

Elmslie Berghauser

Ipswich Railway Workshops and the Powerhouse

Date of interview: 1996

Interviewer: Robyn Buchanan

Interview available on CD



The Powerhouse

Track 01

I am Elmslie Berghauser. I went to the Haigslea State School and attended classes there until Grade Seven. I left at 12 years of age and my parents sent me to the Ipswich Technical College to learn fitting and turning. I was there for about 12 months and I used to ride a push bike down to the Walloon Railway Station and catch the rail motor to Ipswich and then walk up to the College.

You were a full time student?

Yes, a full time student. In the evening I would catch the Toowoomba train back to Walloon which left Ipswich at 5.30pm in the evening. When the train would pull in it, the engine would uncouple and fill the tender with water for the trip up to Toowoomba.

At that particular time Cribb and Footes were knocking off and one would always hear their siren. They had an electric siren which used to tell the employees that they could knock off - they would run north, south, east and west and some would come to catch the train to go out along the Toowoomba line and it would head off and go off to Walloon and I'd ride my pushbike home again. That went on for 12 months.

About three quarters of the year through, my mother went to interview Mr Alexander McConnaghy Scott who had an engineering works in Ipswich to see if there was any chance of employment there and he said, "Send the lad down to me before he goes to College in the morning, but don't let him miss any College". So the train got in at 8.30am and College started at 9.00am, and I had half an hour to spend. Anyway he interviewed me and wanted to look at my hands and with his pencil - he ran his pencil in

all those little lines on my hand. I used to help out at my Grandparents' farm milking cows, minding cows, various jobs on the farm and I had little corns on there. He said, "You look as though you are used to good hard work. Come back and see me in 3 months time".

So anyway three months were nearly up and he'd sent a letter out to my mother and father and said, "If you're in town on Saturday morning, come and see me." This was just before Christmas. So away they went to see him and he said, "I've got three weeks work here for a lad. Would you like me to try him out?" Anyway when you went to secondary school in those days, you had eight weeks school holidays and at the state school you only got six weeks school holidays. "Well", he said, "When college finishes, you come and start." Well I was so looking forward to my eight weeks school holidays which I didn't get, so I went to Scotts and started work there

Track 02

I started off as Billy Boy, they had a gas ring and I used to have to boil the billy for the men in the foundry and the men in the engineering shop and the bottom had a boiler shop. That was my job, used to sweep up the floor, do things like that, run messages. Sometimes I'd have to take the money out from the office to the bank. If anybody, if the engineering shop wanted a bit of paint or a few bolts, they'd send me up to Cribb and Footes to get the bolts and paint and I might have to paint little things that they were making - bearings and things like that.



An early photographs of Scotts in Wharf Street

Scotts was in Wharf Street?

Yes in Wharf Street. Yes. After a period of time, I got apprenticed in 1936, no, at end of 1936 I started there but was apprenticed in 1939. While I was working at Scotts the train time didn't suit me. I used to ride a pushbike from out at Haigslea, right through Karabin and cross the line at Karabin, ride along the railway line to Wulkuraka, down to the Sadliers Crossing Bridge and carry the pushbike up the steps, ride the pushbike across the bridge, carry the pushbike down the other side and ride up Thomas Street, down Darling Street and around to Scotts.

You were worn out by the time you got to work?

No. I was able to do that and I never missed a day. Wet weather was horrendous. As I was riding in, miners would be riding out of Ipswich out to the coal mines, the Caledonian Coal Mine. I'd meet them. They would be coming from way down Blackstone, riding out to Walloon for the coalmine. When it was wet weather, I would take my pushbike over to Toowoomba Highway, near Sprengers shop and ride the pushbike down the bitumen road and come down over the hill and that was 12 ½ miles, that was a fair ride. I wouldn't like to ride a pushbike on that road today with all that traffic that is on it.

It would have been fairly quiet then?

Oh yes, fairly quiet, but big trucks on the road but that was it. It was nine miles straight through from the other way. As I got apprenticed, well I had to attend classes at the Technical College, trade classes, so we would stop, my brother was doing the same thing. He served his time at Arthur Wright's furniture manufacturing shop in Darling Street. He was 12 months ahead of me, so we

both had College to attend to so we had company riding along especially at night, riding often on the dark road out there. There was one night, I was on my own. I used to ride along the road singing away for company. In those days there was a nice bike track. All the men used to ride their bikes along this track and it was a nice little sandy track, really nice to ride on, until it was wet weather. Then we'd go along the main road.

There was a cafe in Bell Street, Yes Marsh's and it was roughly where I think it is a Hot Bread Shop now, roughly in that area. Haenkes had a clothing shop next door. There was a bank on the corner, then there was Haenkes had a clothing shop and then Marsh's had a cafe next door. So Mum knew Mrs Marsh so we arranged to have our meals, get washed at work, go up to Marsh's Cafe and we used to get a bowl of soup, pie and vegetables which would be peas and pumpkin and mashed potato and gravy and after that, we'd get sweets. She liked rhubarb and custard or icecream and something else, may be rice or that sort of thing. We used to get that for one and three pence, and a cup of tea. So we had from 5.00 when we knocked off and had time to wash at work, go and have our meal and then we would do window shopping until it was time to attend the college classes.

