?

Well, perhaps it came out of my being able to observe him, seeing the trains, and I became very interested in train operation compared with engineering.

Although the two must be intertwined.

Yes. But, as I said, I'm amazed at the number of civil engineers who do not appreciate that. All they can think about is the track, not 'What is it going to do?'









No comment. (laughter) Ron, backtracking yet again to May 1949, when you take up your posting to Port Augusta –

Yes.

– with Commonwealth Railways. So you've moved from Western Australia.

Yes.

What did you find at Port Augusta, and what was your major task?

I found that the job of Chief Civil Engineer to the Commonwealth Railways was quite unique, in that it was a hands-on job. You didn't sit in an ivory tower and give directions, you went and did it yourself. The Commonwealth Railways was a relatively small system, it had no big station yards, no commuter service, just through traffic; it didn't generate much traffic of its own, except Leigh Creek coal. But I suppose the biggest surprise I had was this: that I joined the job in Kalgoorlie, in that when I was appointed my maintenance engineer over there, Vic Noble, wrote to me and said, 'You're going to have a pretty busy time for the next few months with other things on. Why don't I meet you in Kalgoorlie and we go across together on the Trans⁶ line, on the motor inspection car,' which was a motor vehicle with flanged wheels to go on the rails. And so I met him in Kalgoorlie and it took us eight days to get to Port Augusta, camping out each night. But the first thing he said to me, 'Mr Fitch, this is your swag.' I thought, 'What's going on here?' So he handed me my swag, which was a second-hand, khaki groundsheet, inside it were two sheets, a pillowslip, two blankets, a towel, a cake of soap and a toilet roll, and it was all held together with leather straps.

No padding at all, Ron?

Oh, no! (laughs) Well, then, our first night out was at Karonie, and there was a little cabin there which was used by the road masters and ourselves, and in the little cabin there was a bedroom with two or three stretchers and a mattress and a pillow but no pillowslips, and a little kitchen with a wood stove and a kerosene lamp and a meatsafe made out of perforated zinc. No refrigeration or anything like that. And out in the prairie was a hole in the ground – a very, *very* deep hole in the ground – which was a toilet. So deep that the blowflies didn't go down, you see. That was our sewerage system out there on the Nullarbor Plain, was a very, very deep hole.

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⁶ i.e. Trans-Australian Railway.









I hope the owls didn't mind, who lived down there! (laughter)

No! And there was a very long drop. And then I realised in no time this was my job, and after that, excepting one or two occasions, I never left Port Augusta without my swag.

Amazing!

It was a wonderful life. Tough, very tough, but wonderful.

Your life then, Ron, was one with the swag, not without a swag.

That's right, yes. (laughs)

Was the Trans line a relatively simple task to maintain?

Yes and no. The Nullarbor Plain was in perfect condition. The hundred or so miles east of Kalgoorlie – where the track was first laid earlier, in 1913 or something like that, the sleepers were getting old, and of course at the end of the War you couldn't get sleepers – there were some problems there. And east of the Nullarbor Plain, through the Barton Sandhills, it was also a bit of a problem. But, by and large –except for just the section from Rawlinna to Kalgoorlie – it was manageable, but with enormous problems of distance.

Do you mean getting your teams out there to maintain it?

Yes. We had a gang every twenty miles and most of them were fairly responsible and stayed there, but if something happens it's a long way to go to fix it up.

So are you saying there were gangs stationed every twenty miles permanently?

Yes. But, as I understand, since I've left, they have mobile gangs. Oh yes, every twenty miles there was a gang camp, generally with six cottages.

What, galvanised iron cottages?

No, the first ones were called 'tent houses'. When they built the Trans line, the standard accommodation for married family men was two tents, face-to-face on a timber frame, and a lean-to in the middle. Afterwards, they weatherboarded up the tent frames, put a galvanised iron roof on the top and a lattice between the two, and that was called a 'tent house', a three-roomed tent house. And that was a standard accommodation for many years. But Pat Hannaberry did a wonderful job and put nice, new, five-roomed villas up at almost every place along the line.









That's a huge job, really.

There was a gang every twenty miles.

And that was all timber-frame stuff?

Yes. As a matter of fact, they were built by contract by an offshoot of the Bunning Brothers. They were timber and asbestos and iron roof, with verandahs, and were really first-class bungalows.

So all along the Nullarbor, the east-west line, you had all these families living.

Oh, yes. Of course, a lot more at Cook where the locomotive crews were stationed as well until the diesels came along. Oh, yes, every twenty miles.

And, Ron, am I right that in those years the canteen trains ran constantly?

The tea and sugar ran most of the week. Every Wednesday night it left Port Augusta, and it didn't get to Parkeston, after spending the weekend in Cook, until about the Tuesday, and then it came back. It ran between the two all the time.

So how many people would you have been looking after on that line alone?

Oh, I would say – it was twenty miles, that's say fifty gangs: I would say anything from three to four hundred men.

Yes, I wondered that. So, Ron, were there any particular problems that occurred on the east-west line that you can recall?

I had a few derailments. (laughs) No washaways in my time, but they had some very bad washaways earlier, in 1930, but none when I was there.

