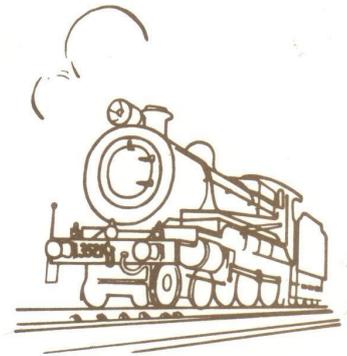


Sydney Live Steam Locomotive Society

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

'Newsletter'

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Robin Levin's Victorian Railways J class built by his father had plenty of admirers at the July interclub run.

May Running Day

After two washed out running days it was really good to have some fine weather. There was a good rollup of locomotives and with everyone on the ball there were four trains ready for passengers at our 1.30pm opening time. Tony and Joy Eyre were on the gate and after a slow start there was a constant stream of visitors well into the afternoon. The sunny places were popular and the queues for all stations were very long. There was even a queue at the ticket counter. Setting up very early were Barry M, John and Arthur Hurst and Vic. There was some emergency track work with Mick and Warwick attending to a depression on the outer main at the bottom curve before lunch. Peter Shiels was down from Lake Macquarie with Adam Kincade. Peter brought the usual Shiels fruit cake for morning tea, this was greatly appreciated, thanks Peter. On the elevated track we ran one seven car train with Arthur

coupling up Betty Blowfly as train engine and Gary double headed with the B1 "Impala". David T ran his B10 as attached banker. The train ran well all afternoon with some very good loadings on many occasions. Paul Taffa took two cars with 0-4-0 Hunslet and John H riding on the guards van. I ran Z1915 with one car. Paul had a spell mid afternoon and when he returned to running I took the 19 off. Gary has done some tone up work on the B1, it is now hauling much better and not as prone to slipping as it once was, the grin on Garry's face indicated he was enjoying himself. On the ground level there was a variety of locomotive combinations as the afternoon went on. On the outer main Adam Kincade was at the head of one train with his 42201. The 422 sounds very good as it powered up the long straight grade from the southern end of the grounds. Very often I would cross Adam's train at the foot of the grade and enjoy hearing the loco get into the grade. The second train on the



Garry & B1 on departure road with Brian & train in the station.

outer was hauled by Ross Bishop with 0-6-2 "Toneya" which ran in a seemingly effortless manner all afternoon. The inner main saw two 1 1/2" scale locomotives on one train. The TGR R class was coupled in front of Warwick's V1224. Andrew was at the regulator of the V class while the R had a succession of drivers, with Lionel, Max and Peter D. all having a go.

The second train ran with Matt Lee, C3506 as train engine and Ray Lee in front with brand new, unpainted, VR A2 class. This combination ran well till Ray was forced to retire the A2 with a lubrication problem. The A2 was replaced by Graeme Kirkby and 4-6-2 pacific 2401. The locomotive had some trouble with the front bogie so both locomotives retired to loco and were replaced by Martin with 2-6-2 "Mountaineer" who ran this train till the end of the day. When Adam took the 422 off the train was taken by Barry T and D5595 with John T and the 2-8-0 J class in the lead. There was some trouble with the J and so it was replaced by Matt Lee, who fortunately, still had the C35 in steam. When Lionel took the R class off Andrew continued with the V and with some heavy loads his driving skills were put to the test.

The signal box was attended to by Barry M, Mick and Brian R while the guard duty was carried out by Peter Shiels, Warwick, Bernie, Steve Border, David Lee and Graham Tindale. On the elevated John H and Simon looked after the trains. Peter W was our ticket seller and sold 2950 tickets for the afternoon. This number was just short of our best previous May running day. Along the way Mark attended to some point problems. Many thanks to our canteen ladies and Emily, our first aid officer.

June Members Day

We had a cloudy day but it was not threatening rain as had been on our previous member's days. Only two locomotives were running. Simon ran his 0-6-0 Simplex on the inner main and I ran Z1915 with the collection of wagons. Ross Bishop had a few laps at the regulator. Mick and Brian R cooked our lunch time sausages on the BBQ and a great lunch was enjoyed by all present. Brian M helped Nick with some more progress on his S truck and after lunch there was a general sorting out of the magazines the club has inherited, some of the excess will be disposed of through the ARHS.

Mick and Warwick spent some time plotting the course of the concrete work around the base of the elevated station signal.

June Running Day

It was a cold day with sunshine and a brisk breeze but a change from the winter weather we had experienced in the week preceding the running day. Wayne and Janet were on the gate and were kept very busy with long queues well after 2.30pm. With the building work on "our parking" area car spaces were at a premium. Even the patch between Park Avenue and the bowling Club was a tangle of vehicles. When I loaded the 19 into my wagon mid afternoon and returned to my spot it had been taken and I was just fortunate that David Lee was leaving early so I filled his space. Alan Mackellar had left earlier and on return had to park near Denistone station.

The early setting up was looked after by Barry M, Arthur, John H and Vic. We often forget that there is a lot of things to do before our running day gets underway so a few extra early arrivals would be welcomed. Emily had a mobility problem so it was decided that any first aid emergencies would come to her. Over the last few running days Emily has treated more members than visitors, as Emily said, it cuts down on paper work, no reports to complete. On the outer ground level Ross Bishop hauled one of the trains with 0-6-2 "Toneya". The second train was double headed with Lionel's TGR R class as train engine and Arthur in the lead with the heritage Mikado 2-8-2. Arthur drove the 2-8-2 all the afternoon while the R class had Lionel, Max and Mark at the regulator. All the drivers seemed to enjoy the run, especially Lionel and Arthur. Ray Lee ran C3803 on the first train on the inner. The 38 had problems with the train brakes and was retired to loco with the train then hauled by Warwick's WAGR V1224 till the end of the day. Ray found some foreign matter in the ejector and with that fixed the 38 was able to take over the train from Ross later in the afternoon. The second train on the inner was pulled by 2-6-2 "Mountaineer" after completing boiler testing. During the afternoon the loco was driven by Martin, Barry T and Peter D. The guards on the trains were Martin, Bernie, Peter W and Lionel.

On the elevated track there was a six car train with Brian C and 0-4-0 "Perseverance" running as train engine. Garry led the way with B1 "Impala" coupled in front of the 0-4-0 and David and the B10 coupled at the back as attached banker. They ran very well all afternoon. The B1 sounded very good as it brought the train into the station. Paul T ran a two car train with the Hunslet and I ran one car with Z1915. Both Paul and myself had some dramas with our locomotives. Paul had trouble with the snifting valve while had the water level going all over the place. I took the 19 into loco and after building the water level up then blowing down water did not clear the gauge glass so I considered there must be a blockage in the passage ways. That left the six car train to work well till the end of the day. In Warwick's report of the days running he wondered about the worth of the B10 at the end on the train. This precipitated a number of emails that, yes, John H guard heard the loco working very hard from the foot of the grade and Brian C felt the push up was appreciated if either of the lead locomotives were a bit low on

steam. I suppose that had all the participants in that exchange been thirty years younger the discussion would have been twittered and face-booked all over the place.

