

# Waybill No 8 Reefsteamers Newsletter February/March 2010

# From the Editor

We had our first club meeting for 2010 on the 13<sup>th</sup> February with many of our active members present. It was with regret that our chairman reported that our club secretary Lee Gates had resigned and the club is most grateful that Dennis Edgar had stepped into the breach and would undertake the direct secretarial duties. The full minutes of the meeting will be circulated to all members

If any member be able to assist with sponsorship in any way, from them selves or contact that they have they are more than welcome to come forward.

This is a great preservation club and it can have a tremendous future but all members need to work together to keep the club going in these hard times and build towards the future.

#### **Depot Report**

The rain and high winds of the January and February have taken its toll on the depot and access way. There has been so much rain in January that the water table has risen and a natural spring has opened up on the depot side of the road underbridge. This makes entrance by car very slippery, however as the rain eases off the spring is drying up.

The high winds has caused the end of the ex blacksmith's shed to collapse this needs to be completely taken down as it is a safety hazard. Any volunteers?

#### **Motive Power Report**

15F 3046 is now complete and is waiting for a boiler inspection and certificate from the boiler inspector. This will cost about R5000 (3 visits from the Boiler inspector).

The first visit is to perform a physical inspection then the next is to witness the hydraulic test where the boiler is filled to the top with water and pumped up to 1.25 times the boiler operating pressure and the pressure must not drop for 30 minutes. Finally there is the steam test with the engine fired up and where the Safety Valves are set and wired so they cannot be re-adjusted. Shaun Ackerman has kindly offer to obtain the fund to pay for this service.

12AR 1535 has now been moved to the lower workshop where two super heater elements have been replaced due to the originals leaking slightly. The springs on the driving wheels were then removed to obtain access to the axle box which had striped keep bolts. New bolts were made by Lappies on our small and big lathes (this was due the required thread pitches that were unique to each lathe) and the keep and wheels replaced. The engine was moved so the rear axle and wheels of the front bogie could be dropped, using the wheel drop jack, so the axle boxes could be examined as to why there was a tendency that the wheels ran hot.



The completed Axle fitted with its boxes

Wool Trimming



Wool Trimmings in the oil reservoir



Axle and Box almost in position in the Bogie

On blueing the axle bearing surface with the axle box it was discovered that the left hand axle box was only bearing on a small part of the axle bearing. This was correct by Andrew who lapped out the white metal of the axle box till it was a much better fit.

1535 is now complete and ready to run on the next Magaliesburg trip on the 27<sup>th</sup> February. The GMAM Garratt 4079 is being worked on slowly as with 3046, 1535 and the 25NC 3472 in working order the Garratt would not be required to run regular trains. Also it expensive to run as it is heavy on coal and water. It could be used for a special occasion if someone or an organisation would donate towards the running costs.

## **Rolling Stock Report**

Coach number 28332 is having its bogies overhauled and the replacement wheels have now been removed from the scrap coach (thanks to Shongololo) and are now ready to be installed in the refurbished bogie. Work on this coach has been at a standstill due to the time taken to work on 1535, but as that now is complete this coach should be completed and ready for service within a week or two.

Coach 22155 (a day sitter) is now being worked on with the interior having been completely repainted and all that is left now is to reassemble the seating and the odd door.

#### Trips

The first trip of the year, on the 7<sup>th</sup> February was fairly well supported slightly better than in previous years (historically the first trip or two has lower passenger numbers than later trips). Trips planned for the next 6 weeks are:

- 1. Saturday 27 February 2010.
- 2. Saturday 06 March 2010.
- 3. Saturday 27 March 2010.

All to Magaliesburg.

## An Apprentice at Germiston Loco Depot in Steam Days



Lappies with the nearly complete 3046

One of our stalwart members of old, Peter Labuscagne, who has returned to us recently and is currently working on restoring our 15F 3046 to operational use, did a SAR apprenticeship in the late 1950s at Germiston loco depot. Recently I interviewed him to find out what the depot was like in the hey day of steam, when Germiston had an allocation of 180 steam engines. Peter who is now 70, while at school joined the sea cadets in Springs at the age of 12 in 1950. In 1954 the Naval Gymnasium at Saldana was opened and there was compulsory military conscription in those days. In 1954 Peter completed his schooling at Springs Boys High and joined the Gymnasium for his one year military training. On completion, in 1955 he returned home with the intention of becoming an electrician with Springs Municipality. But due to his parent's separation and divorce, he was left in limbo.