Well, if that line didn't have so many problems, I believe another of your lines you were looking after did.

(laughs) Yes. I think we'll leave it at that for the time being, eh?

Ron, just going back a little, before we go on to dealing with the line to the north of Port Augusta, we were talking about the Trans line and any of the problems, and you were saying [that] well, in fact, there were some problems that eventuated.

Oh, yes. The major problem on the Trans line was distance, and staff welfare. For instance, if an accident took place on the western end of the line, you were travelling nearly a thousand miles to the accident and a thousand miles back. As a matter of fact, twice in 1953 we had a derailment fairly close to Kalgoorlie, and it meant that long









distance travel out there by train and then working round the clock to get the damage repaired and then back again. By comparison, it was just as far, as the crow flies, in distance, as between London and Rome to attend to a derailment.

The other was staff welfare, such as a certain monotony that could arise in the matter of food or the delay in the men's tobacco ration coming out, and I felt it was my job to try to placate these things as much as possible. And the other was family problems. I suppose the most notable one that I can recall was that one night the ganger's wife at Wynbring, Mrs Lloyd, had a seizure and needed medical help in a hurry. The Flying Doctor from Ceduna was the normal medical access, but there was no landing strip in those days at Wynbring, so we had to arrange for the nursing sister from the RBN7 hostel in Tarcoola to go out on gang section car to try to treat her. Unfortunately, Mrs Lloyd did not survive. That was a regular problem, to make certain that the welfare of the staff was looked after. The same with education. There were very few schools along the line and, where possible, we would fill any vacancies in the gangs [in areas which had schools] by men who had children of school age. Others had to rely on correspondence courses. So, except for one or two rather worrying spots regarding track conditions, the main things were personal ones.

So some of those problems with the people's rations, Ron, you were saying earlier that would have been things like jam, just one type of jam, over a period of time.

Yes. As a matter of fact, I used to go through at least twice a year inspecting, going along on this motor inspection car, and would take eight days to get through to Kalgoorlie and eight days to get back, and call in on all the gangs and all the camps. And the people would sometimes complain – although the tea and sugar train did its best to look after the staff – that sometimes there was no bacon, or only two bread deliveries a week. These things worried them a bit. So, too, did the monotony in some of the food. That was typical of the social problems we had to face to keep the staff satisfied.

Now, did you know most of those people by their first names, Ron?

I deliberately knew every one of my ninety-two gangers on the whole two lines by their Christian name. It took a bit of practice, and sometimes, until I got to know them personally, a little subterfuge. I had a little black book in my pocket with their names on,

⁷ RBN – Royal Bush Nursing.







and if I wasn't certain who it was when I'd get out of the motor inspection car, I'd go up and say, 'Hello, Bill.' I'd have his name noted. And in respect of morale it did the world of good. Eventually I didn't need to use the black book. But I knew the ninety-two gangers, every one by their Christian name.

So were the gangers remarkably free of large-scale trouble in those years?

Oh, yes. We had very few alcoholic problems on the Trans line because, except for Tarcoola, there wasn't a pub on the line. Oh, and at Kingoonya.

This is just to do with problems on the line, personal problems. No, that's all right. That question, then: at the end of World War II, had there been a large-scale move to standardise rail throughout Australia?

No, it all fell flat about 1948. It was this way: that Harold Clapp produced his report about 1945, in which he proposed schemes for the whole of Australia; and there were one or two conferences, an act was passed between the Commonwealth, South Australia, Victoria and New South Wales, but unfortunately New South Wales never ratified theirs with their own parliament and it fell flat. South Australia was very keen on going on with standardisation, and yet prior to World War II they were opposed to it. In Western Australia, the then Premier, Frank Wise, was opposed to it, so the thing fell flat there. So in actual speaking, I think that the whole standardisation thing fell on its face in 1948.

Well, then in 1949 Tom Playford⁸ did a rather clever thing. He had, we know, a very good relationship with Ben Chifley, and towards the end of 1949 he organised an act to Federal Parliament and the State Parliament to standardise all the South Australian railways and also to build a line to Darwin – that was added to catch him on the hop. And what happened out of that was that South Australia was already broadening its own gauge south of Wolseley at its own cost, and the Commonwealth took over the cost on the understanding that when and if it was turned to four, eight and a half⁹ it would be done at state cost. That never happened. So the only work that was done after World War II was paying for South Australia's five foot, three inch-gauge conversion, and in 1960 of course Western Australia did the Perth-Kalgoorlie line. But no, I think it completely fell flat in 1948.

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⁸ Thomas Playford, then Premier of South Australia (later Sir Thomas Playford).

⁹ i.e. four feet, eight and a half inches, or 4' 81/2".









That might have made an enormous difference to Australia's transport system.