Our visitors made good use of the sunny spots as it was cold in the shady areas. As the sun started to set everyone started to head off but even so our last train was close to 5.00pm. Steve and Brian R managed the signal box for the afternoon and Brian H sold 2717 tickets. The canteen was busy with Liz, Diane, Margo and Kim (Nick's mum) keeping things going.

July Running Day

The week before this running day had been miserable and very wintery and Saturday morning was not looking very good. At my loading up time I decided that the 19 would stay cosy in the workshop as it was raining and not very pleasant. Despite the start it turned out to be a reasonable winter's afternoon, a few drops of rain as the gates were opened was all we had to worry about. The state of the weather did have some bearing on our statistics for rides as we only gave 2523 rides which were below the average of 3132 for the past three July running days. The setting up was once again looked after by Barry M, Vic, Arthur and John H. I swept the platform of the new elevated station and although we are not using it yet it makes it look very smart.

Our elevated roster took a blow when John's "Nigel Gresley" was not happy sitting in loco and rolled off the end of the track completing some sort of gymnastic tumble. There was some damaged plate work and some bent motion gear so it was packed away heading for workshop attention. Brian Carter with "Perseverance" 0-4-0 teamed up with Garry and his B1 "Impala" 4-6-0 on a six car train this running day without a banker engine. Paul Taffa had the Hunslet 0-4-0 on two cars and a guards van for running trials after a much publicised stint in workshop. It performed well. John H rode as guard on Paul's train while I was guard on the six car train for most of the afternoon. I took a short break to take some photos and then arrange afternoon tea for the elevated workers. There were some very heavy loads during the afternoon as very often there were far more adult than child passengers on board.

On the ground level outer "Mountaineer" was first out on one train. Ross was on the track soon after with the Fowler "Toneya" and was joined by Graeme K with 2401 4-6-2 coupled up in front. Graeme came off after a while and left the outer trains in charge of the two large scale narrow gauge locomotives. Martin, Barry T and Peter D were the drivers of the 2-6-2. The inner main had its two trains as usual. With Warwick away Andrew had the V1224 in steam and waiting in the station for the first load of passengers. The second train was a double header of Lionel, TGR R class as train engine and Arthur and the heritage Mikado in front. Ray Lee coupled up C3112 as attached banker. Arthur enjoyed the run and Lionel and Max shared the driving on the R class. I think Ray was reported saying he had a pretty easy afternoon. There were a couple of incidents on both the inner main and the elevated which could have been put down to passenger behavior.

The canteen was staffed by Diane, Liz, Margo, Joy and Kim. Emily had a good day not having to treat any injuries.



Paul Taffa's Hunslet waiting in the loop at the new station.

Peter W was in the ticket box and was helped out by Margo. The signal box was manned by Mark, Barry M and Mick. Bernie was gate keeper with some help from Alan Mac.

A few days later John H received this email.

*Dear Sydney Live Steam Locomotive Society,
I recently visited your open day last weekend with my three year old daughter and some friends. We were so very impressed at the way the open day is run, the safety of the set up despite there being real steam engines and the general fun atmosphere. The trains were absolutely fascinating to all the ages in our party, and all got a thrill riding on them. My daughter is still talking about how much she enjoyed her day out.
Although there were a lot of people there we all got plenty of rides due to your efficient operation and dedicated care to keep the trains running. It was also great to be able to get a nice cup of tea and a piece of cake!
Thank you to all the people who make the open day such a success and I hope you are able to continue into the future
Yours sincerely,
Annie, Olive – aged 3*

That makes it all worthwhile and the sort of publicity money could not buy.

Interclub Run

We could have not had a better day as far as the weather turned out, bright sunshine and hardly any wind. It was though a bit on the cold side early but we were not complaining. By 8.00am much of the setting up had been completed with Barry M. Mark, Arthur, Mick and Simon in attendance. There were two trade stands with Kelly Mayberry (E & J Winter Models) and D.N.C. Technologies (Ian Ramsay) well underway preparing their displays. As the morning went on the display of members work grew and provided for plenty of comment. Simon had his B1 locomotive and tender, Andrew showed the Allison Z13 along with some of his O gauge steam trams and rolling stock. His newly acquired Dick Kerr 0-4-2 narrow gauge loco sat on the table beside Simon's B1. John L showed off the progress to date with his

Baldwin tender, Vic had the Rocket on show and David T had his fabricated SA 620 class cylinder block for all to see. On the centre table Barry T set up the Allan Cottrell built 2 1/2' gauge 36 class with scale track and passenger coach and just after morning tea Neil Mackellar arrived with the chassis and tender of his 5" gauge Black 5. In the elevated locomotive depot Max had his 3 1/2" 38 class with the tender chassis. The bogie frames were milled from solid and are a work of art in their own right. David Lee set up the loco chassis and tender for his Commonwealth Railways C class in the ground level locomotive depot. David set off his display with a full size Walkers builders plate. Greg Croudace displayed his highly detailed 5" 38 loco and tender in the GL depot. Barry T had the Ross Style built LB&SCR Atlantic "Eunice" on show along with the newly rebuilt 55 class. Martin had his steam wagon on the back of his truck parked near the flag pole.

The first locomotive out on the track was Brian M's Planet with Nick spending a good time in control. This was followed by Joe Huntley's Fowler cane locomotive. There was much more activity after lunch. At morning tea we were spoilt with cookies and cakes courtesy of Sue Carter, very nice slice supplied by Max and fresh scones from Mrs. Taffa. Liz, Diane, Lee and Joy worked hard looking after us all throughout the day. Emily was on hand for any first aid attention. Brian M and John L cooked the sausages on the BBQ with Henry as supervisor. A very efficient system was established with the raw sausages going on at the southern end of the plate and progressing to the northern end of the plate into a suitable serving tray. The onions were cooked by the ladies in the kitchen. The sausage rolls were followed by apple slice and tea or coffee, everyone was very well fed. Bill R was there enjoying the food, the sunshine and the catch up with many long term friends. Brian R was accompanied by son Peter and grandson Riley over from the UK. After lunch there were more locomotives out on the track. Gary ran his C36 on the elevated as did Ian Ramsay with his 0-4-0 railmotor. John H steamed the 2-8-0 Nigel Gresley and it seems none the worse for its disaster last running day. There was nearly an incident where the points at the end of the siding had not located back to the main correctly but for-

tunately John was going slow enough to pull up when he noticed the problem. Some on lookers were surprised that he was going slowly! There were some diesel outline locomotives on the elevated. On the inner main a very neat VR J class ran with a short goods train. Mid afternoon "The Old Girl" was steamed and a number of drivers enjoyed a turn at the regulator and everyone would have been happy listening to its hearty bark. Barry M and Brian R kept the easy traffic running on the ground level manning the signal box.

