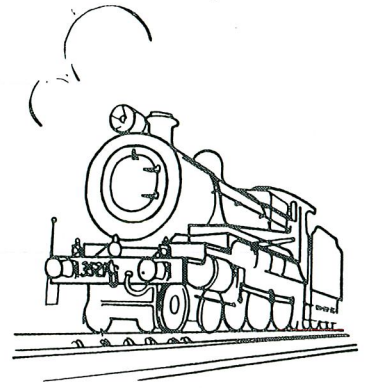


Allison

Sydney Live Steam Locomotive Society
Anthony Road, West Ryde, N.S.W.



'Newsletter'

Vol.27. No. 1
February 1999.

Happy New Year.

Here are some views of the dismantling that took place on the third Sunday in January.



Running Days.

November. This day was the Malcolm Sargent Charity Day. The day turned out to be good and sunny after some rather cool weather in the week before. The crowd was very good and at times there were long queues waiting for a ride. The ground level was served by Warwick, "V" class, John Hurst and Henry Spencer, Mountain and TGR pacific double heading, Jeff Sorensen C3142T and Barry Tulloch D5902, also double heading and Ray Lee with his VR. "S" class.

On the elevated Brian Carter "Perseverance" ran two cars and a van, Jim Leishman ran the Ps4 with three cars and a van. Paul Taffa steamed his "Hunslet" with a couple of cars while Jack Grierson ran his 3 1/2" gauge C38 class light engine.

The locomotive allocation was almost a bit short after having a glut of motive power on previous running days. Fortunately we had some support of the Malcolm Sargent members for the station areas.

December. This running day is not noted for large crowds but a couple of kids parties boosted the attendance. The day had been threatened by rain but while it was humid with a bit of a breeze the sun did come out late. The elevated was served by the 0-4-0's of Brian Carter and Paul Taffa, the Southern Railway Ps4 of Jim Leishman and Ron Larkin's C35 class.

The ground level track roster saw the following locomotives and drivers. C3506 Ray Lee, V1224 Warwick Allison, C3901 Peter Shields and "Tonya" Ross Bishop-Wear. Most drivers made good use of the sidings during the afternoon.

Martin Yule ran his steam truck in the lower end of the grounds. Martin got up steam in the top car park then ran the truck around the street to the Anthony Road entrance.

January. We had a reasonable crowd for a hot summer day, the shady spots were very popular. Early in the afternoon we had one grass fire but this was under control quickly and the hoses were in position for the rest of the afternoon even though, fortunately, they were not needed.

We ran three, three car trains on the elevated, locomotives were "Perseverance" Brian Carter, "Simplex" Ken Baker and Ps4 Jim Leishman. The Mulholland Pannier was there for a run as well.

During the afternoon service on the ground level was provided by Warwick Allison, V class, Peter Shields, C3901, Ray Lee, C3506, Bernie Courtenay, SMR 10 class and a double header with Max Gay "Bitza" and Henry Spencer TGR "T" class. Barry Tulloch had D5902 in the round house on stand by.

Christmas BBQ & Freight Train Day

This day went off very well. While there was not a lot of locos there certainly was some spirited running and interesting trains. During the day we saw Barry Potter's D5507 running with his set of goods trucks. This was the first time I had seen this locomotive painted and in steam and was able to enjoy a run of about an hour at the regulator, thank you Barry. The Maurie Haynes built C3075T, was back at the grounds with a new paint job, some extra decoration and its proud new owner. The 30 class hauled the Allison and Lyons goods trucks. Warwick's "V" class was coupled to seven passenger trucks many of which carried a number of 56lb. weights. Later in the day Paul Taffa with his Hunslet was on the ground level with the Allison bogie wagons. Max Gay gave "Bitza" a run with a couple of passenger cars and Brian Carter had his 0-4-0 coupled to a passenger truck and his caboose. The evening was polished off by a very congenial BBQ tea and some evening running. As I was leaving John Tulloch "H" class and Matt Lee with Ray's C3506 were getting ready with a train of, I think, 11 of the ground level passenger cars. It seemed that we had the best gathering for some years. All in all a great day.

Overheard in the Clubhouse

First Member: *You're wearing my shirt!*

Second Member: (Pointing to various oil & dirt stains) *Yours doesn't have these decorative motifs.*

First Member: *Wait till I have my lunch!*

Anniversary Book

There are still copies available of this. Cost is \$9. See Warwick or the ticket seller on running days.

Works Reports

Seating

Allan Cottrell, Brian Hurst and Bryce Peak are making good progress with this. A load of treated pine has been provided and the gluing in of studs to hold the timber into the concrete ends has been a success. The seats will have steel bracing provided on the rear to prevent the flexing which has exacerbated some problems.