We knew all the bike shops, the motor bike shops and we knew what was in them and we'd eventually go off to college. Some nights were only two hours (two one-hour lessons) and one night was three hours. I think it was 6.30 we had to start college. To me that was an outing, going to college. We'd meet our other, in those days, all around the town apprentices were put on. All the garages had apprentices. Cribb and Footes garage, F W Johnson's garage, there was Marsh Motors, there was Modern

Motors and Faulkner Motors, they all had apprentices going to college. Then there was Forrers, which was across the line from Scotts, they had apprentices and then not only that, but the joineries and foundries all had apprentices. My first apprenticeship class, we had 25 in it and there was one particular chap from Forrers. We started class together and there were 25 in it and as you sat for your exams at the end of the year, if they didn't pass they had to repeat their class again. Not everybody got through them the first year. Same with second, third and fourth year.

There was Ray Fowler from Forrers and he and I were the only two that went right through the class together. If you passed all your exams you only had to do four years college. But if you didn't, you'd have to do the full five years and that was a joy, going to college in those days with those different ones. Eventually the war started in 1939 and I did my four years and my first wages was 12/6 - riding my pushbike from out there for 12/6. Brand new ten shilling note, two shilling piece and a sixpence, that was my first pay. My mother said, "You bank your money". I banked the ten shillings and every pay the notes went into the bank and that was the start of our home here really. I keep a few coins out and that was for pocket money to buy something, or tyres for the pushbike and every Saturday afternoon I'd pull the pushbike to pieces and clean the bearings and grease them up ready for the next week.

Then when I got through to the fourth year, during that period, Scotts had an ammunition contract. They made hand grenade shells. I was called up for a medical examination for military service and had to take a letter from Scotts and explain that we were on ammunition work and that gave me an exemption through that, so I didn't have to go into military training. During that period we used to do a lot of work for Navy, the American Navy, Air Force and Army and all those things and the same time, we did all the repairs for the coalmines around the place which was very much needed for the war effort.

All the coal mines, they had boilers and steam boilers for driving steam winding engines to haul the coal up. Some were out of shaft and some were out of tunnels, and during that time through being able to work on steam plant, I was eligible to sit for a second class engineer's certificate. After I had finished my apprenticeship examination I went on to sit for this second class engineer's certificate. That was just something to do because I was eligible to do it. Then when I entered my fourth year, I should have gone onto £3/5/6 wages but in those days firms were putting on what they called dilutees. They were training just labourers to do particular jobs and they were getting paid full wages and they reckoned it wasn't right for a fifth year apprentice to be still down on his wages and the dilutees were getting full wages. Well I went straight on to £6/7/6 a week and that was a big lift to us. Then I sat for my second engineers certificate and then after a period of 1945 through about 1952, Mr Scott sold out to the City Electric Light. He was a hard worker. He wanted

to work at the bench but they didn't want him to work at the bench making cores and that for the moulding shop.

Track 03

Then in the meantime, I had Mr Hancock offer me a job to go there as maintenance engineer, because in my time, I did a lot of work for Hancocks. I knew what their work was. The man that they had on there who was maintenance engineer was getting due to retire and he said that he would work with us for a period of time. They put him on a retainer and I'd have to take over after him. He'd give me a couple of pound a week more than what I was getting. Two pound a week extra. I thought that was great because we were just starting to have our family. We had the second one, we had one little girl and we had another little girl. So that was decided. And I went to Mr Scott and I said that I've had this offer of Hancock's and he said, "The way this place is going, I'd say take it." That was the reason I left there. I was there for 16 $\frac{3}{4}$ years at Scotts.

Then I went over to Hancocks. I worked there for twenty two and a half years till after the flood. The flood was 1974 and during that time, old Mr Hancock had passed away and the young boys took over. They had new ideas, new management. They had managers for this and managers for that and it wasn't very nice and that's when I decided to - it was causing me a lot of worry - and that's when I decided to leave Hancock's and I sought employment in the railway. While I was at Hancock's I sat for my first engineers certificate and that was similar to what you need to work out at Swanbank. Swanbank was just going, the first power house there.

What were you doing at Hancock's?

I was maintenance engineer.

What did that involve?

Seeing I had a second class engineer's certificate, I was able to take charge of the boilers and they produced their own power. They use all the wood waste to feed the boilers and run the steam engines to generate the power. They generated all their own power in those days. It was a really economical set up. They'd use the wood waste, to feed the fires in the boilers, generate steam to run the steam engines and the exhaust steam was used, it was fed into a container which had a valve on it. I think it was set at three pounds per square inch and that allowed the pressure vessel to push the steam up to the drying kilns to dry the timber and dry the veneers, and there was no waste.

So it was all self-contained?

You see when steam is used, it condenses back to water. It was run back to the boiler feed tank and that water was used over again. You only had to make up water to replenish the water that was lost during that operation. By day they had boiler men, every now and then the boiler man didn't turn up and I was able to take over and

keep the boilers going and they used to work 3 shifts (the boilers) a day.