There were about eighty in attendance and the day ended with thirty or so adjourning to the bowling club for tea. Mick was very happy to receive a number of compliments about the day. A very big thanks to all who contributed to make the day a huge success.

Editor's note: When I got home mid afternoon I sent some photos and a message to our travelling President letting him know what he missed out on. He spent his Saturday on a train on the West Highland line heading to Mallaig behind a hard worked Black 5. He said he had not heard a bark like it for a long while but the whistle sounded like a 59 under water. He probably thinks he trumped us but I would call it a draw!

Annual Inspection of Non-boiler Plant and Equipment - 2011

The annual inspection of the Society's grounds and facilities was conducted on 7 May 2011 pursuant to the requirements of Section 4 of the Australian Association of Live Steamers Code of Practice for the Operation of Miniature Railways, Road Vehicles and Plant - Hazard Identification and Management (Sub-section 4.5: Owner/user Inspection of Non-boiler Plant and Equipment).

The Society's Policy, General Appendix, Qualifications, Assessment of Competency, Hazards and Controls analysis and Maintenance policy and supporting documents generally comply with the recommendations of the Australian Association of Live Steamers Code of Practice for the Operation of Miniature Railways, Road Vehicles and Plant.

The risk related to changes in elevation on paths and walkways was reviewed and it was determined that the requirement for yellow edge marking would in future be confined



Peter Dunn and the controls of Mountaineer passes Toneya while Graeme Kirkby collects the tickets.

to non-standard changes in elevation and the ends of the deck on the Ground Level footbridge.

Similarly, it was decided that fencing matters would be confined to situations where the integrity of the fence was compromised. In this regard, the works associated with the re-alignment of Betts Street have compromised the Southern boundary fence in a number of areas. Current advice is that this fence is to be renewed as part of the neighboring development work and further details are awaited.

There was the usual listing of dead tree branches requiring attention, but the Society's ability to deal with this risk is remains subject to Council deliberation.

A copy of this year's checklist has been placed on display on the notice board in the clubhouse.

The Society's Rolling Stock, Track, Infrastructure and Signalling, continues to be maintained in a generally satisfactory manner.

The Running Day Inspections of Carriages, Track & Structures and Signals (per the SLSLS Running Day Inspection Sheet 2008) have been performed and signed off on a consistent basis throughout the year under review.

A review of the Society's Risk Register and Hazard Control Matrix has been conducted by myself and Warwick Allison on 7 May 2011 and, with one amendment, the Matrix has been confirmed as appropriate to the Society's current operations.

A copy of the current Hazard Control Matrix is displayed on the notice board in the clubhouse.

Warwick has provided an updated "Review of Hazard Assessment" for the current year, a copy of which has been appended to my report for 2011.

Mick Murray
Inspecting Engineer

From the Track Superintendent

A recent near-miss where I just managed to step out of the way of a loaded train due to my attention being distracted highlighted to me the need for constant vigilance when being on, or around the track on Running Days.

There are a number of regularly observed occurrences where the risk of a near miss is high:

- Members not associated with train operations gathering for a chat inside the fenced track area;
- Drivers attending to engines from the six-foot having their posteriors/feet foul of the adjacent running line;
- Trains not protected in the rear when incidents occur;
- Children/grandchildren of Members being unsupervised inside the fenced track area; and,
- Members performing essential track and points maintenance during public running.

We need to remember that our loaded trains have a mass of some 2,000kg and take some time to stop, not counting the reaction time of the Driver /Guard. To address these risks, the following requirements shall apply immediately:

- Members not associated with train operations are requested to remain in the public area, or at least 2 metres clear of the running lines;
- Drivers attending to engines should remain vigilant to the risk of passing trains;
- Guards shall take particular care to protect their train as required;
- Children/grandchildren of Members shall be under direct and constant supervision; or if this is not possible, remain in the public area of the grounds; and,
- Members performing essential track and points maintenance shall have a lookout posted whilst the work is under way.

All Members, whether directly involved in train operations or not, are reminded that they have the authority to direct the suspension of the operation of a train or trains where an unsafe situation exists, until this unsafe situation is removed. In particular, Guards need to be constantly vigilant and should not hesitate to bring their train to a stand to warn passengers who are disregarding the mandatory safety instructions or who are a potential danger to themselves or others.

Finally, attention is drawn to the Society's Operations Guide, a copy of which has been provided to Members. If you need a new copy, or were inadvertently missed, please see me and a copy will be provided.

Remember: ***SAFETY IS NO ACCIDENT***



The cold and overcast July running day meant there was plenty of good steam effects!

Sydney Live Steam Locomotive Society Co-Op Ltd. President's Report-2010/2011

1. Running Days & Events

The 12 months passenger figures were 23883 (12 months to end of April) compared to 24382 for the same period last year, almost identical and not far off the previous year either. This includes the 2 wet days in March and April. That aside it was a very successful year because the 12 months January to December were 28529, our best ever result for a calendar year. Even so we did not have any record months, but every month was consistently above average. A big effort indeed.

The 24 month injury rate is .005% which is lower than the previous year, and the 12 month rate of .006% is also lower. We have had only one incident since October 2009, which is a good result. These figures are susceptible to big shifts with a small number of incidents, and overall I believe we are level running at a good low level, but let's not be complacent. I continue to commend members to be ever watchful for ways we can achieve better safety through small but important continuous improvements.

Thanks to Chief Train Controller Barry Millner for handling the train organisation and Signal Box supervision. Thanks also to Track Superintendent Mick Murray. Making sure our stock is presented safely for running regularly falls to Mick and Barry and also Mark Gibbons.

We are very grateful for the assistance of our regulars Liz, Di, Joy, Margo, Lee, and others who help from time to time and in the kiosk.

Thanks to Brian Hurst and Peter Wagner both of whom handle the ticket selling. Our charity day for RedKite last November had 2526 rides, which was the best for some time.

The Society's special events for members and friends at the Christmas Party and New Years Eve, were both very pleasant affairs and well attended. Special days were also held for RedKite in May 2010, combined with the Presidents Breakfast (the last time we ran for the kids themselves as RedKite declined this day for 2011), September 4 members day and on 5 March this year. We also gave a post convention run on midweek on 28 April 2011.

2. Financial Results

I would like to thank John Hurst for his efforts this year. The financial results are pleasing despite some significant expenditure on capital works. It is no small effort to keep track of our dollars, manage our insurance, get our yearly report together (in a very short period of time) as well as turn up to all the running days and put in a solid days running too. Thanks also to Peter Spencer for auditing the accounts this year.

3. Our Membership

We have 75 members (including country members & those awaiting acceptance), an increase of 5 since last year. We lost one member during the year who did not renew.

This is the largest our membership has been and the increase in the last 12 months is probably unprecedented. Hopefully all our prospective members will achieve full membership and actively contribute to the advancement of the Society.

Thanks to John Lyons who has continued with our newsletter, now 35 years in the position. There never seems to be a problem in filling the 16 pages, in fact the opposite! The editor is always pleased to receive contributions! As well we have moved to sending out the newsletter by email to those who want it so. This means they get it in full colour!

