

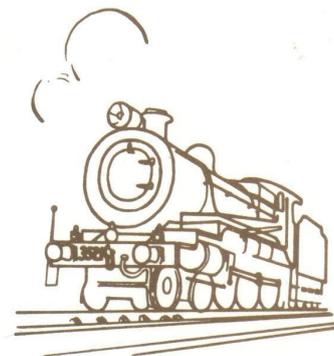
Sydney Live Steam Locomotive Society

Anthony Road, West Ryde, N.S.W.

'Newsletter'

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May 2009



Martin Yule driving Mountaineer with Barry Tulloch as guard and Mick Murray supervising through our shady spot on the West Ryde Parade and Festival day.

Running Day Reports February Running Day Report.

The Saturdays for the last month of summer were a mixed lot. The first one was like hell on earth with the horrendous Victorian bush fires. The second was an early taste of winter so it was any ones guess as to how our running day would turn out. The forecast was not too flash, rain and a chance of storms. I had been woken at day break by some heavy rain at Seven Hills but this did not last long and the weather seemed to clear. I got to the grounds about 10.30am. unloaded the locomotive and did

some additional work on the elevated track just to the north of the newly realigned carriage shed siding stub points.

Before lunch all the normal preparation tasks were done, including carriage checks and picking up a couple of depressed rail joints ready for running. Barry T has also sorted out a couple of matters with the new point machines.

The flag was at half-mast for George Robertson, recently deceased and for the National Day of Mourning for the Victorian bushfire victims which was held the following day.



**The February non-running day turned into a behind the scenes look at the railway. Mick Murray supervises some touchy feely interaction with the kids and the Old Girl.
Photo: John Lyons.**

It was great to see Lionel back at the grounds - his stay under medical care was longer than he thought. It was also good to see Simon, who was still under the weather, but it was great to see him out and about.

Andrew arranged for David to do a boiler test on Mona. As it turned out this ended up being the only engine in steam, only for a short time, as Andrew had to go.

We sat down for lunch at about 12.30pm. and shortly after the rain started. Jim Leishman and myself went up to

great job for over 2 hours!

We still had groups come in, although the ground was waterlogged they had their parties. "The Old Girl" was pulled out of the shed with the front half of the string of goods wagons. In the elevated loco depot we had Jim's Ps4, John Hurst's "Nigel Gresley" and my Z1915. In the other depot was Warwick's V1224, Henry's R class and Ray's C3803. Barry's "Mountaineer" stayed in his ute. Our visitors were able to have a close up look at the loco-

motives and the rolling stock and have a wander all over the grounds, they did not have to keep to their side of the fence. I think many of them appreciated the chance to see things close up.

Overall we were able to make the best of a bad day. There was a small profit for the day from the kiosk which sold drinks and ice creams. Thanks to everyone who answered the phone, it rang hot all day!

Tony Eyre with Ray Lee's 3802 on the outer main passes Barry Tulloch and the Old Girl leading John Tulloch and 2904 and guard Barry Millner on the inner main. The Old Girl was pressed into action due to a critical shortage of motive power on the March running day.



March Running Day Report.

Following the outcome of the February running day we were expecting a rather large crowd. We were forecast a weekend of perfect autumn weather which was sort of correct. There was rain early at Seven Hills and a downpour for about 1.5 hours at the grounds mid morning. As I travelled to the grounds the

clouds did not look very promising. There was no further rain but the humidity was high and when we had full sun it was hot.

The day started with set up and we lifted a few joints in the track we had upgraded over the last few weeks. The new track ran very well. We welcomed Mike and his wife from the UK Rotherham club, they had a good look at what we have to offer and were very impressed.

David Lee ran his GM early on, but suffered a blown mosfet. This didn't prevent him from attempting to haul passengers!

We did have a good crowd, visitors were waiting for the gate to open and at about 1.45pm. the queue extended to the Anthony Rd. gates. Twenty minutes later there were only a few people waiting to get in. There were some big party groups well organised with shade, table and chairs. Vernon reported there were two ride ticket sales of 150 at a time.

There was plenty of variety with the motive power. On the elevated Jim Leishman ran the 10 wheeler with one train while my Z19 coupled up in front of John Hurst's 2-8-0 "Nigel Gresley" with a second train and were on the track just before 1.30pm. As we took our first load Garry Buttell arrived with his B1 "Impala". I suggested to John that it would be good practise for Garry to have a run double heading with him and "Nigel". John thought that it was a good idea so Garry got the B1 in steam and took over from the Z19 at about 3.00pm., the loading capacity was increased as well. So, what happens when a small goods locomotive is replaced by an express locomotive and coupled with a big goods locomotive, some very lively running! Garry settled in very quickly and obviously enjoyed the run, you should have seen the grin on his face. John was getting a bit excited as well anticipating the prospect of running KRIII with the B1. Just watch this space. Jim had some steaming problems and retired early. Garry finished the day having some laps by himself running with one car.

On the ground level Ray Lee was first out on the track running C3803 on the outer main. Ray had a spell from the driving mid afternoon with Tony Eyre taking over on the foot plate. The second outer train was hauled by "Mountaineer" 2-6-2 with Barry Tulloch in



After the March run the Tulloch's drop the fires and clean up in loco. Judging by the smiles, it was a good day!

charge. Events on the inner main saw Barry hand over the driving to Peter Dunn while he prepared "The Old Girl" for its first revenue work at the grounds in many years.

Warwick and V1224, 2-8-2 took one of the inner trains. Warwick had a rather memorable day that he hopes will not ever be repeated. He went done the headhunt, and split the points, derailing two bogies. This was put right fairly quickly and things carried on. Eventually during some shunting of the other train, a point clip was left applied and emulating an incident with Ross Bishop some time ago, the V ran through and derailed all wheels. Some assistance was given by visitor Joe Huntley who was on the spot! 5 people were needed to lift the tender and engine back onto the track. After this things ran quite well for Warwick until the end of the day, and Joe went

March running day again and Mountaineer is oiled around ready for the next trip.