Were they hand operated or automatic?

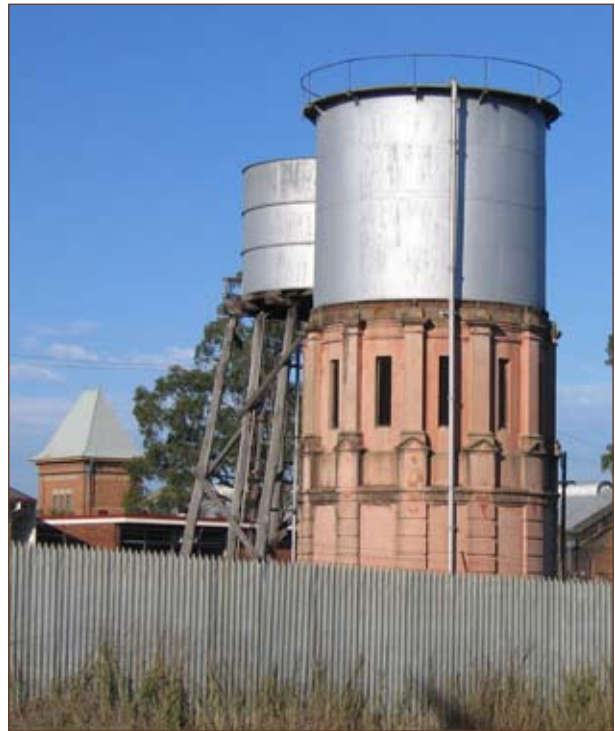
To a point. In the sawmill, the planers had exhaust systems on them. The shavings and the sawdust from the saws were picked up and blown into a big bin and from there they were picked up again from another exhaust system and blown to the boilers. The same thing with the sanding machines and the plymill. The sander dust was sucked up and went through bags because sander dust was like powder and very difficult to handle, and it was very explosive. It is almost the same as coal. Coal out of the powerhouse now, they grind it up so fine, it is almost like face powder and that's blown into the boiler, and it's very explosive. Well wood is exactly the same, when it is turned into dust it is explosive too. They had to keep the fan blowing the dust into the boiler, it was blowing in all the time. If that fan stopped, the fire would shoot back up through the blower pipe and get in and set fire to the bag house.

Then the off cuts of the logs, that was all handled and thrown into the boiler. They even used to buy saw dust. You would buy sawdust from Rosewood Sawmill and the Railway. We used to go the railway and get truck loads of sawdust. The railway used to put sawdust into wagons at one stage and they'd shunt into (Hancock's had a line) the sawdust would come and they'd have to shovel that sawdust into a bin and if they wanted to get rid of an employee, that was the job he got - shovelling the sawdust out. He'd be covered in sawdust from head to foot.

Track 04

Then I left there and went to the Railway. At that particular time they were looking for a powerhouse attendant and they had to have a first class engineer's certificate. My brother was working in there at the time and we approached someone over there at the time and asked if there was any chance of a job over there and he said to come over and see him in the morning. So we went to see him and I had a bit of a resume written up, of what I'd done over the working life. He said to leave it with him and he'd go and see the boss and come back and see us in the morning. So I went back in the morning and he said yes, you can start. You'll have to go and get a medical certificate. He gave it to Doctor Paterson to get a medical certificate.

The job wasn't readily available so I had to go into the tool gang as a fitter. I was a fitter and turner but I wasn't allowed to use a lathe, I had to go in as a fitter. All I could do was fitting. I went in, I started in April 1975. The man that had the job in the powerhouse retired at the end of June, so they called applications for the job and I put in an application for it. It was worded in a way that anyone in the railways thought they might get the job. Well they all applied for it, but then they cancelled that application, and it then said on the application - "Must



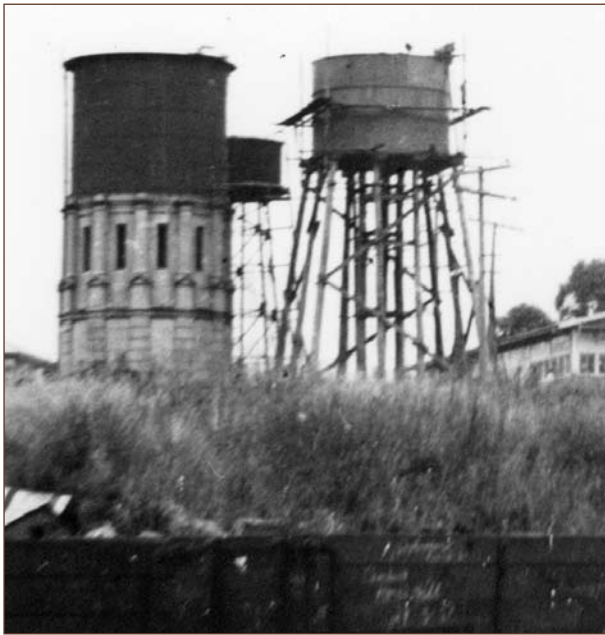
The water towers, with Powerhouse tower in background

have first class engineer's certificate". So that was right. Different people told me that no one in the railways that had a first class engineer's certificate, so I had it all on my own. Then it was cancelled again and they added this clause, "Must be able to work shift work". Well they asked me when I went over there if I would like to work shift work. I told them that I'd never worked shift work in my life but I'll give it a go.

