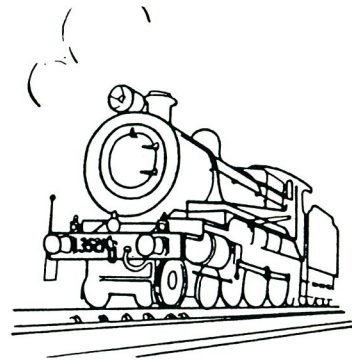


Allison

Sydney Live Steam Locomotive Society

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'Newsletter'

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President's Report-1995/96.

1. Society Activities

1.1 Running Days

During the past year we gave about 20,000 rides which was about 4,000 less rides than the previous year due to an incredible run of wet weather which completely washed out one day and significantly reduced patronage on two other days. This, together with an unpleasantly hot January run, and the November charity day meant that we had only minimal income for a continuous period of 5 months. In contrast with this the August run was very busy with 3091 rides being given in the summery conditions and with rides exceeding 2500 on two other occasions helped support the overall result. We decided to support the Malcolm Sergeant Cancer Fund for our charity day this year. It was very well supported by both members and charity representatives with an arts and craft stall as well as our usual running. Our Secretary was involved with an on air 'tête a tête' with Frank Crook on 2BL and this was obviously good publicity with a quite reasonable cheque being sent to the fund. Another highlight was the June 1995 run (this also started wet!) which was filmed and shown on the Channel 7 "Sydney Weekender" show. Five car trains have been operated on the elevated as a result of having to have guards. This has turned what at first was another operating limitation into an opportunity for some more realistic (and efficient) train operation. Finally a proper format incident book has been provided. This is designed to minimise the effort needed to record the incident, together with ensuring that accurate consistent data is captured for future analysis. These are additional to the injury book that has to be kept under O,H & S requirements.

1.2 Financial Results

A period of heavy expenditure resulted from our commitment to purchase a new freezer and the bookcases for the clubhouse. Other expenditure on the Interclub day and the signal box steps together with the five months of minimal income resulted in a small overall loss for the year. In recognition of this, and upon consideration of our fees compared to similar societies and the period of time since the last increase, the gate charge was doubled from the January running day with no adverse reactions. An increase in ride charges has also been talked about and when this occurs our major consideration will be to ensure that we still provide excellent value for money for the public. It is indeed pleasing that despite the effects of adverse weather, we have still been able to press ahead with improvements to our operation. This result is in many ways due to our Treasurer's competent financial management for which we are all very thankful.

1.3 Projects

Work has been progressing slowly on the elevated signalling until in August the elevated stub points and the associated signals were brought into use. This has created renewed interest in the elevated track operation and the system is appreciated by both operators and public alike. The Relph disc signal is currently the only working example known, and the lower quadrants (including one reverser worked) completes a working system that is quite rare in preservation circles. Some work has been done in preparation of extending the channel iron to work the crossover points as well. Fencing of the tracks has continued with all posts now being in place although temporary nylon rope is being used pending fitting of ferules and wire. Gates at the pedestrian crossing have successfully addressed the problem of people (especially children) walking in front of the trains. New steps & railings have been completed for the Signal Box and together with concreting around the back of the carriage shed have considerably improved this area. New bookcases have been built for the clubhouse to house our library and these look very professional. Slowly an historical display will be arranged for the display areas of these cupboards. They have certainly helped tidy up the clubhouse by providing a home for many odds & ends. Some trackwork has been commenced with the long awaited yard rearrangement now under way. This will give us an improved yard operation with better flexibility. Already the extending of the shunting neck has proven beneficial. Other work has included the general cleaning up around the grounds & in particular, the old clubhouse where several members have been busy in sorting our bits and pieces into an organised storage system. In order to improve safety, additional advisory signs have been provided for the public on

running days, and airblowers have replaced the paper towels in the toilets, to the benefit of both the public & our members who had to service the towels.