Garry Buttler and Impala leads John Hurst and Nigel Gresley with a full load for the elevated on the March running day.

off to see the chiropractor. All the fun was on the inner! David Thomas and the B10 went to assist David Lee and the GM. It was decided that they would wait until John Tulloch and the J was avail-

Barry Tulloch and Mountaineer start uphill on the inner while Dom Mulholland drifts down grade with the Green Machine on the outer. Jim Mulholland is guard on this light load on the West Ryde Festival Day.



able to assist as well, so they spent some time being refueled until the J was coupled on. As it was they only did one paying trip and it was decided the GM would have to come off. With the departure of the GM to loco David and the B10 coupled in front of "The Old Girl" with the J as train engine. This combination did a couple of laps after which David and the B10 uncoupled and returned to the elevated where he ran one car till the end of the afternoon. The J and the big pacific ran well for the rest of the afternoon. The barking as they lifted their train up around the curves on the grade was great to hear, it was a good climax to the days running. Overall we were short of locos and platform staff, so we did pretty well with what we had!

The afternoon's activity resulted in 2608rides, and given we were effectively one train down on the inner half of the afternoon, this was an excellent result and the best March day since 2004. Good news also is that the new point motor installed the week before worked fine.

April West Ryde Parade and Fair Day.

We had been invited to take part in this local event not that long ago but we had a very good rollup of members to make the day a great success. We had received a lot of rain during the week so the grounds were rather soggy. This was not such a problem as most visitors came in, had a look and then moved off to some other attraction. We had a great number of first time visitors, I shared the gate duty with Nathan. There had to be a lot of foot wear warnings given and a lot of advertising for our next running day. Many were surprised that we had actually been there for sixty years and as locals they had just found us. The shoe issue did cause some disappointment. I explained the situation to one family and instantly one young lad broke down howling in a terrible manner, if there was a DOCS officer near by they would have needed an explanation.

The day stayed cloudy and very cool but we were spared any rain. The parade arrived at Betts St around about 10.40 am, just after we opened the gate, and with it most of the people! The car park immediately adjacent to our entrance was decked out with a stage, PA, various stalls, a baby animal farm, jumping castle and a portable coffee truck, as well as various displays. Throughout the day they were entertained with singing groups, bands, dancing, karate and similar displays. Given the time they had to organise it, there was a remarkable turn up considering the weather. The final announcement is



Jim Leishman and the 10 wheeler and guard Bernie round the lower curve with the Festival in full swing on the other side of the fence.

that it's on again next year too!

Running was rather relaxed, we had early morning tea then got ready to run. I lit up the Z19 for an early run on the elevated taking one car till just before 12 noon. On coming off and dropping the fire I replaced Nathan on the gate. Jim Leishman ran his 10 wheeler with three cars and the guards van with Bernie riding as guard.

On the ground level there was a good variety. Henry ran his TGR R class on the outer main but headed back to loco with water pump problems. After some attention, with help from Mark Gibbons the locomotive was back running but it looked that some workshop time would be needed. Warwick steamed the V1224 with Andrew spending most of the time at the regulator. The other train on the inner was the "Mountaineer" with Martin Yule at the controls. John Hurst ran the "Mountain", 4-8-2 on the outer and when Henry was forced off, his train was taken by Jim and Dominic Mulholland with C3901 4-8-2 "Green Machine". They alternated the driving.

Overall we gave 848 rides for the event. Andrew had the V in the siding about lunch time. It had some clack trouble, so Andrew took it to loco and blew them through to clean them. John Hurst also called it a day early leaving Mountaineer and the Green Machine to finish the day.

Bankstown Interclub Run Saturday 30 May

The Bankstown Steam Locomotive Society has invited us to their interclub run. They cater for all gauges to 5 inch. Lunch, tea and coffee will be provided.

They would like details of those coming for catering purposes. Let Henry know or alternatively ring 9528 4104; 0418 440 013; fax 9575 7586 or email gjbeavis@optusnet.com.au with name, club, loco, and gauge before 22 May.

Don't forget your boiler tickets!

The girls did a great job in the kiosk including cooking us a sausage sandwich lunch. Many thanks to Margo and Wendy who helped Liz out for the day. Also thanks to Peter (Margo's husband) who helped Brian Hurst out with the ticket selling.

There was a tricky signalling problem affecting the clearing of No1 signal. This turned out to be a dry joint on a capacitor lead on a circuit board. Mark Gibbons also attended to 10 points.

April Running Day Report

Following the West Ryde fair day it was considered that this running day may be a bit busier than usual. As it turned out we did have a big day. The weather was cool with clouds but these cleared by about 3.30pm. and we had some sunshine. David Lee was on the gate and was kept very busy for about

the first hour, after that there were still groups coming in till very late. There were two big party groups with a lot of smaller ones, there was plenty of room on the grounds. Brian M. and Arthur H. had done mowing on Friday so the grounds looked splendid. Before running started Mark Gibbons attended to #33 point machine

For most of the afternoon there were only two trains on the elevated. I ran the Z1915 with one car till about 3.45pm. The second train was hauled by John Hurst's 2-8-0 "Nigel Gresley" with Arthur at the regulator for the whole of the afternoon. David Thomas ran the B10 as attached banker. Garry Buttel steamed his B1 "Impala" and coupled up in front of the 2-8-0 about 3.00pm. First time round the track the opportunity was taken to add three cars to the train making a seven car, three locomotive consist. We had reasonably long queues all afternoon at the elevated station so the seven cars were always full. With an excess of power on the ground level John Tulloch steamed the J late in the afternoon and as I came off he started running with a three car train with Peter Dunn riding guard. They were the last train to finish elevated running. The three drivers handled the seven car train very well, with Garry and Arthur getting the hang of serious passenger hauling. Peter Sayers had a steam test on his 0-6-0 tank engine but did not run.