His father was a railwayman all his life in the clerical division. Starting off in ticket offices, he became a clerk and then an auditor. So this prompted Peter to go to the railways. His father said "the only way to do it was to become an apprentice that would give him a trade that would see him through for the rest of your life". No truer word was said as Peter has never been without a job as a fitter and turner. His farther sorted it out and arranged that he would become an apprentice at Germiston Loco Depot.

However his farther, due to the divorce, went to live with his sister in Port Elizabeth and so Peter started his initial apprenticeship at Uitenhage Railway Workshops.

After a couple of month, his father being unable to get a transfer to Port Elizabeth or Uitenhage at his incumbent grade 2 clerk's job and not wanting to drop to a grade 3 clerk, ,decided to return to Springs and Peter had the choice of staying in Port Elizabeth or returning with his father to the Johannesburg area. So, as Peter's friends and girl friends were all up in the Springs Germiston area, he decided to return and his father fixed him up at Germiston Loco Depot where he started in the middle of 1955 as an apprentice fitter and turner.

As he started in the middle of the year, he started with the 2<sup>nd</sup> year apprentices and only the following year did he start with the first year apprentices to do 3 months filing training at the Germiston apprentice school. The first job was to file a metal plate into a square then cut a square hole in the plate and then file a square to fit that hole. The gap must not exceed three thousands of an inch as measured by a feeler gauge. Before the apprentice could move onto the next test the square had to be approved by the Apprentice Supervisor. Some apprentices never passed this test and gave up the apprenticeship and often moved onto other jobs in the railways.

Germiston depot in those days was the hub of steam. The whole of Germiston was covered in smoke. When Peter travelled in from Springs on the commuter trains, he could always see 25 or more steam locomotives standing over the ash pits, cleaning fires or taking water and coal. In those days the local commuter trains were wooden side door stock and as the trains stopped opposite the coal stage, the apprentices and railway workers on the train would hop out and jump over the lines to enter the depot, instead of having to walk from Germiston Station. But then they introduced the steel coaches with the pneumatic doors, this meant that they could no longer get out at the coal stage had had to go to Germiston Station and walk back down to the depot.

From the station, one could see Germiston loco which was just a cloud of smoke with locos going in and out continuously. Walking down to the depot through the area where the local carriages were staged, you would pass the electric loco units. At this time they were the 3Es, big locos from 1947/8.

The main office was just before the entrance to the depot. This building has long since been demolished. This building was known as kammer agt. and was where all the clerks worked, here they used to do your time sheets and where you went to get your pay. Walking down through the depot you would pass all the locos waiting to go out that morning taking water. The start time was 07h00.

Before the apprentices could clock in they had to report to Callie Werner who was the apprentices' supervisor. He used to sit in his office which is now the Reefsteamers change room. In those days the room that is used for meeting and eating was the artisan's rest room. After he had seen them arrive, he would send them to the clock in office (now also demolished). You would get your clock card and insert it in the clocking machine which was an old Smiths clocking machine with a big pendulum and a lever on the side to mark the time on the card. The card was taken by an old guy who would put it away. Then you would change and report to whichever artisan you were allocated to either on the 15M or the drop pits.