2. New Locomotives

Ken Baker trialed his Simplex in August and this was a great success. This engine is now doing much useful work on the elevated during running days. Wayne Fletcher had his restored 3½" gauge 'Schools' in steam in September and now this has been fine tuned it is pleasing to see it perform. Wayne has also been running his 'Purley Grange'. October saw Jim Leishman's 5" K4 pass its steam test and commence operations. This is a fine looking locomotive and is certainly the largest engine to run on the elevated for quite some time. In November Vic Sicluna's new 5" Heisler (built by Jim Ranford) performed faultlessly. February saw Alan Cotterall's 3½" gauge Britannia out for its successful steam test. This is another fine piece of work and it is pleasing to see that 3½" gauge is still alive and well. Some more scale rolling stock has appeared and I hope that this aspect is pursued by others as it makes running more interesting! At long last we were privileged to see the long awaited SMR 10 class from Bernie Courtenay perform some running in (they were always a bit on the slow side!) following its steam test during our "President's Day". The workmanship on this loco is very fine & it was well worth the wait! Also unveiled on the "President's Day" was Mike Tyson's 50 class which had been finished by Barry Potter. Another nice job & a very worthwhile addition to the loco fleet. John Lyons' 19 class and Brian Rawlinson's Blowfly are continuing to make progress, and Alan MacKellar's M class is exhibiting his usual standard of meticulous workmanship.

3. Interclub Activities

We hosted the second inter-club day for 1995 and this was a success with representatives of 11 clubs attending. Locomotive attendance was a little disappointing, but those who indulged had good runs with no congestion and lots of chatter. We provided lunch & refreshments and many stayed into the night to view the glint along the 240 ft radius inner main curve! Many thanks to the ladies who helped on this busy day. Members also attended special runs at Galston, Mudgee, Newcastle and Wollongong. A good contingent of 7 members attended the Easter convention at the Penfield club in Adelaide and other clubs after the convention proper. Our "President's Day" recently held was a wonderful day of good weather & good steaming on both the ground and elevated tracks. The society provided breakfast & lunch which was welcomed by members & our visitors. In particular it was good to see our Orange friends with their growing fleet of NSWGR locos & wagons.

4. AALS

We have been active participants in AALS discussions and have firmly but cordially put forward our views. During the year in review, a proposal was put forward to reorganise AALS & AMBSC which we supported in principle. However more work needs to be done in order to ensure clubs are happy with the new arrangements. We have just submitted a 7 page document with proposed amendments to AALS. We hope that these amendments will be incorporated during a process of due consultation with the societies. We had previously submitted a discussion paper on some amendments to the Operating Code, and these will be put forward again for action in a more direct proposal when the time is right. My perception is that a lot of clubs are confused as to their responsibilities under legislation, and do not understand the role of the AALS codes in all of this. We are taking the view that the codes should be like Australian Standards. They help us demonstrate compliance with legislative requirements under the Construction Safety Act, and the Occupational Health & Safety Act, in the event of proof being needed (legislation says the onus of proof of safety is on us). For this reason they need to be a useful guide, not overly prescriptive, but giving the link between the legislative requirements and safety goals that are relevant to us & should be carefully and thoughtfully written. AALS cannot direct societies, societies must act for themselves in meeting their responsibilities. Hopefully this will not be too much of a burden for what is essentially our hobby. We have also suggested greater communication between AALS & societies with the greater use of postal voting to progress matters rather than at the AGM.

5. Our Present and Future

During the year we finally received our new 21 year lease which Bernie & Henry had negotiated with council the previous year. The process lifted the council awareness of us &, I believe, the time period granted (the maximum under current legislation) is a measure of their satisfaction. It was with sadness that we also note the passing of Jim Hyde. Jim was our boiler inspector & third President for 10 years. For a similar period he was Chairman of AMBSC ensuring the smooth running of that organisation with his close contacts with the NSW Department of Labour & Industry and later equivalents. His AMBSC involvement also covered the period we had withdrawn from AALS, hence it was not a particularly easy period to operate in. Our respect for Jim was shown by the number of society members attending his funeral. We have enticed Bernie Courtenay into a "boiler inspector in training" position to help fill the gap, and we have every confidence in his abilities.

The Society has featured well in Australian Model Engineering with numerous mentions in the clubs section as well as favourable mention in letters. Our signalling featured in the November/December issue. Our own Newsletter is reaching new heights of computerisation and thanks to John Lyons is always a good read. I'm sure John would welcome articles from anyone who feels inclined to pen a few words about their project or experiences.

The new year should see us forge ahead with many of the projects before us. The completion of the fencing, station roofing, the yard rearrangement, concreting of the carriage shed yard, anti tip rail for the elevated, completion of the elevated signalling, more landscaping etc. are all tasks for anyone wishing to contribute. As well detailed planning will commence for our 50th anniversary in 1998. The Society has about 50% of its members whom I would describe as active. This is a high number for any organisation and contributes to our success.