There was an abundance of motive power for the ground level track. Henry ran the TGR R class 4-6-2 on the outer main, the problems of two weeks previous had been remedied and the locomotive ran without fault all afternoon, Mark Gibbons shared the driving with Henry. The second outer train was hauled by the massive SR&RL 2-6-2 tender locomotive belonging to Kelly Mayberry. Tony Eyre enjoyed some long

Garden Roster

.June. B.Hurst, T.Eyre, M.Lee, R.Lee, R.Smithers, P.Taffa, B.Tulloch, J.Tulloch.
July. H.Spencer, A.Allison, M.Gibbons, W.Fletcher, G.Kirkby, B.Muston, J.Noller, P.Sayers.
August. W.Allison, G.Buttel, B.Millner, M.Murray, S.Murray, S.Collier, Peter Ryan, Vic Scicluna.

Gate Roster

June. Matt Lee July. Stuart Larkin. August. Jim Leishman. September. Barry Millner



The ladies pose for the camera on the West Ryde Festival day, Liz, Wendy and Margo.

spells at the regulator. Our second visitor was Ross Bishop running 0-6-2 "Fowler" cane locomotive on one of the inner trains, this locomotive always runs in an effortless manner. The second train was hauled by "Mountaineer" 2-6-2 with Barry Tulloch and Martin Yule sharing the driving. It is not often that all locomotives running are larger than 1 1/8" scale. Matt Lee

steamed C3506 but after spending the early part of the afternoon on the carriage shed apron returned to loco. Ray Lee had C3112 in the roundhouse but did not light the fire, packing it away early. Warwick steamed the V class and took over the "Mountaineers" train about 3.00pm. when the 2-6-2 retired with cross head pump problems. Warwick had the V derail all wheels, loco and tender, the second time in two running days. It is thought that the front truck jumped on some ballast in a check rail and all the other wheels followed it off. It took a lot of us to have everything back on the track. There was no damage and Warwick steamed on till the end of the day.

Matt Lee had his 5" gauge 6 wheel P class tender on show, this will run behind the superheated Z25 class he is working on. Brian Muston had a nice set of water jet cut bar frames for a 5" gauge U105 class NSW locomotive. Peter Shiels was visiting from Toronto and spent some time showing some visitors from the Lake Mac. Society around. The 2368 rides was a good result. It was good to have Liz, Di, Joy

and Margo in the kiosk to handle the crowds.

What's Doing!

Project Works

The level crossing gate posts have been provided by Barry Tulloch with welding expertly done by Martin Yule. Gates are partly completed too.

Garry Buttel and Impala leads Arthur Hurst on Nigel Gresley, then 7 loaded cars plus John Hurst as guard and David Thomas and the B10 banking in the rear on the April running day.

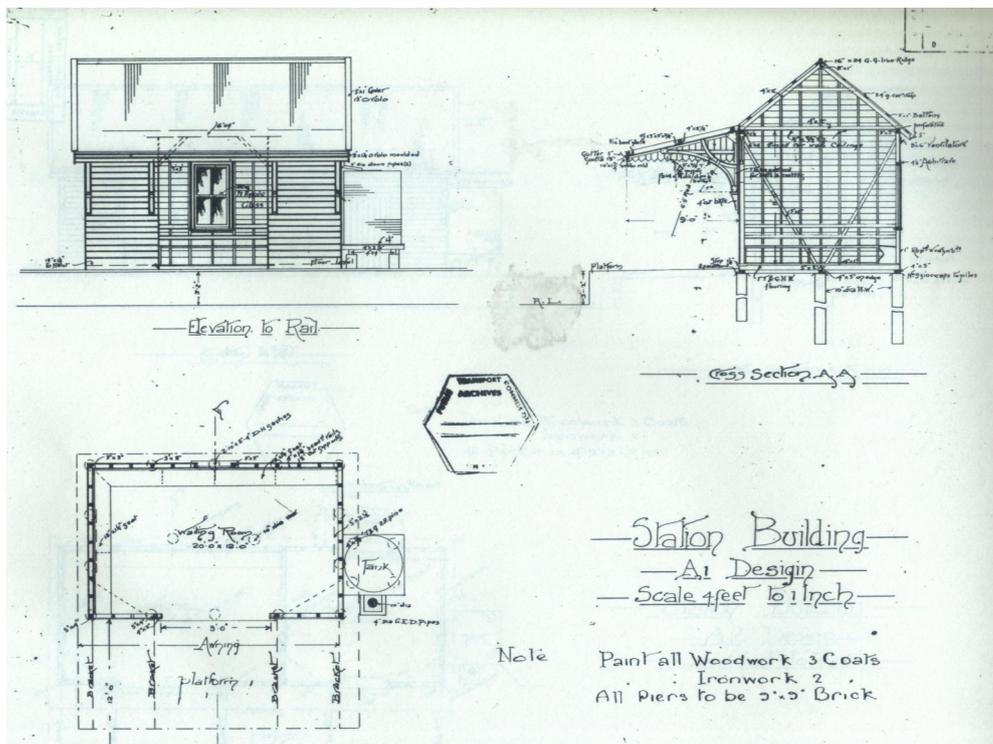


Editorial.

Some of our members would have seen the STN for the "Last" Maitland Steamfest, some of the documents had been printed on 1st. April, was it some sort of joke or are they serious? In one of the model railway magazines recently I noticed that the German company Marklin were at risk because their finances were in some way tied up with one of the failed US institutions, it is amazing what the economic down turn can have an influence on. Marklin has had a long history in toy making and model railways, something you expected to always be there, hopefully they will survive. We will all have to hope that we are able to maintain our sources of materials and fittings to keep things going.

John Lyons

We have been thinking about a new ticket office for Vernon. A typical railway structure is proposed-but what? The answer could be in this shelter shed. It is a genuine railway structure. We would make it about 2/3 rd full size, and put a roller door in the front. As a bonus it will be used to store all that running day signage and stuff that currently clutters the clubhouse. It would be steel framed and either peralum type imitation weather boards or villaboard walls. What do you think?