Oh, yes. Well, as a matter of fact, to show what would have happened – and I've been very cross over standardisation, and maybe I'm a bit out of date now – I once made an enquiry as to what the standardisation would have been in terms of the war effort, and the cost of our war effort 1940 to 1945 was 2.86 million dollars a day in those days. Now, Harold Clapp's first phase, which was from North Fremantle to Kalgoorlie, all of South Australia except Eyre Peninsula, and all of Victoria, over a period of seven years, would have meant four and a half days' war expenditure per [annum] for seven years. Now, his ultimate plan, which was most of WA and most of Queensland and all the rest, over seventeen years, it would have been three and three-quarter days per annum of war expenditure over the seventeen years. So in total the first phase, which was North Fremantle out to Kalgoorlie, all South Australia and all Victoria, thirty-one and a half days of war expenditure, and the whole scheme sixty-three and three-quarter days of war expenditure. Now, that was of course on rates in 1944-45. But we have to assume, therefore, that if inflation had taken place since then, so would have been the wartime figure should have been inflated too at the same time. So that is what it would have cost Australia. So if Harry Truman¹⁰ had dropped the bomb two months earlier it wouldn't have cost us a cent.

I like those figures, Ron, that's very good. I've suddenly thought of the story you might have been trying to remember –

Yes.

– about the Trans line. And was that with the provisions, the two most popular provisions that were sent?

Well, I was told that, during the early days of the Trans line, the Commonwealth Railways provision store, which was catering for all requirements along the line, were the biggest purveyors in South Australia of essence of vanilla and extract of malt. Now, in view of the very remote nature of the people out there, many were single men, the essence of vanilla was certainly not used to make sponge cakes, nor was the –

Malt extract.

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Harry S Truman, then President of the United States of America, authorised the atomic bombing of Hiroshima on 6 August 1945, an act generally believed to have hastened the end of World War II.









- malt extract to feed the children. One would have made a good liqueur and another one was a good base for home-made beer. (laughter) It wasn't the one, but it was worthwhile mentioning that.

Ron, also thinking about the Trans line, you mentioned to me not long ago that in fact a long distance of the early track had no ballast, is that correct?

Yes. Virtually speaking all the way from, say, a couple of hundred or so miles east of Kalgoorlie to just west of Tarcoola, all that piece across the Nullarbor Plain was unballasted, just packed with earth.

And you were also recounting to me that in one test that was done, where a railcar got up over ninety miles an hour, that the track was nigh on perfect.

Oh, that had been ballasted by then.

Yes, by then.

Yes. And it was absolutely perfect.

That's remarkable. Well, now, Ron, can we take a detour and talk about a track that really wasn't perfect! (laughter)

Oh, yes!

The Central Australian track.

Yes.

Now, you once said to me that, if you'd known the condition of the track, you may never have taken the job at Port Augusta.

Well, when I saw the track north of Oodnadatta, I said that to Pat Hannaberry. (laughs)

Well, what did you find, Ron?

Well, to start with, say particularly north of Quorn, the rails were very light: most of them were about fifty pounds per yard; but there were certain sections of forty-one pounds per yard, which was more like two lengths of heavy fencing wire. And north of Oodnadatta, to Alice Springs, which was opened in 1929, whilst the rails were sixty-three pounds a yard the karri sleepers were so eaten into by the feet of the rail that they could bounce up and down up to an inch and a half in front of an approaching locomotive. It was hair-raising to watch it and (laughs) worry to think that the train was on it!

So did you do track inspections of that railway as well?







Oh, yes. I reckon at least two a year on both the Trans line and the Central line.

Now, those inspections you did were, from what you've described to me, fairly unique engineering, in that it was on hands and knees and sighting, is that right?

Yes. The Commonwealth Railways had a system that every two months a machine called a Hallade track recorder –

A what, sorry?

– Hallade, H-A-double-L-A-D-E, Hallade track recorder – a Swiss invention, which consists of three pendulums working vertically, horizontally and transversally, was placed over the undercarriage of a certain passenger car and it recorded the movements of these pendulums on tape, and that indicated the condition of the track. The gangs were instructed only to repair the tracks on the spots denoted on these rolls except in an emergency, to maintain a maintenance program. And on my inspections I'd have one of these rolls in front of me all the time and would watch it and the track, and then every now and again, when I noticed that the gang had been working, I'd get out, get on my hands and knees and squint at the track and see whether it was all right. Yes. I don't know if any other chief engineer in the world would have done that! (laughs)

And was it another engineer who called that 'railroading at its wildest'?

Yes: when I was unsuccessful at getting my books published I'd gone to England for another trip and thought, 'I'll try a story for the UK reader,' and I wrote a manuscript which I tried out there and got no further than one letter of intent and one contract, and both fell through. But in one of them – I think it was the one from Geoffrey Kichenside from David & Charles – who, when he read it, said, 'This is truly railroading at its wildest,' so I used it as a title for a book.

Very apt title!

Very apt, yes.

Now, in those years at Port Augusta, were you also acting for the Commonwealth in another capacity, in investigations and government commissions?