Ground level Round House.

Mike Tyson is looking after having the Road sections galvanised while the need for the full round house facilities are not required.

Council Drainage Works

De-construction. We had been waiting for this time for many months, since we first were informed of the proposed drainage scheme and the development that is to follow. By 7.30 am. on the third Sunday in January work was well underway. There were 34 present with 4 contractors for a total of 38. This included Andrew and Michael Allison, Sue Carter, Tyso's mate and the prospective new member Mark Gibbons. The only problem seemed to be a neighbour who was not happy with the sound of the angle grinder at about 7.40am, so we reverted to an environmentally friendly hacksaw to separate the sections of elevated track. By about 8.30am, or so, most of the work that we had to do was over, we were able to retire for morning tea and then wait to see the wonders of hydraulic power as the excavator moved in, prepared its footing and then lifted and relocated the inner ground level bridge to its resting place to watch the work develop around it.

Special thanks to Bill Richards who purchased the exact correct amount of sausages and bread, but an over supply of onions; to Sue Carter who cut up the onions; to all the 32 members who attended and enjoyed the onion & sausage sandwiches for lunch; to the contractors who showed a very high regard for our facilities and Henry Spencer who project managed the whole day (except the onions) culminating in its very successful operation.

Observation of the site on the evening of the February meeting would make you wonder if the place will ever get back to how it was. No sooner had the digging got under way, the drought broke. This has started to put the contractors at least a week behind schedule. The southern abutment of the ground level bridge slipped into the huge hole excavated in that region. A concrete base had been poured and the formwork for the large sump in this position was well under way.

An up date from Henry on Sunday evening 14th. Feb. indicated that the sump referred to in the previous paragraph has been completed and a trench heading under the foot bridge towards the big hole outside our fence is almost all the way there and has had a binding layer of concrete poured. The rain in the week beginning 8th. Feb. has prevented the contractor attempting to catch up on the time lost previously.

Invitation.

If members are suffering withdrawal symptoms from not being able to run their locomotives they may like to take up the offer from John Snowdon, HDMES, 02 9958 7214, to run at their track at Galston. Public Day is the second Sunday, the club run / play day is 13 days after. Contact John, or, Ted Grey, 02 9484 7583.

Special Working Bee

It is hoped that the contractor will be able to restore the grounds progressively so that we can commence reinstallation of the track early. However the majority of the work will need to be done, weather delays permitting, starting Saturday 13 March. At this stage, working bees will continue until the track is in place, with hopefully as much in place as possible before the running day. As with the dismantling, members help will be important. Please keep in contact to be up to date with the latest developments.

Outer Main Track

Construction of new track to replace the old angle iron track on the outer main is well in hand. Brian Rawlinson spent many days drilling the replacement wooden sleepers, while Barry Millner similarly drilled all the new steel sleepers. The track jig is being reconfigured to weld in some superelevation in an attempt to make the track sit more reliably the way it should. This construction is, of course, being expertly overseen by Bill Richards. A report from Warwick on the 11th. Feb. said that a number of track panels had been completed.

Proposed Unloader

Many of us have admired the way the Illawarra clubs unloader is master of its task. Many thanks to David Lee who kept his eyes open for an electric forklift that was surplus to requirements and to Martin Yule who provided transport. Hopefully this device can be mounted on rails and will reach both lower and higher elevations with less effort than our current unloader, and directly service both locomotive depots.

New Lower Quadrant Signal

Ken Baker has welded up the post for the new home signal at the end of the elevated station. Following this Brian Hurst has again shown his skills and provided a superb painted finish. The hole for the foundations has been dug (didn't quite reach China) and concrete filled. By the time you read this, the post should be installed and hopefully the signal will soon be working from the ground frame.

The Bank

The grass on the bank was slashed and carpet underfelt was place on top. Pine logs have been provided along the edge to retain tree mulch. Hopefully with this arrangement weed growth will be minimised and we will be able to plant some nice shrubs that will survive.

Ash Pans

On event not previously reported is the provision by Ron Larkin of some stainless steel ash pans for use in the ground level loco depot. These make de-ashing at the end of the day much better controlled and avoids the problems of treading on hot coals on the concrete.

(As many members are aware Ron has not been in the best of health of late, he has had two spells in Westmead Hospital but at the time of writing , 15th.Feb. he is back at home. I am sure the Larkin family have appreciated the concern for Ron shown by the SLSLS members.)