Loco and Rolling Stock News

Brian Muston showed us his U105 class Baldwin tender chassis and body which are coming along nicely. John Lyons also had his 2-6-0 25 class chassis running on air. John's is slip eccentric and it's a very tidy job. The engine will be usually powerful but compact to travel. The Editor was very pleased to reach this mile stone much sooner than he did with the Z19.

We have also seen Ray Lees Victorian A2 chassis. It is very interesting to see the dummy frames installed to make it look right despite the 1 1/8 scale chassis. This Victorian loco will look the right size when next to its NSW counterparts! Ray tested the chassis around some bends at the top of the elevated and all looks well. Barry Tulloch has renewed the reversing screw on the Old Girl and reset the weighshaft which had slipped and put the loco into different gear settings on each side. Andrew tried some electrolytic rust removal in the tender. This was moderately successful, however the internal bulkhead is a problem and surgery is required. David Thomas tried out the B10 with a newly imported mechanical lubricator. It worked fine! We have also seen

some boiler parts for David's SAR 620 class. Simon brought along some relatives to see the grounds and passed on the news that he has acquired Peter Sayers' Simplex. Simon is renewing the superheaters and hopefully it will be running soon.

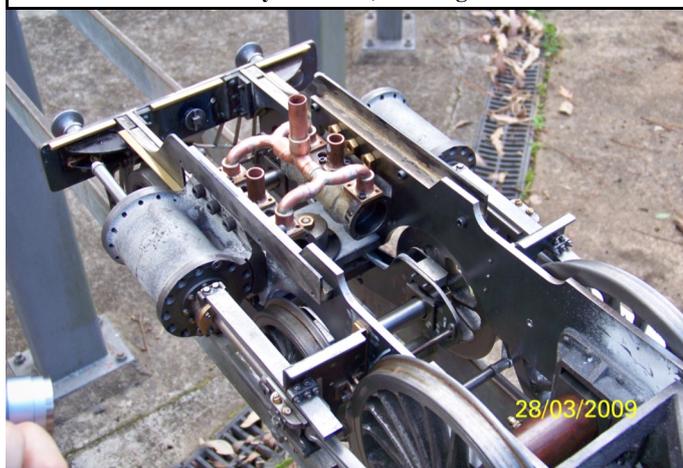
Members News

Sadly George Robertson passed away in February. There

Diary

30 May	BSLS Interclub Run
2 June	Annual General Meeting
6-8 June	Hot Pot Run Illawarra Live Steamers
20 June	Public Running Day
7 July	Directors Meeting
18 July	Public Running Day
4 August	Members Meeting
7-9 August	QSMEE Track'n Tent
15 August	Public Running Day & next Newsletter

The front end of Ray Lee's A2, showing the false frames.



John Lyon's 25 class chassis is running on air.





Before and after views of the realigned elevated stub points reported on last newsletter.

was a good roll up of Society members at George Robertson's funeral. George was a lovely bloke who always showed a positive outlook despite his long endurance with illness.

Bill Richards has moved and is now in a Nursing home after spending some time at the Ryde Rehabilitation Centre.

It was good to see Peter Shiels who dropped in for lunch

track and a good workshop.

Club Shirts

Lists are on the noticeboard for anyone wanting club shirts. They do need more names to make it viable.

Works Reports

Facilities

Allan Cottrell using Jim Leishman's ideas has strengthened up the blue trolley. The alterations were extremely simple, but have made no end of improvement to the structure. Thanks Jim and Allan.

During the week Jim arranged for some more ballast to be delivered, and he has also arranged some more geotextile fabric for our track underlay. Thanks also to Barry Tulloch who arranged our latest supply of char. Arthur dug out the ground and helped relocate and tidy up the top ends of the grounds. This created some space for the char and all in all, it looks fairly tidy stacked where it is.

Clubhouse

Two of the remaining signal arms that were stored were renovated by Warwick and now adorn the clubhouse wall. One is a standard lower quadrant arm, and the other is a shunting arm. Both have been fitted with illuminated lamps behind the red spectacles.

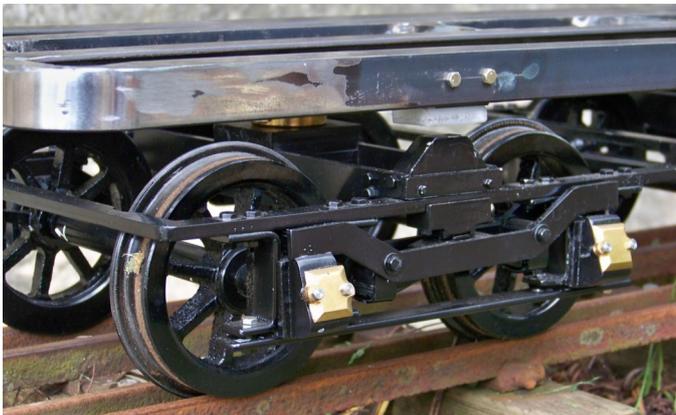
Ground Improvements

David Thomas, Bernie Courtenay and Mick Murray have all used the weed sprayer and targeted some unwanted vegetation. The recent rain has made some of the spraying less effective than desired.

The big effort has been the battle with the grass! Arthur had his ride on mower on more than one occasion attacking the large areas. It has been solid going! Barry Millner also got the mulcher going and we have reduced all the sticks that had accumulated over the last few months, plus the two small mulberry trees that had sprung up. A

Mick and Mark attending to 10 points.





Brian Muston's U105 tender chassis.

big thank you to all those who have contributed to the mowing in these times of maximum growth!

Ground Level Railway

Henry Spencer has wired the point machine for the new end of No.6, and this is now working well. Thanks to Barry T who has fitted up the rodding despite it all being site work!

25m of track on the outer main has been lifted, resleepered, foundation reformed and relaid with new ballast over some geotech fabric. Thanks to Lionel and Arthur who got stuck in early and barrowed down many barrow loads of ballast.

After the outer main we pulled up some more track, this time on the inner main. Jim Leishman and John Lyons helped cut the new sleepers, and with help from Brian Muston, Barry Millner, Max Gay, John Lyons and Warwick, this was resleepered and relaid. One panel had to be replaced as the sleepers were badly rusted and one had fallen off. More ballasting and another 10m of track were done. The following week we did the next 12m on the

inner main, and when this had been completed, we had corrected all parts of the track with obvious defects.