Well when I was given the job for the powerhouse, I had to start shift work and that consisted of starting work at 3.15 in the evening and working through until 12.10 at night. The electricians would start the plant up in the power house, because steam had already gone. There was no steam there. Only electric motor driven alternators. They would start it up in the morning and then I'd take over at 3.15. They were due to knock off at 3.30 so I had it on my own. I had that plant running until 12.00 at night. I was given 10 minutes to close the plant at 12.00 at night, so I went out at 12.10 at night.

During that time I had to keep an eye on those water tanks. They were to be kept full of water to keep the compressors cool. There were 5 compressors and water was used to cool the cylinders of those and it was just pouring through and running to waste again. Seeing it was river water, it was just running into the river when it was used. I had to make sure those tanks were kept full of water.

I had to keep an eye on the tides, I had to know the heights of the tides and then I had to keep an eye on those tanks and I would have to fill them up with town water. They had a one inch main coming in and if the pump wasn't working we would have to keep those tanks full of water.



Original water tank, Grinnell tank at rear, additional tank erected during war.

There were three tanks. There was a 50,000 gallon tank, a 30,000 gallon tank and a 20,000 gallon tank. The 20,000 gallon tank fed the Grinnell sprinkler. In the Carriage Shop they had a sprinkler system. If ever a fire started then the sprinklers would work and that tank kept the water supply to those sprinklers.

Where was that tank?

Up on the hill. There is a little bit of history on that. That was the original tank. A beautiful bit of brickwork, the base of that tank, it's like a room in underneath there, you can go in the doorway.

Nice brickwork on that. That was the 50,000 gallon tank on the top. This one here was built. There was a water main, a six inch main right over the Ipswich railway station, across the railway bridge. It used to go to that thing where they used to fill the tenders of the steam engines, where they'd get the water. That would supply water to that.

Now during the war years, well the steam trains were going, carting coal and all that sort of stuff and they couldn't keep up the water supply on there, so they got the bridge builders in and they erected a wooden stand, something like the railway bridges and they quick made a tank for the top of that and that was an extra supply.

So that went up during the war?

Yes, to give extra supply. But behind that you can see there is another stand there, a steel stand, and that's where the Grinnell sprinkler tank, right directly behind that. You can't see it. That's where that was. That is the drawing office and then on the brow of the hill, it is still standing there, the brick foundation for that chimney and at four points, north, south, east and west is a big cement block set in the ground with a big steel eyelet and

they had guyropes going from the four different places to support the chimney. That went along, there was a tunnel going along there, right in underneath the power house. See that is the back part of the power house. There is a tunnel that goes right through underneath.

That side of the power house, that's where the boilers were, in there. This was all the electrical. I assume they would have had turbines in there and steam driven generators in those days. We didn't know anything much about that. It was like two hips there. The back one was the boiler and the shutes and that, and then the rail line used to go right around the back here, down on the far side of the boiler house and the rail line is still there and the rail trucks used to open up the gates on the bottom and dump the coal down through shutes and it would go right down in underneath (there is another storey underneath that building) it would go down the bottom and there was a big conveyor chain went right around and carried the coal up that peak on the roof. It went right up into there. I don't know which way the buckets went. They would pick up the coal take them right up and dump them in like bins in front of the boiler, so they could let the coal out of the bins and into the boilers.

Were they still there when you were there?

No the boilers - no that was all gone. There was another storey underneath that and that was where all the ash used to go and this tunnel from the chimney went in underneath there and went into the back of the boilers. Heat going out of the boilers come up this way and up through the chimney.

Track 05

When they built that power house - I'm not sure whether it was 1901 or 1903 - there is a water guttering on the roof, there was like a box on the outside and it's got the date worked into it.

I think they didn't officially open it until 1903.

Yes, that might have been.

The power supply in that was run at two phase, fifty cycles. Now our normal power supply is three phase or single phase but it runs at sixty cycles. Now the cycles is the number of directions alternating current flows backwards and forwards through the wires and changes its direction, sixty times a second, that's what that means. Well the two phase that was put in there that only run at fifty cycles so anything that would run on that would run at ten percent less speed. After 25 years (they say 25 years is the life of a power house, 25-30 years) they decided to buy power. This is the first electric power in Ipswich. They even ran power lines to the Ipswich Railway station and the State Government Insurance Office was fed power from the railway workshops, but I don't know what else over town. Near the state government insurance office was opposite, across the road from Goleby's?



The converter sets in 2004

Not the one on the south side of Brisbane Street. On the corner which is LifeLine now I think, that was State Government Insurance Office.

Did they have a Railway Institute Library in there as well, at one stage?

Oh they could have, I've got an idea they did. Yes I've got an idea they did have something over there.