When the Leigh Creek coalfield was being developed in a big way, and particularly when the Port Augusta power station was being built, it was obvious that the little, narrowgauge line through Quorn, Hawker and Beltana could not carry the load, and so a heavy-







Port Augusta
Then and now

duty railway was considered quite necessary. This was actually before I joined the service. At any rate, Pat Hannaberry had the quite correct idea, and that was to come down west of the Flinders Ranges instead of diving through it three times, once between Port Augusta and Quorn, once between Hawker and Hookina and once between Beltana and Copley. And there was a dogfight over that because the South Australian then Railways Commissioner, Bob Chapman, and Malcolm Mackintosh, the Minister for Railways, were very keen on maintaining the existing route, and we'd come to an impasse. And I had been with Hannaberry over to Canberra once to a conference in the Primer Minister's office — Bob Menzies¹¹ chaired it — and we still got nowhere, and eventually Tom Playford and Pat Hannaberry came to an agreement to have a royal commission on the route and that the finding of the commission shall be accepted. Well, I was the Commonwealth nominee and Jack Fargher, who at that time was Assistant to the South Australian Commissioner, was the South Australian nominee, and Mr Justice Wolff of Western Australia was made the chairman.

Mr Justice ---?

Wolff, W-O-L-double-F, a Western Australian, was the chairman. Now, Justice Wolff had had experience before in railway matters. For instance, they had a royal commission in Western Australia over the what was known as the 'Australian Standard Garratt locomotive', a wartime job which had some problems, and Justice Wolff was the Royal Commissioner. Fargher and I did the work, of course, while Justice Wolff was supervising. That took me twelve months, including my ordinary work, and that's when I first met Jack Fargher who was on opposite sides of the fence to start with, and we finished up with the most perfect arrangement together.

How did Jack Fargher strike you when you first met him?

He had an awkward position because he knew what Bob Chapman's views were, and he was very careful to represent him. But he was strictly impartial all the time, and we had some very difficult debates together – particularly the two of us when we were working together to work out all details – but never once did it ever get into personalities, and even to the stage that one Saturday – we were working right through, Saturdays and everything else – he said to me, 'Come on, we'll go to the football this afternoon.' And he

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Rt Hon Sir Robert Gordon Menzies was Australian Prime Minister from 26th April 1939 to 29th August 1941, and again from 19th December 1949 to 26th January 1966.









was a brilliant engineer, but I think his heart was in engineering design, in which he was of superior intellect. He, as a twenty-two year-old, virtually designed the Murray Bridge at Murray Bridge.

Is this the railway bridge?

Yes. He had a big say in the Paringa Bridge, too.

Very similar structures, actually.

Yes. It was very tense for both of us, and he had a tougher job than me because I think he knew in his own mind that the Commonwealth case for the west of the Ranges was the right one, but he was very loyal to his boss. Yes, that was a very strenuous period. I'd come home to Port Augusta Saturday morning, get there at midday, and be grabbed at the station for the problems of the weekend until I'd go back to Adelaide on Sunday afternoon. (laughs)

How did you find living in Port Augusta, Ron, with you and your family?

Oh, a lovely town. I think it's the most friendly town I've ever lived in. We arrived – well, the family arrived in Port Augusta at half past five one cold, winter morning. We were met at the station and became part of the town, right from the start. People were wonderful right to the end. We had a very, very soft spot for Port Augusta. A lovely town to live in.

Well, Ron, what caused you, then, to apply for the job in Adelaide, and what job was it that you applied for?

Well, I tendered my resignation to the Commonwealth Railways. I had a disagreement with Hannaberry over a procedural matter of responsibilities, and so I said to him, 'I can't work under those conditions,' and I tendered my resignation. And, as luck would have it, before it had taken effect, South Australia advertised for Assistant to the Commissioner and I applied. It was just luck.

Was it? So had Jack Farga been appointed Commissioner by this time?

Yes.

So you were his second-in-command?

No. The title was 'Assistant to the Commissioner' –

Oh, I see.







- which was head at branch level but not Deputy Commissioner. The Deputy Commissioner in those days was Bert Harvey, who was the General Traffic Manager. When he retired, a few years later, I was put up to Deputy Commissioner and then became Commissioner.

When you came to Adelaide in mid-1954, Ron -

Yes?

- what was the task that you actually did in that position?

I would say there were three tasks. One was to do investigations at the Commissioner level. For instance, two that come to my mind were these: that there was a new scheme for a new harbour at Port Lincoln and it had effects to the railway, and I had the job of reporting on that and where it ought to go; the second one was a similar scheme at Port Pirie with the handling of the concentrates, and I fought like mad and got away with getting a tippler to unload the ore instead of using cranes. So that was the sort of job. And then there were other committee [positions], such as Chairman of the Appointments Appeal Board and Chairman of the Professional Officers' Classification Committee. But it was mainly the job of handling at Commissioner level, for him, investigations into various matters – not just in theory, mainly operational.

In terms of operational work, where were the South Australian Railways at that time? Were there any major problems?

I would say the only major problem was the fact that, after the War, Australia wanted to get diesel locomotive power. South Australia wanted to use General Motors in the same way as Commonwealth Railways did, but they couldn't get the Yankee¹² dollars. So the Commonwealth did nothing, but South Australia said, 'We'll build our own.' And this was before my time, but I was aware of it. Bob Chapman and Frank Harrison, who was chief mechanical engineer at the time, worked at and virtually designed the 900-class locomotive – the first one was 'Lady Norrie' – in which they used English electrical equipment but made the undercarriage structure and everything else themselves. Now, being a new product like that, there were quite a number of teething problems, whereas with the General Motors ones they already had had the teething problems in America. Yes, they did have some problems, but it was very much to South Australia's credit. In

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¹² Yankee – American.







the middle of that, Bob Menzies arranged a 'dollar loan' and Pat Hannaberry was able to buy his locos that General Motors supplied through the Clyde Engineering Company. But that was the only point there.