Our members also receive a weekly email. This keeps everyone in touch with what is going on in the Society as well as providing reminders of coming events.

Mick Murray does our amusement device inspection and monitors the safety throughout the year. Someone formally needs to do this, and we should all be grateful that we have someone as expert as Mick to do this for us.

A special thanks to David Thomas who has handled most of our boiler inspections as well as keeping the place green and lovely.

I would in this report like to acknowledge the input of Henry Spencer who had spent 20 years as Secretary and a year as a Director, and has decided to stand down this year. 21 years service to the Society in a senior position is a very significant contribution. Thank you Henry.

Our members are a diverse group, with many backgrounds. Our Society is also a complex structure.





By this I mean that it needs the combined efforts of many people using many different skills, and fulfilling many different functions, all done at the appropriate time. The members and especially, each of the Directors voluntarily spend a considerable period of their own time in managing and maintaining the Society. We should all be very grateful for this communal effort, for without each and any aspect of it we would be much the poorer, even to the extent of becoming not functional. Potentially we only have to let one aspect drop to present us with considerable difficulties in one of many areas of safety, function, reliability, presentation, administration, and so on. Ignorance, taking things for granted and even outright criticism of what are often not easy tasks are often destructive and thus this effort should earn the respect and thanks of each one of us. Your patient support and active assistance of the effort of those who further the aims of the society are really a necessary response of membership and a well structured, functional and friendly Society. Appreciation is always well received.

4. Projects

Work has been progressively done in continuing to correct the level of the elevated track. Additionally upgrading work on the ground level has also occurred, although the pace has slowed due to work on the elevated station. This project is now well in hand and should be a major asset to the grounds both visually and functionally. Special thanks to Martin Yule on manufacturing all the steel work, a not insignificant task. Thanks to Mark Gibbons who has refurbished all the point motors with assistance from Mick. The garden has continued to prosper under the guidance of David Thomas and is an important part of the amenity of our grounds. The Ticket Office garden has become a special feature thanks to Simon Collier, and its regular display of flowers attracts much attention. This is a very brief report on the highlights only. Thanks to everyone who has contributed not only to projects but also grounds maintenance throughout the year.

5. Model Engineering Activities

Considerable activity is underway. Two Blowflies by Mark Gibbons and Bernie Courtenay. Brian Muston's U class locomotive, Ray Lees A2 is now steaming, Simon Colliers B1, David Lees Commonwealth Railways C class, Max Gays 38 class, David Thomas's 620 and John Lyon's 25 class. Andrew Allison has produced a couple of O gauge live steamers while his A10 won the Best First Attempt award at the recent convention. John and Barry Tulloch's 5595 has also been steamed. Other members efforts are always welcome to be seen on the morning tea table.

6. AALS & AMBSC & Other Visits

The convention this year was at Lake Macquarie Live Steam Locomotive Society, so quite a few members took the opportunity to attend. Members also attended other clubs invitation days. Perhaps the most significant was a visit to members Sue and Brian Carter at Paddy's River on 2 April. This was a lovely day and many thanks are expressed for their hospitality.

7. Our Future

The West Ryde shopping centre redevelopment is now under way. Parking is disrupted and temporary parking is inadequate and badly arranged. Some aspects of the development appear to be different to what was on the plan, certainly the new Betts St has been moved closer to our boundary with an apparent loss of some car drop off spaces. As well, we are having difficulty managing our trees with council requirements being considered unreasonable.

Only time will see what the outcomes are, however I feel we are well placed with increasing public demand and well kept grounds, and hopefully, a well respected place in the community.

As last year, we remain well placed with all our assets in good condition, the grounds are presentable, we have stocks of coal, road base, sand and ballast, and a healthy bank balance.

Thank You.

Warwick Allison



On display at the interclub run: David Lee brought along his well built Commonwealth Railways C Class, but appears to have forgotten to scale the builders plate? Below: Ray & Matt Lee with the A2 & 35 on the May Running Day.





Above: The A10 with a short goods in tow lazily wends its way around the track at the Orange interclub run.
Below: Eudlo and the SLS gang gather for a photo at Smokey Mountain and Grizzly Flats Railroad.



Orange Interclub

Orange was cool but a bright blue sky and sunny outlook made for a lovely day. This was attended by Andrew, Warwick and Brian M. We passed through Mt Victoria preparing for its train weekend, but avoided the temptation to pull over. There was a detour to 5112 at Bathurst station on the way. This seems to be quite an attraction as people seemed to come and go most of the time we were there. It has been well restored under a railway looking cover. Apart from missing bits (like the crosshead little end pins) it appears it is being well looked after.

We arrived at Orange just before lunch to find Andrew's A10 was the only visiting steam loco present. Other locos were a couple of Planets (including Brian M's), a 422, some other battery diesels a very nice local CPH, and the club loco a Sweet Pea with a Blowfly boiler was also in steam. We ran the A10 and a couple of trucks and a van. The club put on a very nice complimentary BBQ lunch (thank you very much). As usual there was a lot of chit chat all round.

Kelly Maybury had an E & J Winter stand with some goodies (mostly steam bits). There was also a nice stationary steam plant crushing coal.

Not many attended but I spotted reps from Hornsby, Bathurst, Blue Mountains, Wagga, and Canberra (as well as us of course). Things got cooler as the sun dropped and people started departing about 3pm.

Visit to Warnervale

A good selection of members made the trip to Warnervale on Sunday 15 May to take up the kind invitation from Lenny Gort to visit his railway. 0-6-0 Eudlo was in steam with Len as driver and Adrian Samuels was driver for the 2-6-2. Both locos were built by Eric Evans. Eudlo has been extensively overhauled by Bill Richards. Bill came up for the day in a specially hired taxi with Mark Gibbons and Barry Tulloch. It was all extremely civilised with a trip before morning tea, and a trip before lunch and another after lunch. A BBQ lunch was had which was enjoyed by all in lovely weather. The railway is essentially single track with a loop at each end, and is to 12 inch gauge. Bill and wheelchair were marshaled onto a flat wagon behind the engine for a special trip. After this trip a group photo was taken by Shirley Spencer. This has been enlarged and is on the clubhouse wall. A special framed copy was also presented to Bill. All in all a lovely day. Many thanks to Len for a lovely day, and to Bill and Mark for organising it.

Annual General Meeting

Tuesday 7 June was the AGM. There was a good role up of 21 members and with proxy votes we had over 30 members exercise their member's rights!

This year saw Henry stand down as a Director after 21 years as service on the Board, 20 years as Secretary. All previous

Directors were re-elected plus David Thomas to fill the vacancy. Congratulations David! For the record the office bearers are:

President : Warwick Allison

Vice President: Mick Murray

Secretary: Simon Collier

Treasurer: John Hurst

Directors: Barry Tulloch, Mark Gibbons, David Thomas.