Mark has attended to 19 points which were reluctant to go over.

No. 10 points has had the microswitches replaced and a relay panel installed. This took some time, but eventually we got it going. This was following some investigation work by Mark Gibbons during the week.

Elevated Railway

Brian Hurst has painted the buffer stops faces in the loco depots, and it certainly makes a difference! He is carrying on painting No7 signal post while Warwick has painted the arm and has replaced the somewhat faded red spectacle glass.

John Lyons and Allan C have also been cutting shorter sleepers for installation on the elevated track. I am sure they would welcome those willing to help them install them after we have adjusted some beams to iron out some hollows that have formed over the life of the elevated.

John H did some carriage maintenance and worked out why one of the cars was dragging a bit. It seems that in the course of operations the car had been turned 180 degrees and a rubbing strip was causing the trouble.

Features

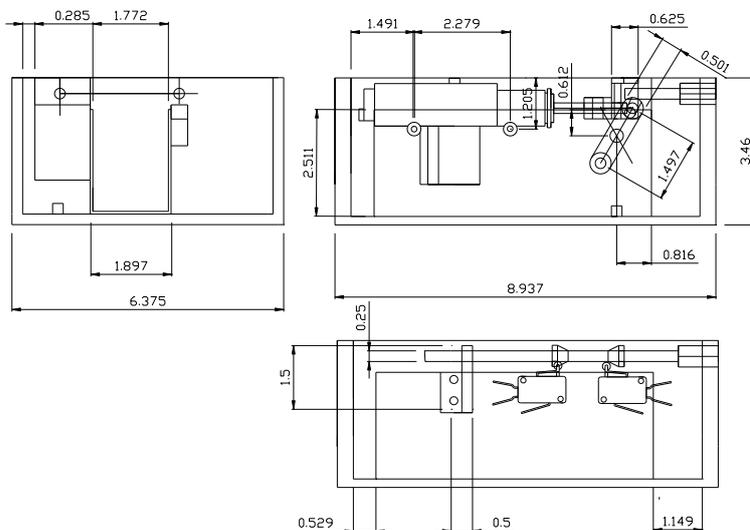
SLSL Point Machines

For many years now our ground level track has had points operated by electric point machines. These mechanisms are housed in a substantial galvanized cast iron case, which is mounted with the top at ground level and the case firmly secured to the points. The lid is ¼ inch steel plate with the sealing side ground for a good weatherproof seal along the top of the case.

The motors are 6v Volkswagen windscreen wiper motor (in series with a substantial adjustable resistor) mounted on a special bracket and fitted with a crank that drives the operating rod (and the front points stretcher) through a spring arrangement. A second rod attached to the points rear stretcher is connected through a 2 to 1 lever that amplifies the movement and which is used to operate point detection microswitches. The mechanism is quite firm in operation and will not open under load. As well they do not trail very well, the force on the switch being such that the point of the

General arrangements of the new point machine which uses a door lock motor.

SLSL Point Machine





Two new machines ready for installation.

switch is usually rolled during a run through.

Also included in the arrangement is a pair of diodes, and by some optimized wiring, the whole arrangement only uses 4 wires, this being achieved by polarizing the motor controls and detection. Later we fitted a resistor as a heater in order to keep condensation at bay. This used another 2 wires as it was permanently energized. Everything is 24v.

They were designed, built and installed largely by Bill Richards with help from Henry Spencer on the electrical side. I designed the interlocking arrangements (as befits a signal engineer!) and Henry drew the whole lot up to produce a set of circuit diagrams for the entire system.

Given the experience with these mechanisms, I think we can now assess how they have performed, and I think they have done marvellously well. Installed from 1987 and after 22 years, they have been very reliable and give long periods of service without attention. As a result it is only after a very long period of time we can see where any weak points are.

One problem that occurred fairly early is that the machines would overrun and even if they detected, the momentum would keep them going until the switch opened up and again, and off they would go. The result is the points oscillating back and forth until the power was cut off by placing the point lever mid position. The motor drive resistor would be adjusted to decrease motor volts and it would be OK. Next week it wouldn't drive enough! It would appear that when exposed to the hot sun, they would free up and operate faster!

If the signaller did not notice, the points would oscillate back and forth for sometime, ultimately overheating the soldered connection to the dropping resistor, which would fall off and save the day! Mark Gibbons has become very expert at point motor repairs!

A mechanical solution to this was to replace the brush spring with a loop of nylax tube, which exerted additional drag on the commutator. This adequately loaded the motor such that once the detector cut the power it would stop quicker.

However it would also result in the motors drawing more current!

The microswitches were always underrated, as only small units could be accommodated in the space available. Over time these would fail and need replacement.

Additionally, the selection diodes would also fail to ground. This was generally caused by the original Bakelite type insulation becoming oil soaked and hence a conductor. Replacement with nylon or teflon sleeves and bushes has solved this problem.

In theory, what seems to be happening is this: The points would operate, and the current would be drawn via the microswitches. When the switch opened an arc would be drawn, thus permitting the motor to continue to overtravel. The arc was sustained because, although the motor was 6v, the supply was 24v, and as the current was reduced, the voltage would rise and assist in maintaining the arc. Hence the nylax brush springs were contributing to the problem.

After a few armature failures through overheating and earth faults, we decided to return to the original brush springs.