Each artisan had one or two apprentices and one or two labours working for him, especially on the 15M. The 15M was the top shed as it is today. There they used to service two engines a day. The 15M means 15,000 miles. After 15,000 miles the engines had a service in this shed. This was not classed as a major service, but the pistons and valves were taken out and new rings fitted. Boiler mountings were taken off, the engine and tender were split. and if fitted, the mechanical stoker and worm were checked. The apprentice was either seconded to front ends (piston & valves), boiler mountings, mechanical stokers or side rods. There were two teams on the side (connecting) rods, one for each side. Bill Goodram was on the right side and Billy Bush

was on the left. Each team had four labourers as well as themselves and one or two apprentices



Germiston Apprentices 1957 Peter is standing 3<sup>rd</sup> from the right

All the rods had to come off. The locos were moved by pinching until the rods were at the bottom, the rods were pulled off and the bushes knocked out. Then the turner would come and measure the rods and crank pins and then turn new bushes to suit the dimensions on that particular engine. These dimensions were taken with callipers, no such measuring tools as micrometers being available in those days. The bushes were drilled on the drilling machines, which are still in the lower workshop, for the grease holes. The 15M was a one day service. The apprentices would work a month or two on the various stages of the 15M. Then it was a couple of months on the turning and drilling, turning spindles, facing spindles drilling bushes sharpening drills etc.

Apprentices at the beginning of the 3<sup>rd</sup> year were sent to the mechanical shops in Koedoespoort to learn how major overhauls were carried out and new engine were built from scratch.

Back at Germiston, the bottom shop was the drop pit shop where major overhauls were done each taking up to 3 months; here axle boxes and wheels were done. Each road was manned by an artisan with some labourers and with one or two apprentices. Wheel sets were dropped and tyres turned to the correct profile on the lathe that is still in the lean to at the side of this shop. If the tyres were too thin for turning, the wheel sets were sent away and new ones requisitioned. At the back of the shop where the Reefsteamers coal loading point is today was the main receiving point for stores. Remember that in the 50s there was no road access to the depot the only access being by rail. In those days there were 3 rail accesses to the depot, straight up into Germiston, the one Reefsteamers use today and under the bridge where today there is a road access. That was known as die gat (the hole), the locos used to go down there and then went up into the yard where they would pick up their loads. The loads were already made up by the shunters (2 x S1 class). The yard was shunted 24 hours a day. The locos would go down die gat, reverse and pick up their loads; whilst locos from Springs would also come and pick up loads.

The running shed, where today our coaches are stored, was a 24 hours a day operation where the daily running repairs were done as well as boiler wash outs. Roads 1& 2 were for boiler wash outs and hot water was supplied by 2 old 15CA boilers mounted just where the new club house is today. The boilers made steam as well which was used for the steam hammer in the blacksmiths shop and in the grease shop to keep the grease soft. The boilers were washed out with hot water so they never got cold. After wash outs, boilers were filled with hot water. There were 4 big grates made out of railways lines where a caboose is staged today. There one labourer attended to the coal fires burning continuously for loco fire lighting. Fire lighters would come with wheelbarrows, load them with burning coal and take them to the locos at the wash out and load the burning coal into a loco firebox. So with a hot boiler and an immediate fire, steam was raised within an hour or two so the loco would be available for work that night.

The fitter on the boiler wash outs would have to perform all the repairs booked for the locos on washout for that day. That would be 6 to 10 locos every day. The repairs would be typically, to ashpans, gauge glasses, boiler mountings, cylinder cocks, blow down cocks, and piston packing, etc. The fitter would be given a paper slip with the repairs needed listed, whilst the same method was used for the locos in the running shed.

It was not as hectic on the washout repairs as the repairs in the running shed, because in the running shed, the driver was often standing behind you saying he was in a hurry and that he had to go. The locos could not stand too long here as the area was very busy with trains. While the locos were being steamed up, the crews would arrive. There were 500 drivers allocated to Germiston in those days. The fireman would arrive an hour before hand when he would draw his kit from a building by the sand pits where the kits were stored in lockers. The kits contained the oil cans, oil bottles, grease pumps, spray pipes, etc and the fireman would put the kit on the allocated engine. Only after an hour would the driver arrive but by then the cab was clean and the fire in good shape, the fireman having done his duty. Only then would the driver start his duties by greasing and oiling the locomotive and checking the repairs had been done.

The rest of the roads in the running shed were reserved for running repairs. In those days the drivers did not have regular engines as that only came later. Then, they could come on duty and be given any engine.