That was run over there and then after they were phasing out the steam over at the railway, they started to buy power from the City Electric Light (CEL it was at the time). They could supply them through a Scott Transformer, they could supply them 2 phase 50 cycles from their power supply, but they couldn't supply them with sixty cycles.

It was quite easy to take a two phase electric motor off a line shaft or a machine and put a three phase motor on there, because that was simple enough. But the big cranes that went to and fro in the shops, lifting the engines and the carriages and that, they were a different situation altogether. They were made in such a way that they could control them slow and fast if they wanted them fast, and to put three phase motors in there it wasn't a real success. That's why the electrical authorities put two electric motor driven alternators in. They are still in there.

Still in there?

Yes they are still in there. The electrical authorities put them in and they'd run one of those each day, alternative days, and roughly two thousand horse power the motor was and that drove an alternator which produced the two phase, fifty cycles to work the cranes and the Traverser. The Traverser was the big carriage that went down

between the shops. They could transfer an engine from one shop to another, run it out on to the Traverser and take it down to the next store and run it into that shop, or whatever they were doing.

It is remarkable you know, how that railway was built. Each of those doorways in the shops, they had like a big arch on them, and they were a replica of the tunnels on the line. Everything that went through those doorways would go through a tunnel. How well thought out that was. Wouldn't be many people that would know that.

They used to run these alternators and that was my job. The alternators would be running during the day and when I would switch them off at night I would switch over onto the Scott transformer which was (there were a couple of units there for it). At midnight, that power was available if there was a fire during the night, and they wanted to shift a crane, or the traverser, they would be able to use the power on the Scott transformer.

At one particular time, they were using power for the Scott transformer and it was overloaded and it got on fire. If you were to go out and look at the wall just outside the power house, you'll find it. I looked at it one day and I said, "What happened to that wall, it looks as if all the brickwork is deteriorating". That was where the transformers got on fire. It burnt for nearly a day, they couldn't get it out, because the transformers are filled with transformer oil and it destroyed all the brick work, I suppose it melted the brick on that surface. It is still visible there.

I'd switch over onto the Scott transformers for the night after I went home.



The accumulator - "I used to get up there and get in that big pot, and go up and down with the pot as it went up and down with the pressure "

TRACK 06

In the Powerhouse there was a steam operated hydraulic pump. The hydraulic power, it was water pumped under pressure that would go down to the Wheel Shop, the Forging Shop, anything that needed great water pressure, that's what the hydraulic pump did.

Now, I always explain it like this, you got a motor car, you got a generator on it and you got a storage battery. The generator generates power and is stored in the battery. This accumulator, was the same thing, only it was storing hydraulic power. It was a big cylinder like that, 14 inches in diameter, which was a lot like a push bike pump and it had a cylinder on the top of it, like you put a jam tin on top of a push bike pump and you could blow in the outlet of the thing and you'd blow the handle up and by putting weighted pressure on that container on the top, you'd get much greater pressure, coming out of the bottom. That container on the top, that had one hundred tonnes of weights in it. Weights, they were all in segments, all put in separately. They say there was a hundred tonne of weights inside of that.

The hydraulic pump would pump that cylinder up and it would go up to about 50 feet high to the top of that. There was a ladder that went right up along side of it. I used to get up along side of it and I used to get up there and get in that big pot, and go up and down with the pot as it went

up and down with the pressure. That would be pumped up and it would stop up until they had used some of that hydraulic power down the shops.

Then the steam hydraulic pump would be cut off. They had a connection system with a rope running to the valve, letting steam into the hydraulic pump and when it went up it would cut the valve off and stop the steam from going in until all the hydraulic power was used in that cylinder and was getting ready to pump up again. Then it would hit a trigger down near the bottom of the cylinder and it would start the steam pump working again and pump the tank up full of pressure again.

Was that the steam engine that was just near that accumulator tower?

Yes but it was in the little room in the side. That was steam operated in the early days and then when they went out of steam, no longer steam available, they converted it to compressed air. They put a big, (this is what the compressors did, supplied air to that tank, big cylinder outside the power house. That always had to be left full of air when I went home at night to blow the fire siren. There was a fire siren and if there was ever a fire at any time the watchman or the gate keeper would have to run up to the power house and pull the lever and blow the fire siren and the railway firemen would have to come in and attend to the fire.

They used to blow that every pay day, every fortnight at 1.00pm. They would give it a blast, to make sure it was working and everybody knew that it wasn't a fire, it was blowing at 1.00pm. You used to have to go and pull a lever outside the power house and give the air siren a blast and the whistle too. It operated on steam in the early days. I used to hear it at Haigslea, I used to hear 7.20 whistle in the morning and 7.30 whistle at Haigslea. They tell us that when it was working on steam, they could hear it on the hill at Tallagalla. I've got an idea that was in the Tallagalla Centenary School booklet.

It was my job too to blow the whistles. I had to blow them manually and this is how many whistles I used to have to blow. Well whoever was in the power house, when I went on to day work, I had to blow these, you see when they started to cut out the shift work, then I was bought in on the day work.