Following the AGM the special general meeting was held. Several matters were discussed. One was another letter to council to comment on their Open Space management plan prepare by David. The meeting approved of progressing a design for a NSW loco style water tank for the new elevated station. At the conclusion of general business Warwick was wished happy birthday with song and a special supper treat provided by John Hurst.

Club Camera

The club's camera appears to be missing. If you know where it is, please return it to the drawers near the kiosk window. We don't think it was pinched. They didn't take the charger!

Works Reports

John Hurst has arranged a detailed survey of the grounds and this has commenced. This will place all our infrastructure into a CAD drawing which will greatly assist us in knowing where our things are. We have separate diagrams for the signalling cables and water pipes which eventually we should be able to integrate.

Since the relocation of Betts St, David did some cleaning up in the gardens around the front gate and reported he had spoken to one of the project engineers from the new development who indicated that some action was imminent regarding the damage to our boundary fence. We haven't seen it yet! It seems the plans are for the fence to be replaced.

The unloader has been leaking oil for some weeks. The solenoid valve was the culprit and this was removed and stripped by Mick to discover a damaged O Ring. Mick obtained and replaced the O ring in time for the unloader to be used on the June member's day.

Arthur cleaned out the guttering on the shed. Apparently there were trees growing in it! Arthur has also pruned the trees about the new station which should stop a lot of rubbish gathering around the channel iron.

A large number of magazines were donated to the Society. These have been sorted with books etc being retained and model engineering magazines also retained. The books were catalogued and stored in to the bookcase or cupboard. The

Duty Roster

September: W.Allison, N.Amy, S.Collier, G.Buttel, B.Millner, M.Murray, S.Murray, P.Ryan, V.Scicluna, G.Tindale
October: B.Courtenay, G.Croudace, S.Larkin, N.Lyons, L.Pascoe, S.Sorensen, D.Thomas, D.Lee, G.Gunning, S.Miller
November: J.Hurst, J.Lieshman, J.Lyons, D.Mulholland, J.Mulholland, B.Rawlinson, M.Tyson, M.Yule, R.Bishop
December: B.Hurst, A.Hurst, T.Eyre, M.Lee, R.Lee, P.Taffa, B.Tulloch, J.Tulloch, N.Bates, P.Wagner

Gate Roster

September: S.Larkin October: D.Lee November: J.Lyons

remaining boxes of magazines were delivered to the ARHS who have agreed to take them. Thanks to David Lee and Barry Millner who arranged to transport them to the ARHS.

We have been fortunate to have Jeff Kane come down and assist of our grass cutting days. He uses a whipper snipper deftly and gives no mercy to any protruding blade of grass! John H had to repair his air blower which he used in vacuum mode to suck up all the leaves and grass clippings around the channel iron area. The plastic pipes had perished so a trip to the mower shop was in order. The repair turned out Ok and it was back in business after lunch.

Jim Leishman powered up the Guerny and used it to clean the deck of the ground level footbridge prior to repainting its deck. It had a lot of grime and it has made quite a difference. He also cleaned out the muck at the back of the treads. These were inspected and no corrosion is evident at all. During the week Jim L then repainted the deck of the ground level station footbridge. This completes the resurfacing of our bridges with a non slip surface. Jim has continued with the paint brush and has repainted all toilet floors and has re-painted all the safety yellow edge markers or trip hazards.

A recent decision made that members will be interested in is a new TV. A 55 inch LED LCD suitable for direct input from computers as well as DVD players etc is proposed. This should update our system and bring us into the digital age.

We are also considering some CCTV for the signal box. Scott Murray is investigating options. David Lee has also attended to some of the defective floodlights.

Prunings, Rakings, Weeds and the Trailer

Another reminder to please not place green waste into the trailer. Green waste (depending on what it is) is to be disposed of as follows:

Weeds go into the green lidded Otto bin.

Leaves, mulch etc is to go onto the gardens.

Excess material can go into the bin at the southern end of the grounds.

Logs to the BBQ.

Any material pruned should be mulched at the same time. If this cannot be done its probably best left where it is!

Incident Reports

Members are reminded that any incident involving the railway is to be recorded in the incident book. The Track Super will assist this.

Members News

It is with regret that we note the recent passing of Max Gay's dad after a grand innings of 99.5. Our thoughts are with Max and his family.

At the August meeting both Ian Tomlinson and Neal Bates were accepted as full members of the Society. To both Ian and Neal we hope that your time with the Society will be an enjoyable experience.

Locomotive and Rolling Stock News

Boiler inspectors David and Bernie did hydrostatic tests on Brian's R1 boiler after some attention at Tulloch Works, followed by Ray's 3803. C3803 is now as old as the full size 03, Ray certainly picked the right paint as it still looks almost as good as it did on its first run out of paint shops. Andrew had the Old Girl out and spent a fair bit of time attending to the lubricator, which seems to be now OK. It was flushed and cleaned. Work is expected to start on the tender after the interclub.

Brian M, John L and Simon have assisted Nick with some more S truck construction. John L designed and completed a set of axle boxes and Simon had Nick spend a day in his workshop fitting things up. This is looking pretty good and Nick is pleased with its progress! The wagon was on display on the inter-club day. As well Graham Tindale has shown us his new riding cars.

David officiated at the boiler test for John H's Nigel Gresley, and new superheaters are also being fitted.

Mick attended to a damaged bogie on the Pullman set which was found last week. It needed a new brake actuating rod. Mark brought along his Blowfly boiler. This is immaculate and a credit to him. On the inter-club day we saw Andrew's recently acquired 0-4-2 Dick Kerr locomotive. This locomotive needs more work to complete it and will be an interesting addition to the club's loco roster. On the July running day Neal Bates had his Foster traction engine in his trailer, he was planning to have it on display but due to a change of circumstances he was not able to stay. We all hope we get to see it in steam one of these days.

Editorial

We have just hosted a very successful inter-club visit, a very relaxed day, no over-crowding on the tracks and enjoyable food. It is just over thirty nine years since I had a brief conversation with Barry Potter one running day, he was driving his 3 1/2" 24 class loco and a subsequent meeting with Barry, then joining the SLSLS set me started with model locomotive engineering. Many present at that inter-club day had been involved with live steam from an earlier time and it occurred to me that so many of those present had made such a valuable contribution to the hobby. That contribution had come in so many ways. Setting up, designing and maintaining their own club infrastructure. The design and construction of locomotives and rolling stock both passenger carrying and scale. The accepting of executive positions in our societies, a task that is very necessary in this day and age. Going wider we would have involvement the AALS, the AMBSC and the Australian Model Engineering magazine, you could look around our grounds that Saturday and see many who have made such a difference to the betterment of model engineering in general and live steam model railway engineering in particular. I will not mention names as it would be easy to leave someone out but those of you who were there will easily fit names to the different roles people have taken. We are also aware of the model engineering skill that so many had demonstrated over the years, some more than others, but never the less they have provided inspiration, advice and guidance to many.

We had as well two trade stands showing us some of the material, components and equipment that are now becoming available. The future for model engineering seems to be safe.