Engine used to come in from work at the end of the shift, unhook from a load and go to the ash pits, clean fire, take water, take coal and then the driver would book off. The shedman would have a list of priorities of what engine was to go where and he would take the engine into the allocated road of the running shed. As the driver walked off, he would go to the office in the shed and book the repairs that the loco required, just like Reefsteamers do today. The fitters had their own area with lockers ands stores. Each fitter had a wheel barrow and a labourer who could be any race. Peter as a 3<sup>rd</sup> year apprentice had a white guy of 65 as his labourer who used to call peter meneer. The charge hand supervisor, of the fitters, had a list of all fitters on duty that day. There were 3 shifts, day, afternoon, and night. He would give jobs to those fitters that were good at specific types of work. He would write the loco number and the repair on a slip of paper and send it by a messenger to that fitter. The messenger was usually an uneducated guy as don't forget in those days the railways gave work to everyone. Even if you had a standard 2 education you would get a job on the railways.

Once the fitter got his paper, he with his labourer and the wheel barrow would go to the right road and engine to do the repair. Remember this was a working steam shed with hot engines and the atmosphere was full of smoke and steam. You had to be very careful. If a loco was been worked on underneath or at the front end when a red board would be hung on the drivers armrest so any one coming to the engine would know it had not to be moved. On completion of the repair or repairs, the fitter would take the slip back to the charge hand and sign off the repair in the book. God help you if the repair was not done properly because the driver would look for you the next day. Peter has seen plenty of blokes being chased and hiding away from unhappy drivers.

At the Germiston end of the running shed was the sand store with a permanent guy with a wheel barrow filling the loco sand boxes with sand. At the other end of the running shed was the blacksmiths shop. The blacksmiths were Tom Philips an Irishman and Clarrie Elloff. They each had a striker who used to stand in front of the anvil with a 14 pound hammer who used to hit all their flatters. Peter would have a chisel made from an element bolt. Peter would go to Tubby a storeman and ask for an old element bolt which Tom would hammer it into a chisel and oil harden it and this would make the best chisel ever.

Also there was a guy repairing lamps and an electrician's shop, where the electricians would do any loco electrical work. There was a vacuum shop and a carpenter's shop as well, all these artisans being running shop fitters. There was an additional fitter for boiler mountings who also had a labourer and an apprentice .An apprentice would spend a couple of months with each of these artisans, that's how he learnt to be a qualified fitter. In his 3<sup>rd</sup> year, after the 6 months at Koedoespoort the apprentice would be put on his own in the running shed. By this time the apprentice would have a pretty god idea of how to do repairs on his own.

During all this time, the apprentices would still have to go to classes at the apprentice school which was near the balloon. It had a beautiful fish pond and garden but the building is gone today. The apprentices would go for lectures and for drawing one hour a day. On top of all that the apprentices had to go to Johannesburg Technical College one day a week (NTC1,2,3 etc) There were 500 drivers at Germiston in those days and as many firemen, but firemen used to come and go. Firemen started off as cleaners, cleaning boilers with paraffin cotton waste and a lot of them did not last. A lot of the apprentices also did not last and of the bunch that were with Peter there were 4 or 5 of them that packed up saying they could not handle it any more.

There were numerous types of steam locomotives shedded at Germiston (see below). In those days the Vereeniging local train was hauled by a 10<sup>th</sup> class. When there was a power failure on the electric commuter lines, a 15F or a 12<sup>th</sup> class would be found and put on those trains. The trains would never stop, unlike today,

The drivers would come and go to the depot via the subway which was patrolled by the railway police and god help you if they found an apprentice crossing the lines. They would take your name and the next morning Callie Werner used to c\*\*p you out and fine you a couple of shillings. You had to walk through the subway; you could not walk over the railway lines because they were so busy. There was a stop signal at the entrance to the yard and every day there would be trains stopped there waiting to cross over into the yard. Some trains with heavy loads were too heavy for a 15F too pull away so the next thing an S1 shunter would come out of the yard hook onto the F and the load and both of them would pound away to get the load into the yard.