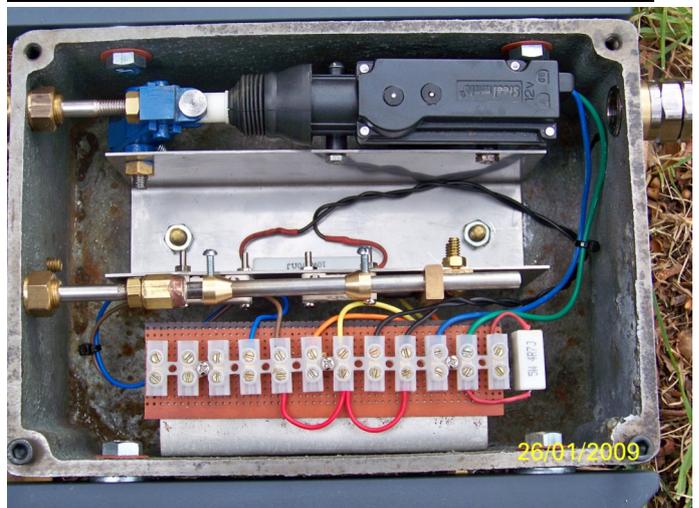
The overheating by the sun is being counted by painting the point motor lids a reflective silver colour.

It is hard to say if this has improved the situation, but it certainly is no worse, and as it is better for the motor, we are sticking with it. As an additional help, some motors have been fitted internally with heavy duty relays that operate off the microswitches. These seem to break the motor current much more effectively, and remove the small microswitches as an Achilles heel of the system, by no longer overloading them. This is a good solution, but overall, the system is no longer as simple as it was!

Sometimes the motors suffer water in them, but by and large, given the maintenance we do (never enough really!) they are suitably water proof.

Some of the really good points (pardon the pun!) of the system include the solid case and drive spindles and bearings, the separate drive and detection and the fact

A look inside showing the simplicity of the arrangement.





Henry and Mark installing the new point machine in track.

that replacement components were all available (we have a stock of the VW motors!)

When the need arose for some more machines a fresh approach was adopted. We wanted the new machines to be interchangeable with the existing ones, and we also wanted to address the elements of the existing machines that were weak points. Also the VW motors stock would not last forever! The availability on the market of a linear thruster in the form of the 12v car door lock motor offered some opportunities, and at about \$10 each, the price was right too!

Bill Richards had 2 more cast iron point boxes hidden away and he manufactured the necessary connection rods and bearings, and mounted them in the box. Mick Murray located some larger and more suitable microswitches for the detection. The only issue was how to put it all together! It was considered the drive needed an overcentre toggle on it to hold the drive in position once it had driven. Warwick worked out a suitable arrangement where the components were all mounted on a piece of stainless steel bent into a channel by Martin Yule. The general arrangement is shown on the drawing.

The door lock motors are worked from an electronic unit (about \$14) that pulses the motor for a short period of time. If the motor doesn't go (because of an obstruction for example) the power is only momentary and then cuts off. The device is meant for 12v, but so far works OK on our 24v. The toggle firms up the switch being held against the stockrail, but doesn't seem to have enough force to spring it back if it moves off. However the detector picks up any switch not closed properly.

As well the points will trail much more readily, now without damage (or derailment!)

They are still fully interlocked, but the interlocking can be done simpler due to the non polarized nature of the detector circuit arrangements now used (the microswitches no longer performing the double purpose of detection and motor cut off.)

Only time will tell if they are reliable. However, they are certainly simpler!

From the SLSLS Library:

A Book Review

The Premier Line by O S Nock. 240 pages, Published 1952

Warwick Allison

If nothing else, the London and North Western had character! From an initial amalgamation of four local lines, each with their own cultures, the L&NWR was formed in 1846. Locomotive construction was centred on Crewe, and this workshop grew into one of the most productive, efficient and highest quality factories in the United Kingdom, producing at least 2 engines a week.

Always strongly business focused, management kept a strong hand on the locomotives and operations ensuring they spent just enough to maintain the business, and no more. This resulted in a fleet of small locomotives that ran at modest speeds. As a further quest for frugality, a direction was given that all the locomotives be painted black. The men of the LNWR were proud and punctual. The engines were well kept, and they knew their job. However in the quest for on time

David Lee and Bernie Courtenay showing their prowess with the whipper snipping. There's lots to do!





From left: Arthur, John, and Brian Hurst, John Tulloch and Henry Spencer on April meeting night.

running, they drove their small engines in a spirited way, and as the underdog always does, gains a sympathetic satisfaction for their hard work in keeping the show going.

As well all the engines had names. This helped because they were randomly numbered when built (usually they took the number and names of scrapped locomotives), but the names had no single theme, except to say, they had a LNWR theme! Most were wonderful extractions from mythology, English history or famous people. Their reuse makes reading their history confusing.

Like all business's that don't plan for the future, they fell behind the competition. Double heading was rife as loads increased and when other companies were accelerating services, the LNWR was behind the eight ball. This didn't stop them trying though, and the little 2-4-0s were flogged along attempting higher speeds, albeit on fairly light loads. They were fortunate that they had some large wheeled but elderly singles ("Ladies") which could scoot along. Ramsbottom built some 500 0-6-0s of the DX

a successful engine. Some were better than others but none were entirely satisfactory. Eventually he got it sort of close with the Teutonic's, when he fitted the low pressure cylinder with slip eccentric gear that allowed a large exhaust passage, only to revert to an arrangement later that restricted their breathing. His later engines culminated in a large long boiler 2-2-2-2s which even had intermediate combustion chambers in their boilers (whatever they are!) Drivers had ways of getting around some of the limitations of these things, but it was Whale, the next CME who saw all the double heading and the inability of the loco stock to keep up with the high speed demands, and he started scrapping the compounds almost immediately and built some 4-4-0s (Precursors) in which he got just about everything right, and train operation was transformed.

Whale was not long as CME (as far as CMEs go) but he transformed the LNWR equipment. As well as the Precedents, he built a 4-6-0 version which he called an 'Experiment'. Despite interchange trials with other railways (and particularly the Great Western) they still failed to pick up all the important points, and these locos were truly Crewe and while a great improvement on previous engines (except the Precursors!) they still didn't quite cut the mustard. Bowen Cooke put things right when he superheated and tweaked both these classes. The Precursors already had long travel valves and with superheating, horsepower rose to over 1200HP making them superb performers.