There was a whistle blown at 7.20 in the morning, that was to get ready and give them a warning to get in and they had to be in. The gate would be closed at 7.30, another whistle was blown then, that was starto and then at 9.00 it was smoko till 9.10 and then at 11.57 were given 3 minutes to wash their hands and then there was another whistle blown at 12.00. At 12.35 there was another whistle blown, that was ten minutes before 12.45 and 12.45 was when they had to start work again. Then at 2.20, afternoon smoko till 2.30 and then at 3.20 the shift workers would knock off. That was for them to get ready and then at 3.30 they knocked off. Then 4.05 they were given 10 minutes to wash themselves to get ready to go to catch the buses outside the gate, and the train left at

4.15. So there were a lot of whistles and you had to keep your mind on it. Everyone in the railway had a watch and they'd tell you if you didn't blow the whistle on time.

Then it got to the stage where they started to blow that automatically, they had a solenoid mounted up outside, an electric operated solenoid and if that didn't blow at the correct time then there was something wrong with it. I'd have to race outside and I'd have to pull the lever and blow the whistle. Notify the gate that the whistle wasn't working automatically.

Just before that, before I knocked off of an evening, when I was on day work, I'd go down to check the compressors to see if they were all right until I handed over. There were a few fitters on shift work at night, and they used to keep the compressor going for the workers at night. You see the Boiler Shop might have been working overtime, or the Machine Shop might have been working and they required air.

Just before I'd get back, about 3.50, and I got back this one particular day and I forgot to do it. I got in and I looked at the clock to see what the time was and I thought it was time to blow the whistle and I blew it at (I think) 4.00pm but I've come in out of the bright sunlight and it's dark in the power house and I couldn't see the clock correctly. I raced out and blew the whistle and after I blew it I realised I blew 10 minutes too early, and so I quickly rang up the gate. Clay was my immediate boss. I rang up and said I blew the whistle at the wrong time. "Oh" he said, "don't worry about it, blow the whistles at the correct time". So when I blew the second whistle, that ought to have been the first whistle I should have blown. As soon as they heard the second whistle, every body in the railway headed for the gate. They couldn't stop them from going out, they nearly tore the gate down trying to get out. I had to blow the correct one at 4.15 but oh was I embarrassed. I never live that one down. I sometimes say to different ones, remember the time I blew the whistle too early. Any way, that was that.

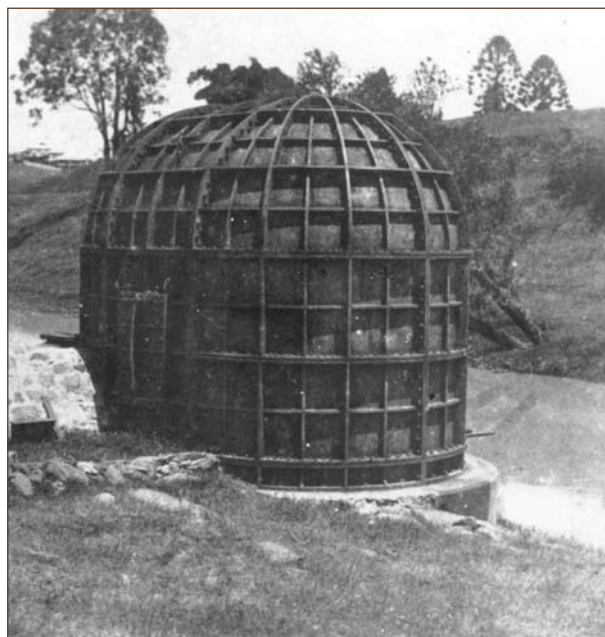
You wouldn't need a clock in North Ipswich, you would always know the time.

That's right. Someone complained about the whistle, it was too noisy. They took it off the top of the tower, not the tower on the part where the boilers were in but there is another tower - it is like a battlement. You could climb this ladder along side the accumulator, lift the hatch of the door and go and walk all around that and a beautiful view of the whole workshops and all around Ipswich.

TRACK 07

There was another thing while we are talking about hydraulic power. Over a period of time they put in a motor-driven hydraulic pump. That was the Ruwolt That was still standing around in the corner, wasn't it?

The steam-driven hydraulic (or later converted to air) - that was only kept as a stand by, most of the time. You



"... they had what they called a "dome" down on the river bank. A big cast iron dome..."

could work that on air if there was anything wrong with the electric-driven hydraulic Ruwolt pump.

River water, I told you before, that was used for washing parts for steam engines, on the railway engines, and toilets. They used a terrific amount of water for toilets and the gardens. For washing hands, they would use town water.

Another thing was very interesting: in the early days, that water was pumped up from the river at all times, and they had what they called a "dome" down on the river bank. A big cast iron dome - it would be as long as from that wall to that wall and as high as that and it was round on the top like that. It was made in segments, all bolted together. There was a doorway in here where you could go in, and they could lift that up, and it was like wedges. When they let it down, it sealed the doorway up, and this was all big inch bolts in there. I think it was, I don't know how many hundred bolts, bolting that all together.