To end this editorial I would like to thank Andrew Allison for his part in the preparation of this Newsletter, it has been very much appreciated.

John Lyons.



It was good to see the 2½" gauge 3676 built by Alan Cottrell and SFX car on display at the July interclub run.

Part built Locomotives

Paul Taffa has two 5" gauge part built locomotives to dispose of. One is a C38, the other a C36. Contact Paul for details. 9642 2979

New Signalling Cable

Jim has arranged conduit and pits for the new cable route for the signal box. Lionel and Arthur assisted by Peter W and Brian R have been digging the new trench for the conduit to take the new cable from the signal box to A termination box. The major achievement was a five track underline crossing, managing to miss the existing buried treasures. Arthur and Lionel were at it early still digging, digging, digging, and laying the conduit for the new signal cable. It's a big job and progress is happening!

Track work

Mark G, Barry T and Peter D have completed fitting up the revised operating mechanism on the hand point in the carriage sidings. Some background trivia on this point is that it was one of the first two Bill Richards ever made, for Ted Herbert's track, at Luddenham. Both were recycled, after a lengthy period in store, at Bill's place, into the present ground level yard system, upon the duplication of the Main Line, circa 1978/9.

They may be the oldest (functional) 5 inch gauge points in Australia, having been manufactured circa 1954, some 57 years old. At 54' radius, these two are also the largest radius points in the system, as opposed to the three groups of the remainder of the points: - 43' R, 36' R, and 30' R.

This leads into a timely reminder that points (hand or motor) should not be trailed. As well it should be noted that when

operating the lever frame on the elevated track take care to observe the position of the points to see if there is any non-alignment and move the locking lever carefully so as not to spring the locking mechanism.

Mark Gibbons has advised that over half of the 13 point machines have been fitted with a gasket for the lid. This appears to be successfully keeping water out.

Elevated Station

Improved arrangements for the cover plates have been devised by Mick and John H. These have allowed more room for the signal wires John has sucked up leaves around this area with his super sucker which seemed a better way to clear the areas around the channel iron rather than blowing. Mick and John H have continued to work on the station steelwork covers and this is coming up to be a nice job, a lot more involved than probably anyone thought.

Neal Bates, Ross Bishop, Warwick and Brian R attended to the work around the signal at the new platform. This area was cleaned out of leaves, and a jack hammer was used to widen the slot between the signal base and the elevated track footings. They laid some plastic drain and then concreted the area as best they could. Jim L removed the formwork the following Wednesday.

Jim L (and ladder held by Alan Mackellar) drilled out the holes on the elevated station roof ready for the screws for the purlins which were then erected by John L and Warwick. After John left at lunch time, David Thomas assisted until Neil Bates arrived and gave welcome relief with his strong arms. Drilling above your head takes its toll! He next working day John L, Jim L, Andrew and Warwick finished erecting the last of the station purlins.

We were waiting for Martin to arrive with the station fascias! These had been laser cut by Wayne Fletcher and then powder coated. Andrew, Warwick, Martin and John L got stuck into mounting the fascias which were largely done by lunch time. Before lunch Andrew and John L worked out the gutter bracket spacing. Following lunch and with the additional help of Neal B we fitted the gutter brackets and then the gutters as well! We took advantage of Martin's truck and used it as a work

Diary

3 September	Members day
6 September	Directors meeting
17 September	September public running day
16/18 September	Canberra Society open weekend
4 October	Special General Meeting
7/9 October	Galston 38 th anniversary run
15 October	October public running day
1 November	Directors meeting
19 November	November public running day & next newsletter

platform which was very convenient. This was a good result and more than was expected was achieved for that Saturday. A trial fitting of some roof panels then took place and it all looks good! The next work day should have seen good progress on fitting the roof but it was a bit of a washout. The roofing should be well under way by the time you are reading this Newsletter. The fascia pattern is based on Strathfield Railway Station. Have a look next time you are there.

Required for the Canteen

Diane Lee asked me to put a request in the Newsletter for any good mugs or cups to bolster our crockery collection, it would save us having to go out and buy any. Have a look and see what may be excess to your requirements at home.

Clack Valves

Max Gay

While getting over my recent hip operation I came up with some formulae for the internal dimensions that may be useful for those that contemplate making their own non-return valves (clack valves).

Before one starts talking about these dimensions I have not got into any theories about turbulence around the balls and all that sort of stuff as I don't know enough about it. I have used the KISS principle.

I have calculated these sizes by using the ball diameter, and using an equal sided right angle triangle with the 90° at the centre of the ball for obtaining the seat diameter (the square on the hypotenuse is equal to the sum of the squares on the other sides). The angle of the seat is at approximately 45 degrees to the axis of the body of the valve.

Having now come up with the diameter of the seat (choke diameter) I calculated the area, and then used the same area for determining the bore diameter by adding it to the area of the ball diameter. For the lift I used the area of the choke diameter and calculated the same cylindrical area between the ball and the seat.

I refer to the choke as the entry or inlet bore of the valve. The outlet of the valve should be the same diameter as the inlet. Likewise the choke diameter should not be any smaller than the inside diameter of the delivery pipe otherwise it will act as a real choke.

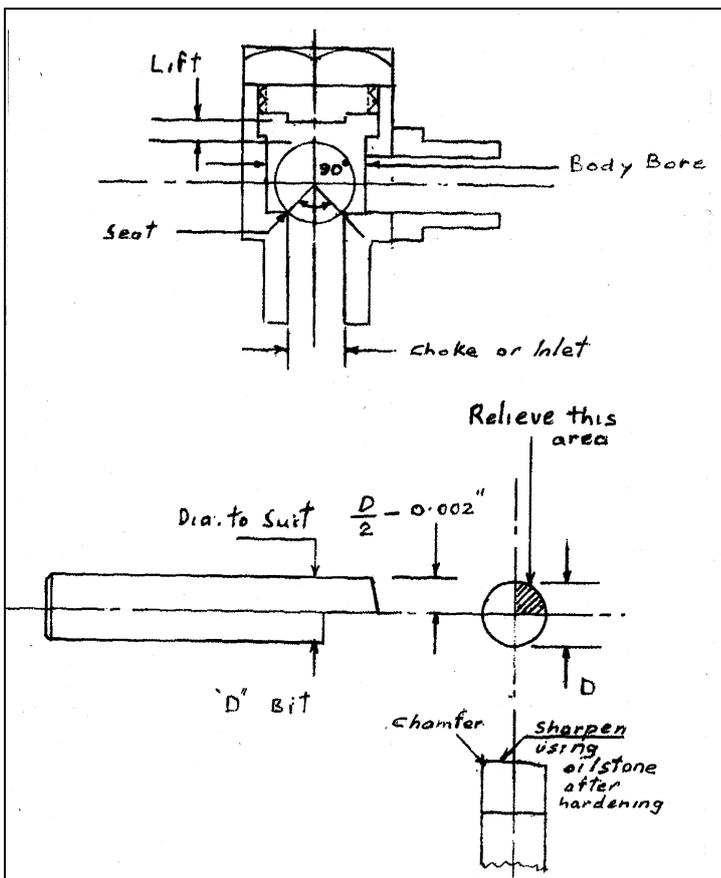
Most of the choke and bore diameters are not true fractions of an inch, and some may choose to use the nearest fractional sized reamers to make their valves.