When an engine was due for a 15M it would come into the depot in the early afternoon and be staged near where the caboose is today and the blow down cocks would be opened. If you were working in the 15M shop you could be finished early depending what you were working on. If you were on side rods, you would finished at 3pm but If you were on boiler mountings or front

ends, you would be lucky to be finished by 4pm. In winter time you would sneak out and sit in the engines, close the windows and it would be nice and warm.

One day Peter was sitting in an engine on the fireman's side while another apprentice was in the driver's seat and the engine had 100lbs on the gauge. The engines were close together. The other apprentice said "I wonder if it will move?' Peter said "you are mad, leave it alone." But the other guy ignores Peter, pushes it into forward gear and opens the regulator. Of course the loco moves and crashes into the engine in front. Bang!!! The shedman hears this and comes running. That bloke was fined heavily. Though Peter was not blamed as the shedman saw him sitting in the fireman's seat and then all apprentices were banned from sitting in the engines. However they did sneak over there particularly when the Garratts were staged. They would get up into the cab and close the doors (the Garratt's cab was enclosed) and hunker down and keep warm.

The station pilot was in those days either 1947 or1535. They would shunt the Pretoria coaches onto the Durban Train and in those days the passenger trains were full and Germiston Station was immaculate and clean.

In the fourth or fifth year, the apprentices were seconded to the breakdown train. There was a steam operated hooter in the clocking office that used to sound when the crew was required to report to the breakdown train. The steam breakdown crane that is in the drop pit shop is the actual crane that was used on the Germiston breakdown train. You would never know how long you would be away maybe a few hours or a few days. The train was fully equipped with accommodation, a kitchen, a complete workshop with lots of tools. It was heavy work as the steam crane was all manual not like today where the cranes have hydraulically powered out riggers. On the steam crane big blocks of wood were carried for levelling off whilst out riggers were screwed down by hand. A breakdown could not only mean a locomotive off the rails but it could also mean an engine in trouble at one of the local shunting yards and this would require an onsite repair. If it was a light repair, you would go with a tool box and a road truck to do the repair.

Also in the fourth year of his apprenticeship Peter was seconded to work on "the section" on pumps. To supply the steam engines working on the line there were pumps that pumped the water from a river or a borehole to the water column where the steam locomotives could fill up their tenders. Peter was transferred to Springs to work on the pumps. At Springs there was a fitter called Seretti who was the pump fitter. Springs used to service the pumps on the Springs to Breyton and the Springs to Blackhill sections of the lines east from Springs. The fitter would go out for a week at a time in a caboose which was fitted out with a workshop kitchen and sleeping accommodation. The fitter and his crew would start off on a Monday morning with the caboose attached to the pick up freight train and be dropped off at the siding where there were pumps to be maintained. They would go down to where the pumps were and spend the day servicing the pumps or the borehole pumps. Most pump station had an automatic water treatment plant which was maintained by a different fitter who would go by road to the pump stations. When the service of that pump was complete the next pick up freight would collect the caboose and drop it off at the next water point and shunt the caboose into the siding. Here the fitters and crew would stay overnight eat and wash at the nearest cold water tap. So this was the routine for the week and on the Friday the caboose and crew would be taken back to Springs loco to get there for 4 or 5 o'clock. Peter should have been there for 3 months but for the last 2 weeks he was sent to work as a fitter in the Springs running shed doing running repairs



How many of you remember that this was the sign to indicate water was available here?

Near the end of Peter's 5<sup>th</sup> year he was sent to Koedoespoort where he finished his 5 year apprenticeship after which time Peter left the railways and went to work for commercial firms. Of all the apprentices that were at Germiston during Peter's time there, he is the only one still working on steam engines and he is very proud of that.

In 1958 Germiston had the following allocation of locomotives (thanks to Les Pivnic for this information)

Class GMAM - 34; S - 2; S1 - 16; S2 - 8; 6 - 5; 7 - 7; 8 - 4; 10 - 10; 12R - 14; 12A - 8; 12AR - 2; 14 - 3; 15F - 67; 16R - 1; 16CR - 2 = a total of 183 engines;

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