He designed a four cylinder express engine (the Claughton) after close examination of Churchward's Stars. These engines, like the earlier LNWR Crewe built locos were capable of outstanding performance (especially uphill with an excellent steam producer) when pushed along by their crews. The Claughtons were perfectly balanced with their 4 cylinders all driving onto the same axle. However thoughts are that they could have been even better and, like the Experiments,

Arthur and the secret behind the much more regular grass mowing.

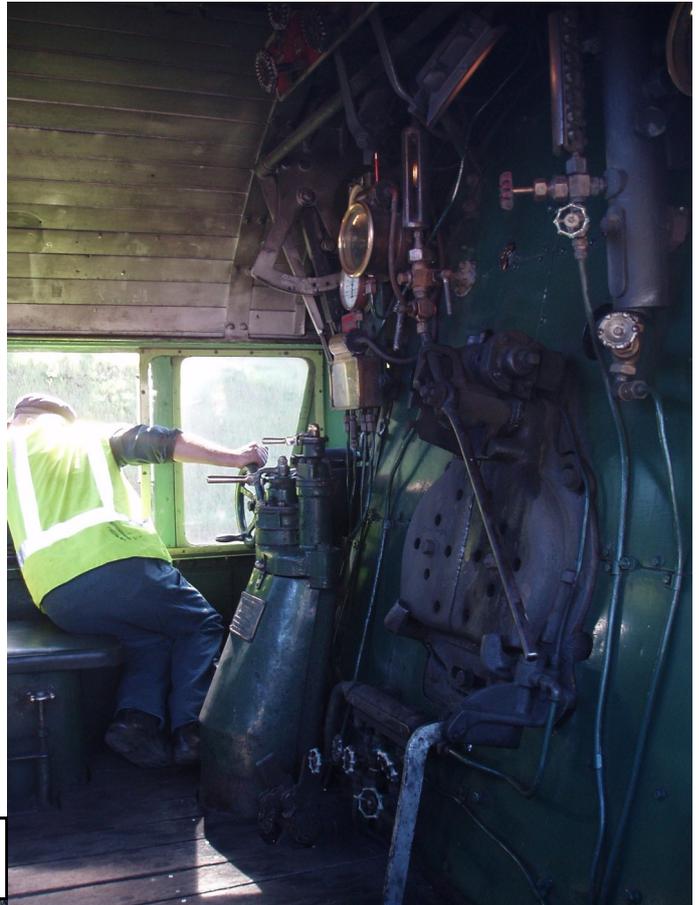


they fell a little short of Great Western performance. Again, they picked up on some great ideas and configurations but failed to follow it through just in the true LNWR tradition!

Eventually the LNWR became part of the LMS and there the story ends rather sadly. With an initial merging with the Lancashire and Yorkshire, followed within 2 years by the grouping, the proud traditions of its men were given scant regard by the new order.

It would be a mistake to think the LNWR were slouches. The men did what it took and did it well. Amidst the few mentioned above, there were a myriad of other engines, rebuilds and outstanding performances. Like most of Nock's books there is a good smattering of runs of logs, which mean little without an intimate knowledge of the territory. However the comparative listings are much more helpful. Certainly the lists of engine names makes fascinating reading, if only we knew why they picked them! Doesn't Hardwicke, Jeanie Deans, Penmaenmawr, Prometheus, Frobisher, Pegasus, and Gladiator, fill you with romantic thoughts?

When you have finished reading it, don't forget to put it back for others!



Right Photo 1: On board 621. Below Photo 2: Strathalbyn station, complete with train order signals.



A SOUTHERN ENCOUNTER

David Thomas

In October 2008 I had the good fortune to ride on the "Southern Encounter"- a tourist train that runs between Mount Barker, in the Adelaide Hills, to Victor Harbour, on the south coast in Encounter Bay. On this occasion the train was pulled by 621, the last operating member of its class.

I had known of the Southern Encounter for some years and as I am building a model of the 620 Class, thought that a trip behind one would be an encouragement to continue building the myriad components of the miniature as

well as being a pleasant day trip.

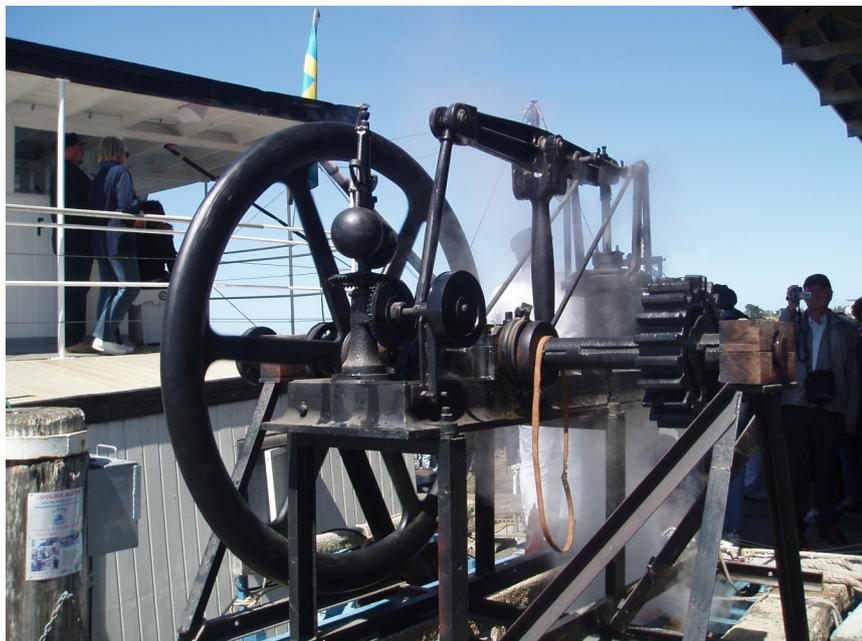
Over the years the Southern Encounter has been hauled by Rx, 520 and 620 Class locos so it was unclear whether 621 would work the train in October 2008. A brief inspection of the SteamRanger website indicated that all steam locos were out of service, with 621 being in the final stages of a major overhaul. Thanks to Craig Duncan, Maintenance Supervisor for SteamRanger, I received a message that 621 was back in steam on 8 August and expected to haul the Southern Encounter for the foreseeable future.