The Society really does seem to run itself, an impression that can only be a result of the extraordinary dedication of its members and the ladies. I would like to thank the members of the society, & the Board and commend to you our coming year.

Warwick Allison

**The Development of the Steam Locomotive on the N.S.W. Railways.
by Mr. C.A.Cardew. Continued.**

“ With the extension of the lines further inland from Sydney and Newcastle, there was a great change from the earliest conditions on the New South Wales Railways, the task of providing new and different locomotives suitable to meet the greatly altered circumstances for both passenger and goods train service began, and that with the passing of the years this process of evolution and development of the locomotive stock, and of its detail design, and equipment was carried on, always with the object of more adequately and efficiently meeting the engineering conditions inherent in the lines as located and constructed, and similarly of coping with the demands imposed by the ever increasing volume of traffic offering.”

On the development of Goods traffic locomotives, the A93 Class, later to be classified the Z19 class.

“ The first of these went into service in 1877, and of which there were ultimately 77 in the class.

As delivered they had round top boilers and opened cabs, when later the boilers came to be renewed, a different design of firebox, the square top, belpaire type, was provided, and a more enclosed cab giving better protection against the weather was fitted. The locomotive was of the 0-6-0 type, all the engine wheels being coupled for driving, there being thus no waste of potential adhesion in the design. Having in mind the severe grades by this time predominating on the system it was already realised that, in goods train working at least, and for handling heavy loads on these railways the provision of the maximum possible adhesion was a vital necessity if such trains and loads were to operate successfully without undue slipping of the driving wheels. And when it is realised that, with the ordinary railway, whereon the frictional grip of the treads of the driving wheels are depended upon for traction, it can be shown that, applying an accepted value for the adhesion factor (ie., ratio of wheel weight to tractive effort) on a 1 in 30 grade, for every ton weight on such wheels at best not more than another 5 tons in weight can be drawn up the grade without risk of the driving wheels slipping badly, and in adverse weather and rail surface conditions often much less, the severely restrictive effect of steep grades, no matter what kind of locomotive used may be (except some other than the adhesion principle be employed) will be realised.

The A93 gave good results and, indeed, there are quite a number in service, until recently on certain steeply graded branch lines where traffic is light, and on shunting duties in marshalling yards. (1965) They were, and are, however, severely limited in speed and, due to the concentration entirely on the objective of providing the maximum possible in adhesion, they lack the desirable feature of either a two wheel pony truck, or a bogie, leading, capable of side and / or swivelling movement, and of assisting to guide the engine round sharp curves.

Making concession on account of the prevalence of sharp curvature on our lines to this latter requirement, it will be seen that all later locomotive designs intended for main line working were provided with idle guiding wheels in some form of pony truck, or bogie, though doing so usually with the least possible loss of adhesion weight for driving.

The J131 Class. “ The J131 Class indicates this change in design feature, these locomotives imported from the United States and of thoroughly American design, was a very bold step for the News South Wales to take because, for the first

time, there was to put to work an eight wheels coupled locomotive, and one having a rigid wheelbase no less than 14' 9" long, this dimension being a very great increase when compared with the same for any previously used locomotive and, having in mind the abundance of very sharp curves, especially on the main Western line, there could have well been some misgivings. Certainly, the two middle pairs of coupled wheels were flangeless with a view to relieving flange reaction on the inner rail in a curve, but still the length of rigid wheelbase was greater than was used again until many years later. Even then, when there was next an increase, it was only exceeded by 3 inches, while the longest ever of 15' 9", was not introduced until 50 years later with, meanwhile, practically all the 8 chain radius curves on the main lines having been improved to be mostly 12 chains radius, with transition curvature, also, between curve and tangent, and between reverse curves. These locomotives, of which there were only 11 obtained, for their day were also heavy locomotives, the total weight, as compared to their heaviest predecessors, being nearly 30% greater, though the adhesion weight was increased only by some 15% because the coupled wheel axle weight were reduced, and so the tractive effort was not greatly enhanced. Like most of the New South Wales locomotives introduced in this period, when they came to be re-boilered in later years they were equipped with the square topped, Belpaire type, of firebox in place of the original round top design."