That was water proof. In the early days, they had electric motors in there, pumping water out of the river. Down where the river runs, they would have a tunnel coming in the river bank, it went right in underneath here where the pumps sucked the water up. That water was pumped up - up the river bank, along the flat part into a well down below the Powerhouse because those pumps weren't strong enough to pump water from the river level right up to those tanks up on the hill. They couldn't pump it, they could only pump a certain distance. It was pumped into a well, down below the Powerhouse and there were more pumps there that would pump the water from the there up to the tanks. That was the old original system.

Then they decided over a period of time to do away with it. Then they made another tunnel in from the river. These tunnels, they had big iron grid in the front of them so debris couldn't go in, out of the river. That was all tidal

up there. The tide goes right up to above Hancock Bridge, and the tide would rise and fall in height the same as it did at the Pile Lighthouse (that's where they take the tide readings from). I had to know when the tide was at low and I knew when the tide was turning. I used to get the tide book and I'd see when the tide was high and low tide and I'd know. I could go down to the river and I could see the tide turn. The debris would be floating down in the river, and at the particular time, that tide would turn and then all of a sudden you'd see the debris start to go back up again. [The tide] had to build up six inches above the mouth of the tunnel before those submerged pumps cut in. They put two submerged pumps in and they would work them alternatively. When something went wrong with one, they always had another one to work by.

Now in one particular day, 441,700 gallons of water were used in the railway workshops. That was in my records, I used to have to record all that. Write it all down. I used to read the water meter up near those tanks. There was a nine inch main coming in off the town supply and I would have to read that every morning at 9.00am

Why I had to read it was because, one particular time the railway was charged for 1 million gallons of water that they never used due to the fact (you know what a water meter is like - and all the different dials, tens, hundreds, thousands, tens of thousands, hundreds of thousands) the needle was probably pointing to the million but it wasn't really there, only 900,000 or something like that. That was the reason you used to have to take [readings]. The man used to come once a month to read that meter and he'd always come when I was up there reading the meter, and the Council man would always take my reading. He'd check it too but I said, no that's what the reading is today. He would always accept my figure.

It was always quite interesting to be able to do that, it meant you weren't just sitting around the Powerhouse, it took you out. I had a roving job. I could go and check all the compressors. I used to pick up the keys at the gate in the morning and I had access to the back gate. I could open the back gate. You know, there was a tin fence all around the railway, no one was allowed in or out, and I could go out that gate and go down to the river and check that the pumps were all right and everything was all right there. That took me quite a while, to go down there. It was nice in Winter in the warm sunshine to take a walk down to the river.

There were floats on the outside of the tank, and sometimes the float would get stuck. I could climb up to the top of those tanks and there was a ladder going up there and you could walk all around the tank. There was a handrail on the top of them, like a footing to walk around there. That was a nice place to go up there too. You could look right over here and I could see our house. It was really interesting. You get a better view than that you did off the battlement (we used to call it) of the Powerhouse.

It was dark in [the Powerhouse] and you had to keep an eye on things. There was a pressure gauge in there

that told us what the air pressure was. If the air pressure was getting down, you might even have to go and start another compressor because the sawmill was worked on compressed air to work the sawbenches, the carriage and everything. It all worked on that and if the air pressure got down too low, the clamping for holding down the logs would let the log go and could cause damage. It could be dangerous.

I'd keep a record of the number of hours each compressor worked during the day, that was entered up in a log book. At 12,000 hours the compressors had to have all new big end bolts made, because apparently in England somewhere, when these compressors were made, some of those big end bolts broke, it was like a big motor car crank case, and the bolts broke and somebody was killed. They made this a stipulation that 12,000 hours was the life of those bolts. It was a big job, making those bolts up, a lot of work involved for the Tool and Gauge Shop who used to make them. They had to be changed at 12,000 hours and that's why you used to have to keep a record of number of hours and notify them that such and such a compressor was ready. [consulting old log book] This one the number one compressor, the valves used to get carbon on them and they had to get cleaned too and that one was done at 9,878 hours and then it was it done again at 11,955 hours and then here.

You had to keep all your records books...

Yes that was the log book that I was referring to.

Then it went up to 12,373 hours and before they got around to changing was 12,687 hours. I had all the figures for number one and number two and number three, number four and number five. Roughly you used to get them changed about the 12,000 hours. They were able to let them go a little bit longer.

TRACK 08

You were on your own at night in the power house?

Yes I was on my own, the only one that would come was the watchman. The watchman would start at 4.00pm and they had keys for all over the railway. The watchman would have to carry a clock with him, and he'd have to get the key and clock his clock, and that would punch a card and then at the end of the shift that card would just be handed in and the authorities would be able to say that he was at that particular point at such and such a time and he would come in and clock the key every so often. It was not really lonely, there was plenty of light in there, Checking the compressors too, I would be able to go down and check the compressors at night. There would be workmen working, and I'd go and have a talk to them.

So you and the watchman weren't the only people there at night?

No. Shift workers would be working too. Sometimes the Wheel Shop used to work a regular two shift at night and there was quite a few men on that. Then the Machine Shop would work shift work, and sometimes the boiler shop would be working too so even sometimes the blacksmith shop and the forging shop would be working at night too. So there was quite a bit of activity going on there.