AALS Training Sessions

Barry Glover is arranging training sessions to promote a better understanding of the boiler code, boiler inspecting and legal & insurance requirements in operating miniature railways. The Saturday (whole day) is for boiler inspectors and the Sunday morning is for club presidents and secretaries. The NSW session will be held in June in our clubrooms.

Convention Delegates.

Brian Kilgour will attend the Boiler Inspectors Meeting while Warwick Allison will be our AALS meeting representative.

Free and For Sale.

Paul Taffa has a ceiling fan to give away FREE, and, a bunk bed / desk unit FOR SALE. If interested contact Paul for details and Price.

SLSLS Member in Parliament.?

Paul is standing for election to the Legislative Council of the NSW Parliament, his Party, RAMPS, aims at providing a voice for motorists and riders.

Diary

2 March	Director's Meeting
13, 14 to 19? March	Working Bee to restore track
20 March	Public Running Day
2 to 5 April	Annual Convention at Lake Macquarie Live Steam Locomotive Society. Convention booking forms are pinned on the notice board.
6 April (Tuesday)	Grounds Open for post convention visitors.
13 April	Members Meeting (deferred from 6 April)
17 April	Public Running Day
1 May	President's Breakfast.
4 May	Directors Meeting
15 May	Public Running Day & next newsletter.
29,30 May	Trip to Barry Potter's place at Orange.
5,6 June	AALS Training week end.

Garden Roster.

March '99.	A.Mackellar, W.Allison,R.Barlow, B.Kilgour, B.Millner, D.Mulholland, J.Mulholland, V.Scicluna, P.Shiels.
April '99.	B.Courtenay, K.Baker, B.Carter, V.Condon, J.Grierson, M.Haynes, L.Pascoe, J.Sorensen, N.Sorensen, P.Taffa.
May '99.	J.L.Hurst, J.B.Hurst, A.Cottrell, J.Leishman, J.Lyons, P.Lyons, B.Peake, M.Tyson, M.Yule.
June '99.	B.Hurst, T.Eyre, P.Brotchie, G.Kirkby, M.Lee, R.Lee, B.Rawlinson, B.Tulloch, J.Tulloch.

Gate Roster.

March. S.Larkin. April. D.Lee. May. M.Lee. June. R.Lee.

(If the march running day is missed the roster will go back one month.)

Editorial.

I hope you are impressed with the way the first page has turned out, I was surprised at the result, photo copied from colour prints . The quality of black and white photo copy technology has really advanced.

The scenes tell us that our 51st. year is starting as one of rebuilding the grounds around this drainage project and the challenge of restoring the grounds to the fine conditions we have been use to.

Please keep in mind that any articles for the Newsletter would always be welcome.

John Lyons.

The Development of the Steam Locomotive on the N.S.W. Railways.

by Mr. C.A.Cardew. Continued.

Compounding. The application of the compound expansion principal for steam locomotives has at times, and on many railways, been extensive, and even in comparatively late years on some railways (France) there have been modern, highly developed, and most efficient compound locomotives put into service. However, more often than not the practice has been highly controversial one. On the New South Wales Railways this type of locomotive made practically no headway, even though, that for a long period on the London and North Western Railway under the direction of Mr. F.W.Webb compound locomotives were being built in large numbers. There were, in fact, only two of the otherwise simple expansion 2-8-0 type, J.483 class, and two of the 4-6-0 type P.6 class, in both cases supplied as compounds at the suggestion of the builders ever in service here.

The J.483 class was a Vulcan Compound locomotive of the Baldwin Locomotive Company of the U.S.A. design having two outside high pressure cylinders and two outside low pressure ones, the high pressure cylinder being superimposed on the low pressure one on each side, and driving a common cross head. After some five years or so, working as compounds the two locomotives concerned were converted to simple, single stage expansion, two cylinder locomotives. In respect of the two P.6 (later 32) class compound locomotives, they are of some special interest in that there were no other locomotives anywhere ever built with the same compound cylinder arrangement. These two locomotives had all outside cylinders, one high pressure on one side, and two low pressure, each of the same diameter and both of which drove the one crosshead on the other side. This arrangement, however, did not provide triple , but double expansion , the one high pressure cylinder exhausting into the two low pressure ones simultaneously, with the high being so proportioned to the low pressure cylinders that, as nearly as possible, the work done on either side of the locomotive was equalised. Actually, in effect, though not in fact (because they had three cylinders) they could be said to conform to the well known Von Borries design for compound locomotives, in which there was one high and one low pressure cylinder, with a special Von Borries intercepting valve (which they had) which allowed the engines to be started as ordinary two cylinder simple locomotives and change over to work compound. In starting, this arrangement gave trouble, while under all conditions of working the locomotives were less powerful than the others of the class that were not compounds, so that, with no great fuel economy resulting either, they too after some ten years, or so, running as compounds were converted to be ordinary two cylinder simple locomotives. There was to be no progressive development of compound locomotives stem from this small venture in compounding on New South Wales Railways locomotives, and in the upshot it was just as well.