I would say the other problem, which didn't affect me at the time, was the condition of the Eyre Peninsula railways. They were locally known, very kindly, as the 'hoop iron railway', but we fixed that up. But I suppose the outstanding thing, while I was Assistant to the Railways Commissioner, was the River Murray floods of 1956. Jack Fargher was on leave and Bert Harvey was Acting Commissioner; and the River Murray seemed to be getting pretty bad at Renmark. So I suggested to Bert Harvey I go up there, and had to go through to Morgan by railcar and then get the bus across because the Paringa bridge was out and the railway connection lost. I got to Renmark and stayed there for about a week, just keeping an inch ahead of the floodwaters. At the time the only accommodation I could get was at the Berri Hotel, which was a singlestorey building in those days. And my room was in the front of the house, facing the road; and across the road, on the river side, there was a levee and the water was well up it. I was sleeping six feel below water level! But the levee bank didn't break, thank goodness. And we had a shuttle service with a little railcar pulling a truck, a wagon, across the bank to Paringa, because the road bridge was under water. And it was a pretty dodgy part there.

The townspeople wanted us to breach the bank across the river approaching the Paringa bridge, because they reckoned it was going to flood the town, and I had to almost use a shotgun to keep them off the line.

Is that right?

Everybody lived through it, but it was a wonderful experience because of the spirit in Renmark, and the way that people stood up to it was really wonderful. And everyone was helping. One Sunday night we were having an evening meal at the Berri Hotel and five young fellows walked in for a meal. They'd come from Kadina, and played football the day before and drove overnight from Kadina to Renmark to help fill sandbags on the Sunday and then motored back to Kadina. And that was a remarkable thing. They stuck at it. And while I was there we had an anxious night when Angove's distillery nearly went. They had a crash gang: boys who would just sit down playing cards in the RSL¹³

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¹³ RSL – Returned and Services League.









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Building until something happened, then they'd go out and fix it. This time, they joined hands and sheets of galvanised iron were put in front of them and bolstered with soil. (laughs)

Incredible.

END OF DISK 2: DISK 3

This is Rob Linn interviewing Ron Fitch at his home in Somerton Park, South Australia, on 5th November 2004 for the Institution of Engineers Oral History Program. This is tape RJF3, tape RJF3, the third tape in the series.

Now, Ron, just before we finish off with the material on the Murray River floods, you're saying you've recalled what it was you wanted to say about the Trans.

Yes. Maintenance of the Trans line during the war years, a great deal of it was done by prisoners of war and civilian alien internees. They were sent along the Plain resleepering, and the Commonwealth Railways had a Chevrolet panel van fitted with steel flanged wheels for running on the rails, and with a machine gun mounted on the canopy. And this was to patrol the line in case any of them tried to escape. Well, the one or two who decided to escape came back as quickly as they could because they realised they were going to die of thirst! (laughs) And the other thing, post-war, when the first of the displaced persons came, who were directed to employment for two years, they were directed out onto the Plain doing re-sleepering. They were mainly from the Baltic countries, and there were no complaints about them; they were very good, hard workers. And they turned their tents into cabins by taking sleepers pulled out of the track and standing them virtually up and using them as a roof, too, and filling up the gaps with clay.

That's remarkable.

Yes.

So, again, you had a close relationship with those people?

Well, I didn't see them as much as I did the ordinary men because they didn't last that long, no. But one interesting part: I called in at one of the gangs one night when they were having their evening meal – they had cooks there then – and the cook said, 'You watch them.' When the soup was put on the table, each man took a soup spoon and put a whole lump of butter and mixed it up in the soup. I think they were starved of fats during the War, that's probably the reason. Yes, they put butter straight into the soup.









Well, if they'd come from some of those countries they would have been denied many things.

That's right, yes.

Well, thank you very much for recalling that, Ron. And I'm just thinking, too, the 1956 floods obviously caused all sorts of problems for the rail, but obviously you had a lot of help to pull through it as well.

Yes, well, matter of fact the track between Renmark and Paringa was very rough, but it was only being used by this railcar, but it also became a refuge for snakes, too. Because once the track was so rough – 'Well, must do something here,' – I saw a snake up ahead of me and I thought, 'A snake, he's as scared as I am.' I crouched down to look at him. He was only a little one, thank goodness.

But we did keep a locomotive under steam twenty-four hours a day at Renmark to take the people out if they were ordered out; but it didn't get to that. We also arranged that, if it did get to the critical stage – Theo Rogers, the Assistant to the General Traffic Manager, and Don Watson, one of our senior train –

Oh, yes.