Was the power house still working when you left the railways?

I would have been the last one, it might have gone on for a little short period. I had a permanent position, but it was temporary. Even long before I started, they were talking about winding it down and it was only supposed to go so many years after they put the electric power in it but that never eventuated. But we took twenty years to wind it down. Yes I think it was more than 20 years. I think they said it was 10 years to be wound down so I was fortunate that I saw my time out on that.

There is a fascinating little timber booth in there. What was that for inside the power house? Was it a phone box?

Yes a little square one.

That was all beautifully made.

You could ring out anyone. That was railway's own phone. You couldn't phone out from there, you couldn't phone out from the railways at all - out into the outside. You'd have to go down to the gate or the public phone but that was all railway controlled. You had all these phone numbers - you had a whole list of phone numbers and if you wanted to ring..... You see, to check up the time too



The phone box

you had to keep an eye on the clock that it was set on the right time and every now and then you had to ring up the time keepers office in Brisbane and say "What is the time?" They had an electric clock that worked on the power supply and it didn't keep a real good time. It varied a bit so they put a battery operated clock in along side it so you had the two to work on. When you put the batteries in first, the clock kept good time. As the batteries got old the time would vary. I would have to adjust that time on that time clock. Now this is how silly it was. The electric clock working off the power supply, I wasn't allowed to touch that, an electrician would have to adjust that. I could adjust the battery driven clock.

At one particular time there was always controversy between electricians and the power house attendants. The electricians wanted the job of looking after the power house but the railway would never grant them that permission to do that and they kept that until the mechanical side. But as I say, it worked hand in hand. Electricians did some and the mechanical side did the other things.

I don't know, whether there was a Parsons Turbine in there. There were all foundations still in there where those things were, but when I was there, that was more or less just used as a storage for electric motors that were taken off machines and replaced. Any surplus stuff went up there.

So the boiler room was really just a store room when you were there?

Yes. Even the front of the power house where I worked in.

Did you take part in much other railway workshop activities?

No but when I went there I had to go into the tool gang for the first few months, just as a fitter and worked on different repairs around the place.

You mentioned earlier that your father in law was in the railways as well?

Yes he was an engine driver. I had an uncle who was an engine driver in the railway. Now when I mentioned I used to go down to Walloon on my pushbike, catch the rail motor to Ipswich and he used to drive the rail motor most days, up to Grandchester. They run a rail motor up to Grandchester in the morning and pick up the workers and bring them down to Ipswich and they would catch the workers train. The workers train, by the time it got to the railway always consisted of 13 carriages. I think 9 or 10 carriages would come up from Brisbane and the rest of the carriages would come down from the Rosewood line. Did I say the rail motor used to bring workers down of a morning and that's wrong. No the workers train, about three carriages would go up to Grandchester and pick up workers and anybody going further, from up at Laidley, would drive down to Grandchester, catch the workers train down to Ipswich because you had to be in by 7.00 and then the workers train would leave the station at 7.10

and arrive over at the railway workshops by about 7.20. See they would bring, I think it was 10 carriages from Brisbane, 3 from Grandchester and bring them over and unload them and then they would take the train back over to the railway yards and park it over there I think until the evening and then it would come over in the evening and pick up the workers in the evening.

Then this particular driver, Ambrose Denman, he would go to Grandchester in the morning and I think they would even pick up cream from the railway stations and he would come in (that's the one I used to catch - I used to catch it about 7.45 or 8.00 or something like that at Walloon) and I used to sit behind him on the rail motor and I used to see this big man, six foot, six foot two and he'd be sitting there and the old rail motor would be shaking like this. I used to sit behind him and admire him. I never knew that one day I'd marry his daughter.

He was well liked. He would pull up anywhere and pick up anyone on the rail line. They had gates at different places where they'd leave, anyone wanted to go across the line, there would be a gate keeper and then they'd open up the gate and let some people across. Well some people would wait at the gates and they would pick up a rail motor. It was quite easy to stop a rail motor.

My working life time was 16 $\frac{3}{4}$ years at Scotts. I had 22 $\frac{1}{2}$ years at Hancock's and then when I decided to leave Hancock's I didn't know where I was going to go. I registered for unemployment, I didn't know what I wanted to do, it was getting on my nerves a little bit, the pressure of work. Joan said, you may as well get out and even get a job on the council. I registered over town and they had nothing suitable for my category so I went to the chap, you know the chap Ray Fowler, I did my apprenticeship at the same time as him. He was at Forrers at that time and he got out of Forrers and started up his own business on the north side there. He said, I'll give you a job so I went up there for 12 months and then in the meantime I got into the railway.

How long were you in the power house?

I was in there 12 $\frac{1}{2}$ years when I finished so my working life was from December 1936 to 3 September 1987 (52 years, I was never without a days work). I got a job at Scotts. We were having similar times like that, similar with just after the depression. People weren't getting much work. The only places that were putting them on before I started was Kruger's Handle Factory. Kruger's Sawmill. They used to make handles, they put boys on, school leavers.