However those who wish to take that extra step and stick to the sizes quoted you can make up "D" bits using silver steel and heat treat them. These bits are then useful for re-cutting the seats later (refer to the sketch). Figures in brackets are the closest fractions or reamers.

The calculations used the following:

- Choke Diameter = Ball dia. x 0.707
- Ball dia. = Choke dia. x 1.414
- Body bore = Ball dia. x 1.22
- Ball lift = Ball dia. divided by 4

You could use the same calculations for metric sizes if imperial balls are not available. This may happen one day.



Above: Clack valve terminology & "D" Bit
Below table of values for standard ball sizes.

Ball Ø	Choke Ø	Body Bore Ø	Lift
3/32"	0.066" (say 1/16")	0.113" (say 1/8")	0.023"
1/8"	0.087" (say 3/32")	0.153" (say 5/32")	0.032"
5/32"	0.110" (say 1/8")	0.221" (say 7/32")	0.039"
3/16"	0.132" (say 1/8")	0.190" (say 3/16")	0.047"
7/32"	0.154" (say 5/32")	0.266" (say 1/4")	0.054"
1/4"	0.177" (say 3/16")	0.305" (say 5/16")	0.062"



The tender for Max's 38 is coming along nicely.

Traction Engine Tests

Ross Bishop

In selecting a suitable Traction Engine to build I considered several options for which castings and drawings were available. The more frequently modelled 2 speed single cylinder agricultural traction engines eg. The Burrell or Allchin failed to captivate me and I looked farther afield for something more demanding.

The chosen McLaren is a 10HP, 3 speed sprung Road Locomotive with Compound Cylinders, 4 shafts and "Double Geared" final drive. At 10hp, the prototype was considerably larger and more powerful than the common agriculturals which, of course, is reflected in the size and performance of the model.

The terms "2 speed" or "3 speed" and "3 shaft" or "4 shaft" on traction engines refer respectively to the number of changeable gear ratios available and the total number of transmission shafts including the crankshaft, intermediate shafts and the rear axle.

"Double Geared" refers to a feature adopted by some manufacturers of engines designed specifically for long distance road haulage, notably Burrell and McLaren if not others, to drive each rear wheel independently of the axle (more gears!) so as to reduce torsional shocks and the occurrence of axle breakage.

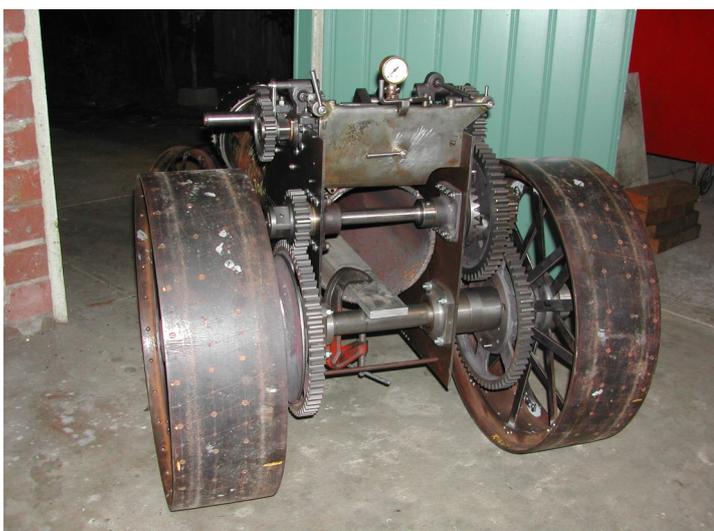


Photo illustrating the separate final drives to each rear wheel. The differential is located on the right side of the 3rd shaft above.

Additionally, on the McLaren, the change mechanisms for the 3 gear ratios operate by means of 3 separate rack and pinion mechanisms with an interesting mechanical interlock system for the prevention of two gears being engaged simultaneously. The complication of all this appealed to me and has been quite rewarding in terms of new challenges and satisfaction with the results.

As designed for UK use, the boiler had a working pressure of 175psi (1200kPa). While single cylinder models generally operate at more familiar 100psi pressures, it is generally accepted that compounds require the higher pressure / tempera-

ture to function properly. Wanting to build the boiler within the scope of AMBSC, I accepted the limitation of 100psi (700kPa). To offset the associated loss of temperature I decided to incorporate superheating for possibly the first time ever in a 3" model!

Saturated steam at 175psi (1200kPa) has a temperature of 192 deg C. Saturated steam at 100psi (700kPa) has a temperature of 170 deg C. The difference being 22 deg C. The thought was that if the superheater could make up the loss of 22 deg then the power available should be similar to that of the high pressure counterparts in UK. A worthy experiment and one which I was very keen to test in practice with steam chest pressure measurements, different cutoffs and temperature measurements before and after the superheater.

Firstly, the relative steam chest pressures between HP cylinder and LP cylinder. The LP piston area is 2.35 times larger than that of the HP piston. Therefore, to obtain similar force from each, we'd like to see a pressure differential from one steam chest to the other in the same proportion. So with temporary gauges installed we took to the streets noting the pressures on various slopes and conditions.

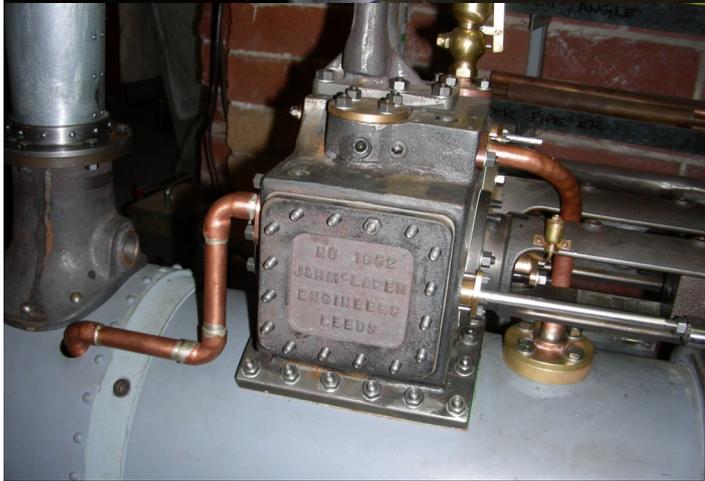


In the photo above you see the HP at 80psi and the pressure in the LP at 26psi. This is little low, the ideal being 34psi indicating the LP is a bit lazy.