– controllers –, were sent up there to wait and take charge if anything happened. But then it didn't. But while they were up there, and Jack Fargher and his staff were over on the West Coast on an inspection, I got word in Adelaide that there was a bit of fun on Lake Albert, down near Cooke Plains, so I went down there. And it turns out that, on a Saturday night, the lake was filling up and a westerly wind came in and blew water upwards, splashing over the line that went through the top end of the lake.

This is the line from Tailem Bend?

Yes! On the main line. The driver of the Overland reported this one.

That's phenomenal!

It didn't do any damage. But so I went down there on the Monday with George Eimer, who was Assistant Chief Engineer –

George, sorry?







– Eimer, E-I-M-E-R – and what we arranged was to put some old sleepers alongside the bank, on the water side, and anchor them down with rails so it wouldn't wash away the bank. No damage was done, but it could have been close.

I've never heard that story, Ron.

Yes. And then at Murray Bridge the goods yards, which were down on the riverbank, were also under water.

Yes, I've heard that from others.

Yes.

You couldn't do much!

We couldn't do a thing at all.

What a remarkable era.

Yes.

And so, Ron, that's your time as Assistant to the Commissioner. You become Deputy Commissioner in 1959.

Yes.

What were your tasks as Deputy Commissioner?

Under the Act^{14} , the Deputy Commissioner is only operative when the Commissioner is ill, on leave or suspended. (laughs) So, while I had the title of Deputy Commissioner, I was his assistant, except when he was missing.

Oh, okay. All right, so in effect you continued with the same job?

Yes, except for these emergencies. And I was able, when he was away out on inspections, to take certain things into my own hands and anticipate what he'd do.

Now, in those years did you have much to do with politicians like Tom Playford?

Quite a bit. I did this way: Tom Playford, knowing I came from the Commonwealth Railways and knew all the back stories of the Commonwealth Railways, when he was having a problem with them he'd always say to bring Ron Fitch along, too. (laughs) Yes, I had a bit to do with Tom. And my minister, originally – before I was Commissioner,

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¹⁴ Name and year of act ???









when I was Assistant – was Norman Jude, followed by Frank Kneebone, who was mine for most of the time, Murray Hills for a couple of years and then Geoff Virgo at the finish.

I might leave the ministers *per se* and just talk for a minute about Tom Playford, who's a person quite renowned, of course.

Yes.

How did you find him to deal with?

He knew more than I did.

Is that true?

Tom Playford knew everything about everything. When I say that, I don't mean he was bombastic at all: Tom was so well-informed it was hard to believe. Yes, you might say that.

So in terms even of the railway situations, he knew the basics of it all?

He knew the basics. As a matter of fact, once – (laughs) I think it was when I was with the Commonwealth Railways – I was in his office, and Bob Chapman was there too, and Tom said, 'Wait a minute, wait a minute, you're talking to a cherry grower now.' And Bob Chapman said, 'No, we're not, Mr Premier.' No, Tom took us all for a ride. On his mantelpiece in his office was a little phial of oil from Moomba and a lump of Leigh Creek coal and a wooden-handled dip pen he used, and I'm satisfied that when somebody came in to get something they thought, 'Oh, I'm handling a cocky¹⁵ here, I'll handle this bloke,' and Tom was taking them for a ride all the time. Oh, no, he was brilliant to deal with. But he could be very stubborn. But he was a good man.

So in his dealings with the Commonwealth I suppose he was stubborn at times.

Oh, yes. As a matter of fact, I understand – and this is only hearsay – after the new Leigh Creek railroad was finished he wanted to negotiate the freight rate of the coal again, because he had fixed with Senator Collings to get a ha'penny a ton mile from Telford to Quorn. And I was told that he had a conference with Bob Menzies in Canberra about all this, and they weren't getting anywhere, and eventually Tom said, 'Well, whatever you call me, Mr Prime Minister, as an eminent lawyer, you'll understand

¹⁵ i.e. 'cocky farmer', farmer of a smallholding, by implication of small experience and easy to manipulate.







quite well that the 1910 *Northern Territory Acceptance Act* says that the Commonwealth will not charge freight rates any higher than those applying to the South Australian Railways. Well,' he said, 'I'm just going to go back to Adelaide, and I will cut the price of Leigh Creek coal down to glory and you'll have to match it.' He just walked away and left him. (laughter) And whoever was with him – and I won't mention his name – said that Tom said to him, 'Oh, we'll just leave it for a week,' and ten days later he made Bob Menzies another offer and it was accepted. (laughs) Oh, he was a gem to deal with.

I only found him cross once, and that was in connection with the oil refinery atPort Stanvac. There was a conference of all the people concerned about the railway and everything else, and I was sitting next to Carl Meyer, General Manager of the Harbours, and the Mobil man said, 'Well, we can't help a bit of oil spillage in the Gulf.' And Carl Meyer said, 'Well, if Mobil spills oil in the Gulf it will be prosecuted just like anybody else.' And Tom Playford hit the roof. I think he was frightened he wouldn't get the refinery, but he did not[?]. But no, he was a good man to deal with.

Now, another personality who'd been in the South Australian Railways long before you arrived was the former Commissioner, Bill Webb.

I've heard of him, yes.