Superheating.

The first known proposal for using in an engine steam that, after leaving a boiler in the saturated condition, had been subjected to the application of further heating, and thus being superheated, was made by Richard Trevithick who, of course, is the actual inventor of the steam locomotive for use on railways, though it does not appear that he ever contemplated the employment of such steam in this latter connection. It was reserved for Dr. Wilhelm Schmidt and Herr Garbe, in Germany, in the early years of the present century to develop the principle for locomotive use, and evolve practical and successful apparatus for application to steam

locomotives whereby, with an only slightly altered conventional locomotive boiler, high temperature superheated steam could be produced and used in the cylinders of a locomotive.

In common with progressive railways in all parts of the world the principle of superheating was taken up on the New South Wales Railways, and the equipment developed, and locomotive practice adapted for its use under the local conditions applying, as was necessary for there arose quite a number of problems, more especially such as stemmed from the fierce searing effect which steam deprived of all moisture content, and converted to a hot gas having a temperature not far short of that of a dull red hot metal, can have. To quote Herr Garbe's own words in this connection, he wrote in his book on the subject "It will be easily understood that during this experimental period many mistakes were made. Every new type of locomotive brought its own problems with it." In the early stages in New South Wales the Schmidt design, which is a fire tube superheater, was not used, but a waste gas superheater, consisting of two banks of tubes carrying the steam intermediately between the boiler and the cylinders, located near the sides inside the smoke box, and subject to the heat of the flue gases therein, was tried. In principle and design it was not very different from a type which, about 1907, was brought out by the Baldwin Locomotive Company in the U.S.A. and known as the Baldwin Superheater. However, the amount of superheat obtained was not more than some 20 to 30 degrees Fahrenheit while there were maintenance troubles, so only a few were fitted, and as a result attention was turned to the Schmidt fire tube arrangement as the only type which was at once suitable for application to the ordinary locomotive boiler, and capable of providing high temperature superheated steam.

In this latter respect it can be said that the value of having high temperature superheat was not only very early appreciated by locomotive engineers on the New South Railways, but it was a tenet which was to be even more firmly held as time went on, and was never shaken, and the design of the superheater was, therefore, continuously being shaped accordingly. This, perhaps, was the more remarkable, since there were other locomotive engineers of great repute on railways abroad, which by world standards might be held as out ranking our own, who took the view that maximum economy was attained if the superheat initially provided was such as the steam, when leaving the cylinders to exhaust had practically no superheat content left, but had reached saturated temperature for the pressure concerned, and that there would, in fact, be waste if there were any superheat in the exhaust going to atmosphere. There were some most distinguished locomotive engineers in this school of thought who, accordingly, designed their boilers and locomotives for low temperature superheat, and followed this practice for many years, as did their successors, and in one case, not so long ago, on a very famous English Railway, there was designed a big, new, Pacific type locomotive which, for this reason, fell well short of the success that was expected of it. But the locomotive engineer responsible, seeing the error made, and being converted from the low to the high steam temperature ranks, then altered this design, with the greatest effect.

A mistake of this kind was never made with the locomotives in the New South Wales Railways, where steam temperature in excess of 550 degrees Fahrenheit at least were always aimed at and realised.

In considering this question of steam temperature it is, of course, true that the virtue and economy of superheating reside chiefly in it suppressing the loss otherwise resulting from so called "missing quantity", which is caused by initial condensation in the cylinders and which, with a saturated steam locomotive (and not withstanding some return from the subsequent re-evaporation process) is commonly of the order of some 20 to 30 per cent of the steam supplied and that, by applying high temperature superheat to prevent this, there results economy in fuel and water consumption, respectively of 25 to 35, and 35 to 40 per cent.

For the same, and other attendant reasons a very considerable increase in drawbar horse power output is secured.

Continued.

'Newsletter' is Published by: Sydney Live Steam Locomotive Society Co-op Ltd.

Track location is Anthony Rd, West Ryde adjacent to the car park behind West Ryde shopping centre. Telephone (02) 9874 8696 Postal Address: The Secretary, PO Box 124 West Ryde NSW 2114

Web Page Address: <http://www.pnc.com.au/~wallison/sls/sls.htm>

Public Running Day is the THIRD Saturday in each month from 1.30pm. Entry is \$2 adults, \$1 children. Rides are 50c each