The J.483 Class. The "big J". "The next class of locomotive represented a very considerable step forward in hauling capacity and size. It was another locomotive of the 2-8-0 wheel arrangement like the one previously dealt with, and also was American in design and construction. This was a really powerful and heavy locomotive for the time, the tractive effort being just 30% greater than the last example, and the total weight, which was increased by a like figure for the first time with any locomotive here reached 100 tons. The adhesion weight was also 30% more, with much heavier coupled wheel axle loadings, though the rigid wheelbase was less, at 14' 3". There were 20 locomotives of this class, and some of these locomotives going into service in 1891, lasted till the year 1937. As powerful units for effecting the movement of heavy trains, with a reasonable turn of speed, these locomotives were very successful, though they were somewhat costly in upkeep and uneconomical in fuel consumption."

The T524 Class, the first of the "standard" goods engines. "As the result of experience gained after three or four years service with the "J's" and with the need to augment the available goods locomotive that would have the necessary power and speed characteristics to meet the traffic requirements for a long time ahead, and that could operate on all the main lines then being strengthened and improved, and likewise run on many branch lines then already, or in the not far distant future about to be, similarly dealt with the T524 class was designed. This was another of the 2-8-0 wheel arrangement but the detail design, such as the plate frames instead of bar frames etc., followed English instead of American practice. The cylinders were outside, as had now become an accepted principle for the New South Wales Railways, and one from which there was not to be any departure thereafter. The boiler from the beginning had the square top, belpaire design, of firebox. The tractive effort as originally built, at 28,000lb., was somewhat (but not much) greater than the last mentioned class, the coupled wheels diameter at 4' 3" was the same with the rigid wheelbase 9" longer, at 15' 0" in which the two middle pairs of wheels were without flanges. The total weight, also, was about 6 tons more, and the adhesion weight some 3 1/2 tons greater. The first of this class were built in England, to a general design worked out in the design office of the Locomotive Branch of the New South Wales Railways (and frequently referred to in the technical press as the Australian Consolidation locomotive, ie., 2-8-0 type). They went into service in the year 1896. Ultimately, by various builders in Great Britain and New South Wales there were 280 in the class, which by this figure became numerically the strongest of any to operate on these railways, and with two other classes built later, but which differed from it only in minor respects (in one of which there were 190 locomotives and in the other 120) there was constituted by these locomotives an almost universal standard class of locomotives for the goods service of the New South Wales Railways, numbering 590 units, and capable of operating on nearly all lines. It may be recorded that, in later years, by certain improvements the tractive effort of all these locomotives was increased to the figure of 33,600 lb. and there is still a considerable number of these so called standard classes of goods locomotives at work. (1965)

To the success of these locomotives for operating under the conditions here the foregoing record of their increase in numbers, and years of unchallenged near monopoly of the goods train working, will testify, to which I myself will only add the criticism that the long, narrow, sloping fire grate made the engine rather difficult for the fireman to fire, as from personal experience, and that a more commodious and comfortable cab could have been provided.

To be continued.

General News.

The special Club day held on the last Saturday in May turned out to be a most enjoyable event. The weather was great, there were two new locomotives, a few visiting locomotives with scale rolling stock, a chance to have an easy few laps of the track and some un-finished work on display. A good few members were present in time for breakfast and the lunch time sausage sizzle was enjoyed by members and visitors alike. A very happy Mike Tyson was out on the track by mid morning with his 5" gauge D5112. As mentioned in the last Newsletter Mike has no grand plans for future construction projects, he just wants to enjoy running D5112. The second new locomotive was Bernie Courtenay's SMR 10 class tank engine. The locomotive is still to be painted but never the less it is a fine example of model locomotive building at its best. Bernie ran a few laps on the elevated and then ran on the ground level at a nice steady speed, much like the full size 10 class. I am sure that Bernie will give us a full description of the locomotive for a future Newsletter.

Bill Richards, Life Member. At the August Special General Meeting it was proposed by Bernie Courtenay and seconded by John Hurst that Bill Richards be granted Life Membership of the SLSLS. Bernie spoke at length of the contribution that Bill has made to the SLSLS during his time as a member. Bill joined the Society in 1961, served as President 1973 to 1982, was a director 1989 to 1996 and now still serves as ground level track superintendent. Bill pioneered the idea of 1 1/8" to 1' 0" scale and the development of the wheel standards used by West Ryde members for many years and now adopted by the AALS. His expertise in Model Railway Engineering is recognised throughout the live steam movement in Australia and he has influenced the development of other Societies. Bill is noted for his attention to detail and making sure that things get done right the first time. The standard of construction of point work undertaken by Bill is second to none and has been instrumental in gaining our Ground Level Track the reputation it holds today.