Were there stories around about Webb still, in the time that you were there?

Oh, yes! Bill Webb's name's never forgotten. Never will be forgotten.

What, because he was an American come into Australia, or ---?

No, because he did so much. The railways were allowed to run down and he came as a new broom and he could do what he liked. He nearly bankrupted the government, you know. But he did things, and chaps who might have been junior clerks or even junior engineers when he was there were still there in my time, and they knew all about Bill Webb.

And you mentioned to me once, Ron, that the Adelaide Station – the *old* Adelaide Station – was very similar in design to the Union Stations in the US^{16} .

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¹⁶ US – United States of America.









Yes.

I noticed that in Washington, in one other place. The design of the building and the dead-end platforms reminded me when I first saw them as very much like Adelaide.

And in your – sorry, as Deputy Commissioner, which you only used (laughter) when the Commissioner was indisposed, you filled that role for seven years and in '66 you become Commissioner yourself, Ron.

Yes.

In those years, after becoming Commissioner, was the – you held, in 1966 at least, the position of the respondent at the Royal Commission into Transport in SA.

Yes.

Now, were they fairly arduous times, to go through all that?

No. To try and explain that story, what happened: when the Walsh Government came into office they wanted to put back some sort of transport control mechanism. Tom Playford lifted that in about 1960: when he put on the Road Maintenance Tax on road vehicles, he lifted all other transport controls. Well, it did have some effect on the railways' traffic, but when the Walsh Government came to power they wanted to introduce some in the form of a levy which would go towards railway reconstruction. That bill was passed in the Lower House but it was defeated in the Upper House by the Legislative Council. So Frank Kneebone, who was a very good minister to work with, and the government instituted a Royal Commission into transport in South Australia. The only thing left out of it was transport by air. The Royal Commission was chaired by Mr Joe Nelligan, and included the Auditor General, Mr George Jeffries, and Mr Tom Shanehan, a primary producer. The Royal Commission was really intended to try to find whether there should be a form of some transport regulation in South Australia. And of course the Broken Hill mines thought it was a wonderful chance to try to get a reduced freight rate, and the road transport people quite strongly fought for them. But no, it wasn't a difficult time, it was only extra load.

At one stage, I was prepared to go to jail. The Commission asked for certain costing information, and I prepared it, and our counsel submitted that, in terms of certain features of the *Royal Commissions Act*, that it had been given in confidence. And the road transport people, and particularly the Broken Hill mines, fought like mad to get this information out. And there was a small adjournment in the case. In the meantime







the Adelaide *News* published an article saying that the Chairman had said he was going to do so-and-so with me, which was nothing of the sort; and when I told our counsel – his father was stationmaster at Alice Springs – he said, 'Oh, this is no good, there might be trouble.'

This is your lawyer?

Yes. I said to him, 'I am not going to permit it to be released, and I'm prepared to be charged with contempt of court.' And it turned out Joe Nelligan backed me up, (laughs) because the road transport people had already put some information in under the same conditions and it was accepted. We didn't have to, but I was prepared to fight that one because they'd put their confidential costing in, I was going to keep my costing confidential, too. Philip Rice, that was his name.

Rice.

Philip Rice, R-I-C-E, yes. I once had some problems with the then Premier. It was this: when Steele Hall was Premier, he arranged for Stuart Hart, the Town Planning Commissioner, to see me. Steele Hall had been to London, had seen the Festival Theatre on the South Bank of the Thames and he thought that the [Adelaide] Festival Theatre, which at that time was going up to Carclew¹⁷, should be on the bank of the Torrens. And I said to Stuart Hart, 'That's all right, it'll be like the Festival Theatre in London, it'll be on the south bank of the [Torrens] and the colour of the water will be the same, that's brown.' (laughs) I said, 'I'm prepared to co-operate to every extent,' – because it was virtually railway land with the Railway Institute on it and so on – 'but I want to protect the railway facilities.'

And things went on all right until my chief engineer came to me one day and said, 'I've just been told,' and had seen a plan that the architects had designed with access to the railway platform level from the Festival Theatre side where the commercial vehicles went in, with headroom high enough only for a motor car. So the Fire Brigade and the ambulance, the buses, semi-trailers and so on could not get down there. So I raised a bit of steam over this and there was a conference in the Premier's office, and he produced a plan which is as it is now with the circular approach, and I said, 'I've never seen that plan in my life before. This is the plan I was shown yesterday.' And we had a ding-dong

¹⁷ Situated on Montefiore Hill in North Adelaide.

¹⁸ Premier Don Dunstan.







fight. (laughter) That's all. But I was accused – and he mentioned it in *Felicia* – that he did so-and-so to me –

Oh, this is Don Dunstan.

– yes – he told the Railways Commissioner so-and-so and so-and-so, but it wasn't that at all. I just said, 'What's going to happen if there's a fire in the railway station and we can't get the fire engine down there?' And that was all it was, too. But we wanted to cooperate. As a matter of fact, later on – no, it must have been before that, when Murray Hill was minister – Murray Hill was very concerned over the loss of the railway facilities area. He went out of his way to try to find ways around it. But that was all, that was the row, I had a row over that because we were going to be stymied. For instance, sometimes buses used to travel down the concourse to either pick up passengers off the trains or put them on; and the buses wouldn't have been able to get down there.