Roughly the same can be observed over the full range of working conditions. Having said that, I would point out that steam chest pressures are, at best, a crude indication of the actual facts. Really, logging pressure from the bore over the entire stroke, like the good old days of indicator diagrams, would be far more revealing. While I'm sure suitable transducers and data loggers are available for the purpose these days, this is not a can of worms that interests me to open! The other pressing question was "what is the superheater doing or not doing?"

The steam circuit is long and meandering. The chosen route being influenced mainly by opportunity for connections to the cylinder without adversely impacting the overall aesthetics so far as possible. Photos show the saturated steam leaving the rear of the cylinder via a 1/2" copper tube that passes back through the boiler to emerge from the front tube plate in the same manner as it might on a locomotive. The dry steam en-

ters the HP steam chest on the front of the cylinder via the 'L' shaped pipe emerging from the smokebox just behind and to the left of the chimney. In between the superheater is a conventional 2 element stainless U tube type extending right back over the fire to just inside the firebox door.



The superheater has minimal aesthetic impact.

My plan was to compare surface temperatures of these copper pipes either side of the cylinder with an infrared laser thermometer.

In practice it proved impossible to do this on a moving engine whether riding or walking beside. As you might expect the readings by the u beaut instantaneous point and shoot temperature gun are all over the place. However, with engine stationary, taking several readings in quick succession, ignoring the greatest variances, I could get some meaningful comparisons.

Interesting thing was that the effectiveness of the superheater was wholly dependent on the condition of the fire. Rather obvious really but not what I was thinking! You assume that heavier load, stronger draught, more heat. Yes, but only if the fire is ready to go. It takes time and sustained draught for coal to ignite, boil off moisture and gas before reaching peak temperature. If you barrel into a hill with a green fire and not much else then you may survive on stored energy in the boiler but the superheating will be very poor. With a hot, bright fire the superheat is vastly better.

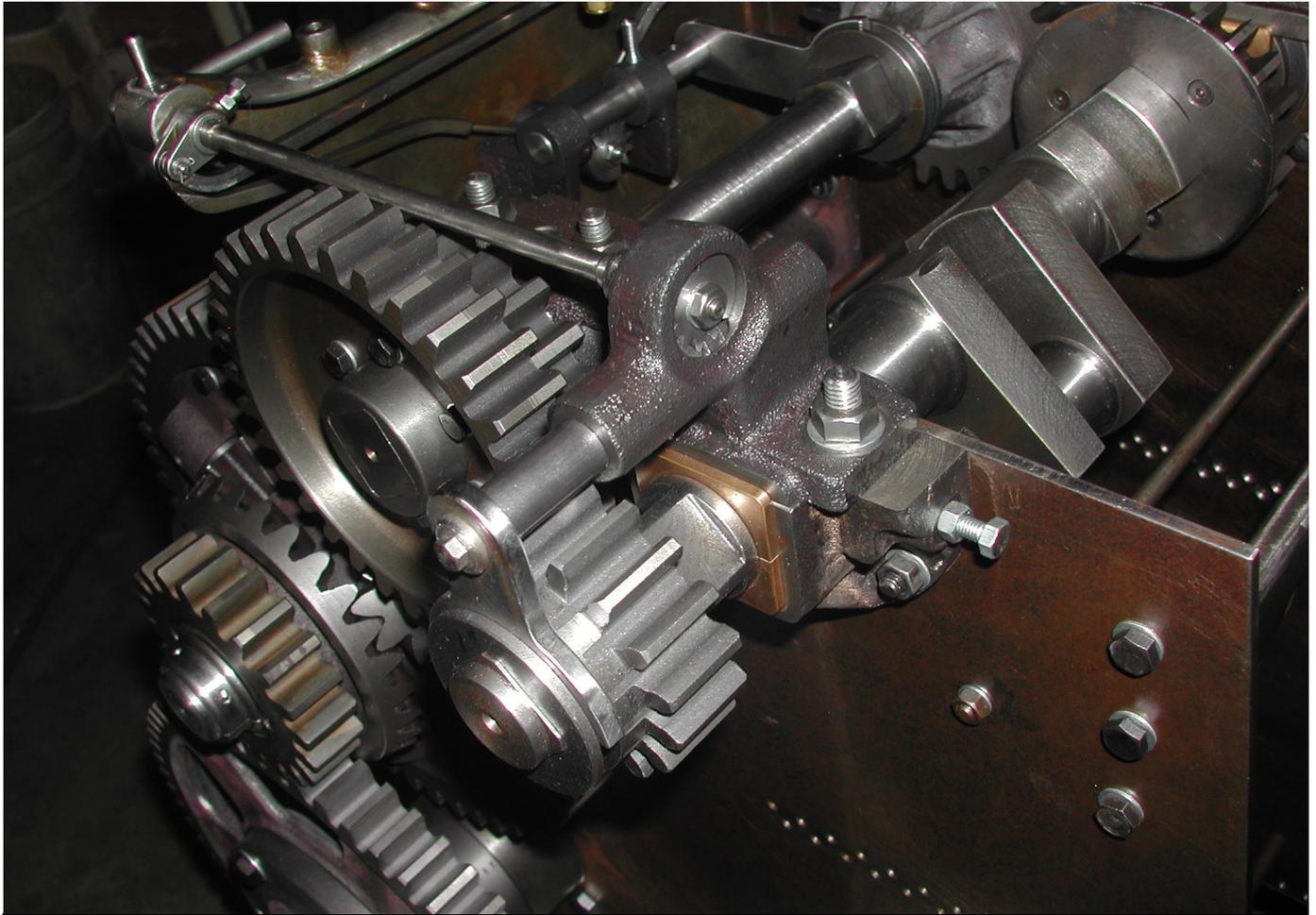
Steam at 100psi is 170 deg C. The pipe surface, with a small throttle opening and consequent pressure drop measured 118-122 deg C. With a dull fire the surface temperature of the dry steam pipe entering the cylinder had dropped to 95 deg showing the superheater had cooled the steam rather than heat it. When the blower was used, all other things remaining constant, the engine revs picked up slightly and the surface temp entering the cylinder quickly increased to 145 deg. A net change of 50 deg in about 30 seconds! A change demonstrating a complete reversal in superheater performance from having a cooling effect on the steam to actually heating it! The dry steam temperature increased or decreased significantly with variations to the fire. Open the door it fell. Close the door it increased. Add coal it fell. Increase the draught it increased etc.

The conclusions drawn from both aspects of the investigation were as follows: -

- The compounding proportions are such that the cylinders do not share the load equally.
- The above may be a result of the lower boiler pressure and may not be the case at 175psi.
- The superheater may at times compensate this loss but only under ideal firing conditions.
- Superheater performance is widely variable due to the inconsistencies of manual coal firing.

Is it equivalent to a 175psi engine? No, but the power and dry operation is quite satisfactory.





Above: The gear change mechanism for low gear on Ross Bishop's magnificent McLaren Traction Engine. This is repeated in principle for the 2nd and 3rd gear levers, but uniquely different in each case.
Below: Arthur & Max prepare for the next load of passengers. Ray & 3112 are out of sight at the rear of the train!



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