Bill has a wealth of knowledge with regard to machining and model engineering in general and has been able to give many of us valuable advice with difficult problems. Other members also spoke on behalf of the motion and when it was put it was passed. Congratulations Bill, well deserved.

AGM election results. President, W. Allison, Vice President, B.Courtenay, Secretary, H.Spencer, Treasurer, J.L.Hurst, Directors, B.Kilgour, P.Shiels, R.Larkin.

New Member. Stuart Larkin has been elected to full membership of the Society. Congratulations Stuart, we hope you have a long association with the SLSLS.

Track work. The last of the old elevated track which was laid on the ground near the carriage shed has been removed in conjunction with the recent yard rearrangements. On the August running day it will be possible to run around a train in the carriage yard. This means that some prototypical shunting can now occur with the inner track trains being able to collect their carriages and run tender first into the yard. They can then run round the train and propel back into the shunting neck ready for being signalled onto the inner main. To make the most of this engines should have working front couplers.

Concrete. Lionel has been working hard on the concreting of a path from the unloading area through to the steaming bays. This will be appreciated especially when it is a bit wet under foot.

Christmas Run. The Australian Railway Historical Society is having their Christmas get together at our grounds on December 7th (ie., the first Saturday in December). We are donating the takings for this day to our charity, The Malcolm Sergeant Cancer Fund. This will be a day with a difference. It will start before lunch. There will not be the need for the normal level of passenger hauling, and hopefully we can run a variety of trains including scale rolling stock only trains and some mixed trains as well as normal passenger runs. Maybe we can have a yard shunter in operation. It would be good to see some of the smaller gauge locomotives given a workout. Some selected friends will also be invited. When the ARHS visitors leave we will continue on with our own Christmas party, say, from about 5.00pm. Family friends would be welcome for this, of course, which would be a BYO barbecue. It was considered that this will be a much preferred option than following the December public running day as this would be very close to Christmas, ie., Dec. 21st.

SLSLS History. Alan Mackellar has provided a display of our first 30 years on our display board. If you have not seen this yet it will be well worth the effort to have a look.

Jim Ranford has donated 3 videos made off his movie film which contains many early scenes of the Society. Thanks Jim, there is a growing interest in knowing how we are where we are today. Jim has given me some notes on the preparation of these videos, I will publish these in the next Newsletter.

If anyone has copies of pre December 1969 SLSLS news sheets could they contact Warwick Allison or myself so that we may make arrangements to have them copied.

Lap Counter. A counter has been installed on the elevated track. Ken Baker is interested in knowing how many laps we do and has provided an impulse counter which has been installed off the lower quadrant track switch.

Reflectorised Landmarks have been provided on the inner and outer mains since the June running day.

Duty Roster.

Sept. '96. B.Courtenay, V.Condon, M.Haynes, J.Sorensen, N.Sorensen, P.Taffa.

Oct. '96. J.Hurst, J.B.Hurst, A.Cottrell, J.Lyons, P.Lyons, B.Peake, M.Yule.

Nov. '96. B.Hurst, J.Davies, T.Eyre, G.Kirkby, K.McMahon, D.Mulholland, B.Rawlinson, B.Tulloch, J.Tulloch.

Dec. '96. B.Richards, R.Larkin, S.Larkin, R.Lee, M.Lee, J.Leishman, J.Ranford, M.Tyson.

Gate Roster. Sept. H.Spencer. Oct., P.Taffa. Nov., B.Tulloch. Dec., J.Tulloch.

Events to come.

Narooma Public School will visit our grounds on 5th September. If you can spare some time your help will be appreciated. Contact Henry for details.

Blue Mountains Society at Glenbrook, Saturday 31st August, Sunday 1st September.

Canberra Steam Locomotive Society. 28th, 29th September.

Hornsby Society, Galston. Second weekend in October, the Friday is usually the inter club day.

Wagga Wagga Society. Early November.

Editorial. Please keep in mind that items for the Newsletter are always welcome. Also as our 50th anniversary is in 1998 give some thought to ways of celebrating the event.

John Lyons.