No, that's right. Ron, in your years with the South Australian Railways, were there major changes that you saw happening that really showed that that era of railways was coming to an end, or a new era was opening up? What was it like?

Well, firstly – I'll put it this way: my own personal philosophy was that if things are working all right you don't alter them, and therefore, while there were certain administrative functions of the railways from which I would rather have been something different, I felt, 'They're working all right, why alter them?' But there was an alteration this way: that the lifting of the petrol restrictions in about 1950 had its effect on the passenger travel, particularly commuter travel. Also the lifting of the road transport regulations made enormous differences to certain products carried by rail. So some rationalisation was necessary because we had to face up to the fact that the automobile was coming into its own properly. So there were those changes, and sometimes when we didn't want to do it ourselves the Transport Control Board would tell us to do it. They could tell us when we could close a service. I could see that rationalisation was necessary, but that, in the latter years before I retired, I could not persuade government that it was necessary. I put in a number of reports about that and said that we must be ready to rationalise, but it wasn't done. And it's been done since: you can see it happening. With the advent of the automobile and better roads it was logical. Matter of fact, my own personal view is this: that not one ton of bulk traffic such as minerals, grains, manures, should go on road when adequate rail facilities are there. But all the









small quantities, rail should give them away and give them to road. After all, the kapoks and the Weetbix and that sort of thing are different. And it had to happen.

What's the advantage of rail over road on the bigger tonnages?

It gets it off the road, its haulage costs are cheaper because you can put big trainloads – and this is for the bulk commodities – and I think, from a point of view of pollutions, there's an enormous difference. Now, a classic example of this was when things were open slather, I've seen at Port Lincoln a line of loaded trucks with grain taking it straight to the silos at Port Lincoln up to about a mile long and they'd be lined up in a queue almost for twenty-four hours to unload. Some of the farmers would bring their own grain, and the street in front of the railway station leading to the wharf was their kitchen, their bathroom and their toilet. They just lived in their vehicles. So that was not necessary. I think that heavy things should get off the road. The function of rail in my view now is for bulk commodities. The smaller stuff, far better on the road.

Ron, just looking at your life as an overview, did you ever think, when you came in as an engineering cadet in 1927, that forty-six years later you'd be retiring as a Commissioner of Railways in an Australian state?

Well, I'll be perfectly honest about that. It was never in my wildest dreams. And my aim, when I was a junior engineer, was if I could become a district engineer in Western Australian Railways, of which there were five I think it was - Geraldton, Northam, Kalgoorlie, Bunbury and Perth – that would have been the acme of my career. But at the time I was in my middle to late thirties I'd reached the grade of Chief Draftsman, which were the same grade. I never dreamed it for a minute! No, not in the slightest.

And also, Ron, over the years that you were involved so intimately in Australian railways, what were the greatest changes that you saw?

I would say dieselisation first; then mechanisation of plant – well, perhaps equal to it. In Australia, the introduction of overnight passenger trains equal to the best in the world; and the rationalisation of transport between road and rail. The absolute tragedy in the failure of rail standardisation in Australia.

Yes, you've referred to that a number of times in our discussions.

Yes, an absolute tragedy. My hobby horse. (laughter) It might be out of date in light of present arrangements, but it was my hobby horse. It was an absolute tragedy. Now, I've mentioned those. Oh, yes, and perhaps another one, and it may be a bit of personal









jealousy in this: the conversion of railways from an instrument of national development to an instrument of political opportunism, and that's happened all along the line. The railways became used as a political football, and that was one of the worst features.

Now, in terms of engineering of railways, Ron, has that changed essentially over the years, or have just the superficial things changed?

I think the principles remain the same but the techniques are different. For instance, the mechanisation of everything, from the engineering side, from the construction, to the maintenance. They have rail grinders and all sorts of things we never did see. Men couldn't use a spiking hammer these days to drive a dog spike. It only had a head as big as the spike. But that is only improved techniques, but the principles remain precisely the same, yes.

So, in effect, the heritage that you came into in railway design and engineering from the nineteenth century – and I've actually read books from that era and I can picture those things – for the early years of your life as an engineer, they didn't change, those principles, really even in ---?

Oh no, not changed. As a matter of fact, when I was in my twenties, our main permanent way maintenance men who were called inspectors of permanent way, they all worked in the 1890s on building of the lines, as young men, and they were towards retiring age later on, thirty years later on. No, that part didn't vary at all. So the principle is the same, the steel wheel on the steel rail, but the type of traction changed, the maintenance and construction techniques have completely changed, and I think now the fact that one time the railways in most countries – overseas, anyway – if it wasn't by rail it was by canal, that has gone now, and now you've got the rise of the automobile has made an enormous difference to it. Enormous difference.

Well, Ron, could I just say thank you so much for allowing me to interview you today? It's been a great delight to hear your life story. So thank you very much.

Thank you. Well, now, have I got off my chest. (laughs) END OF INTERVIEW.