On the day of the trip I arrived at the SteamRanger depot about an hour before departure and was able to have a look at 621 before it attached to the train and have a brief look through the engine and carriage shed. Rx 1224, F-351 and 520 were observed in addition to assorted carriages in various states of repair. It is hoped that Rx 1224 will be back in service within a year when it receives a new set of tires. The F Class and second Rx could be returned to service at a later stage.

621 was in the yard initially outside the depot shed (photo 1), giving enthusiasts a chance for photos and close inspection. As it has been for some time, it was resplendent in Brunswick Green, and lacked the smoke deflectors it had worn for most of its working life. It is understood the latter will be reattached in 2009.

For the technically minded - a couple of minor alterations were noted from its condition a few years earlier: the speedo drive had been changed from the mechanical arm

**Top Photo 3: Machinery at Goolwa.
Middle Photo 4: 621 and 507 at Victor Harbour.
Lower Photo 5: Horse tram at Victor Harbour.**



ing of a steam loco in Australia, these three locos were similar. However the remaining seven of the class, although superficially similar, contained numerous variations on the original design. Differences included: steam dome regulators instead of smokebox regulators, regulator handles (possibly to indicate to the drivers there was a different regulator fitted), roller bearings in the trailing truck, tender rivet patterns and experimental smoke deflectors.

In subsequent years individual members of the class were fitted with different items such as exhaust steam injectors, cross-compound compressor, oil-coal firing and

bolted to the coupling rod to a more modern electric drive mounted on a tender axlebox, and the chemical dosing tank on the tender rear platform had been removed. Chemicals appeared to be added directly to the tank from the container.

Modifications were normal throughout the operating lives of the class members and the new changes are in keeping with this tradition. 621 was one of the first three of the class of ten built between 1936 and 1937. Apart from the streamlined exterior of 620, the first attempt at streamlin-



cast cylinder blocks were replaced by fabricated ones. Eventually some features became standard for all members, such as smoke deflectors.

Right on the departure time of 10.30 621's steamboat whistle blew and the train eased out of the station and steadily built up speed for the 1:45 gradient soon after, extending approximately one kilometer south. The terrain at the start of the trip comprised rolling hills that reached their greatest height to the north at Mount Lofty. As we travelled southwards, the hills reduced to undulating to relatively flat on the Fleurieux Peninsular.

Owing to winter rains the countryside was still very green. This was expected to change to dry and brown in a month or so as the weather warmed and the land dried out. Most of the district comprised open farmland used for grazing or growing wheat. Bushland occurred sporadically, especially in the railway corridor. Tall gums dominated bushland in the northern section with stunted gums and mallees in the south. In addition to cattle and horses, a few kangaroos



were sighted.

Past the top of the grade the train picked up speed although at no time did it exceed a fairly leisurely pace. The clackety clack sound of the wheels over the rail joints was a pleasant reminder of an earlier era of short rail lengths and non-welded rails. The train stopped to pick up some passengers at Strathalbyn, a sandstone station with a set of ancient-looking signals (photo 2).

Further down the line we passed the Steam-Ranger Goolwa depot and stopped at Goolwa where hundreds of people were milling around and a fair and market were underway. A row of old internal combustion farm engines and at least one stationary steam engine were lined up along the old wharf (photo 3). The paddle steamer Oscar W was busy shuttling passengers up and down the river, in its 100th year of operation.

At Goolwa the diesel-hauled "Cockle Train" was connected to the "Southern Encounter" and loco 507 attached behind 621 for the run to Victor Harbour. This also involved attachment of an extra three carriages to the front of the six car train.

After Goolwa the line turned westward and passed through Middleton (the home of the late Neil Campbell) and Port Elliot where it ran parallel to the coast, in sight of the beach. A few brave souls were trying to get into the surf and not looking as though they would succeed, unlike a couple of board riders clad in wetsuits.

On arrival at Victor Harbour 621 was detached and turned on the turntable ready for a return trip with 507 on the "Cockle Train". After 507 shunted four carriages into a siding, 621 and 507 departed for Goolwa (photo 4). 621 later returned in time to take the recombined train of nine cars back to Goolwa on the return trip to Mount Barker.

The stop at Victor Harbour was for three hours, time enough for a look at the railway activity, a leisurely lunch and walk across the pier to Granite Island. The old horse-drawn tram (photo 5) (actually three of them) still operates between Victor Harbour and Granite Island, and were well patronized by people on holidays or away for the weekend.

The pier railway was part of Australia's first railway that linked Goolwa to Victor Harbour to transport goods between the Murray River and harbour for shipping to and from other parts of Australia or overseas. The 621 departed Victor Har-



Above & Below: Photos 6 & 7: 621 at Victor Harbour.

bour at 4 pm with nine carriages (photos 6 & 7), being six cars of the "Southern Encounter" and three cars of the "Cockle Train". At Goolwa depot the three cars were detached and the remainder headed north for Mount Barker. Further along the line begins a 1:45 climb for a few kilometres. Although the train was slightly over the normal maximum load, 621 steamed steadily up the grade without excess strain. At one point the fireman was seen to be leaning out of the cab trying to catch some cool air and draining a water bottle over his face. Obviously it was harder work for the fireman than the engine! Mount Barker was reached in the afternoon light five minutes ahead of schedule and the loco turned and returned to the depot while the carriages were also shunted under cover by a diesel. So ended a pleasant journey on one of Austra-





We were fortunate to have some help on the April running day. Above Kelly Mayberry and his Sandy River and Rangeley Lakes No.24 descends the grade on the outer main with Lionel Pascoe as guard.
Below, Ross Bishop and Toneya provided a service on the inner main with Simon Collier as guard.



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Web Page Address: <http://www.slsls.asn.au>
Public Running Day is the **THIRD** Saturday in each month from 1.30pm. Entry is \$2 adults, \$1 children. Rides are \$1 each.
To ride on the trains, enclosed footwear must be worn.