

SYDNEY NEWSLETTER



ENGINEERS
AUSTRALIA

RTSA

Railway Technical Society of Australasia
Sydney Chapter
Mail: PO Box 6238, Kingston, ACT, 2604

APRIL 2007

NEXT RTSA SYDNEY CHAPTER MEETING

Thursday 3rd MAY

17.30 nibbles and networking for an 18.00 presentation to be held at our venue –

GROUND FLOOR AUDITORIUM, INST. OF ENGINEERS,

8 THOMAS St, CHATSWOOD (WEST SIDE OF CHATSWOOD STATION)

**SHAMUS WALSH, OPERATIONS MANAGER, HARDFACE
TECHNOLOGYS will present on
RAIL HEAD REPAIR AND RENEWAL**

Hardface Technologys is a privately owned Australian company focused on Rail Head Repair. They conduct rail head repairs on both steel and manganese rail, either in-track or in their workshop. They rebuild wear on crossings (frogs) as well as removing defects such as cracks. They also remove wheelburns, squats, dipped welds and repair battered rail ends. Rail that has been removed from service due to wear or minor defects can be returned to original specification and returned to service. Old rail that has been removed from track can be recycled and returned to service.

The presentation will detail the procedures and techniques they use as well as detailing the results of several field trials. The presentation will cover both steel and manganese repair and there will also be a section on Arcbutt welding, which is joining rail using Arc Welding.

Complimentary nibbles and networking from 17.30 prior to the presentation starting at 18.00.

Why not come along to an RTSA meeting (where you will be most welcome) and broaden your horizons in the industry that employs you and/or that you are keen to support. Even better consider joining RTSA (you do not have to be an engineer to be a member) and enjoy the full range of services provided by the association. Contact is at the mail address (above) or at www.rtsa.com.au or by ringing Bill Laidlaw on 0409 602 833

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FUTURE MEETINGS

The following meetings are planned for the remainder of 2007. We always despatch a newsletter, or in extreme situations a flyer prior to every meeting. In most cases the next couple of months are firm while those further out are provisional.

Anyone with inspiration or bright ideas for future meetings should contact Bill Laidlaw at billlaid@bigpond.net.au

Thur 7th JUNE at Chatswood: Presentation by Air International

Tue 3rd JULY at Central: AGM and tba

Tue 7th AUGUST at Central: tba

Thur 23rd AUGUST at city location: joint RTSA / PWI / IRSE meeting, with a speaker arranged by PWI.

Wed 5th SEPTEMBER at Central: tba

Wed 3rd OCTOBER at Central: tba

Wed 7th NOVEMBER at Central: provisionally Downer EDI on the subject of 25kVA electrification as practiced in Queensland and Western Australia.

There will be no meeting in December since the normal date would clash with the AusRAIL 2007 conference, which returns to Sydney this year.

MEETING VENUE

The alert reader will have noticed the changes of date and location in the above program. The venue at Chatswood has turned out to be a bit off the beaten track for some members, which has lead to some soul searching by the Committee. It has been decided that from July we will trial lunch time meetings in a room located off the main concourse at Central Station – with a change of ‘normal’ date to the first Wednesday of the month. The first two such meetings (July and August) will

in fact be on a Tuesday due to prior booking of the meeting room on our desired date.

It is anticipated that the meetings will be 11.30 for a 12.00 or 12.15 presentation with finish time no later than 13.30. The usual refreshments will be provided, although they may be adapted to the new (lunch) time and the need for attendees to return to their offices afterwards ready for another 4 hours of hard labour.

Details of how to find the new meeting room will be given in the June Newsletter (which will advertise the July meeting)

COMING EVENTS

AusRAIL Plus 2007 will be back at the usual Darling Harbour location in Sydney from 4th to 6th December 2007.

CORE 2008 will be held in Perth between 7th and 10th September 2008. Themes will be around high volume bulk freight and the integration of rail as part of the export supply chain, and rail in an urban environment and the issues of integrated planning of land use and transport as the core of successful public transport. Register your interest by going to www.CORE2008.org

WHAT MAY NEWSLETTER?

At exactly the time Shamus Walsh starts his presentation on May 3rd the editor will be lifting off to far flung places, from which he will not return until the day of the June meeting (7/6). This is not a comment on our meetings, but rather an attempt to use up Qantas frequent flyer points before the captains of greed and debt get control of that airline.

Consequently there will be no editor to produce a May Newsletter, although a ‘template’ will be left so that details of the June meeting can be dropped in and circulated to

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members. It is also possible that the June Newsletter may be somewhat lame (depending how 'lame' the editor is at that time) before normal transmission is resumed in July. Anyone suitably inspired is more than welcome to send in a contribution to help maintain the standard of the next few Newsletters (surely we have some inspired or inspirational people among our flock?).

LAST MEETING

The April meeting was a joint IRSE / RTSA meeting with Chris Lees, Risk Manager of the Level Crossing Unit as guest speaker. The following is a summary.

There are around 3000 level crossings in NSW of which half involve both public rail and public roads. 20% of the latter (around 300) have active protection. Of the total level crossings in the state there are only 46 'public' crossings on the RailCorp controlled network, along with a further 22 private crossings. The 46 public crossings involve 36 with flashing lights and booms, 5 with flashing lights and only 5 passive crossings (eat your hearts out, other capital cities!). The 22 private crossings involve 19 passive and the remaining 3 with some active protection. Sydney and surrounds is quite remarkable for its very limited number of level crossings, with only perhaps half a dozen or so in the normal suburban area.

The NSW Level Crossing Strategy Council (LCSC) coordinates and directs level crossing strategy, and is made up of a number of peak road, rail and regulatory bodies with representation at CEO level. It oversees corridor strategy and communication strategy.

The StaySafe Parliamentary Inquiry some years ago made 69 recommendations which have led to increased resourcing for the five years since 2001. The Level Crossing unit was created, increased funding provided, and community awareness campaigns initiated during this time.

The incident rate in NSW is low by national standards. The fatality rate for motorists and pedestrians at level crossings has wavered between 10 in 1991 to 1 in 1994, 1995, 2003 and 2005. Specific incidents such as the 'five mates' at Gerogery in 2001 are clearly visible in the time series as aberrations in a normal incidence of 1 or two fatalities.

The trend line for motorist incidents at active level crossings has fallen from around 10 in 1988/89 to 6 in 2004/05 while at passive crossings the rate has fallen from around 26 to 8 over the same period. The trend for pedestrian incidents at all crossings has fallen from 5 in 1988/89 to around 1 in 1996/97 and remained near that level since.

A curious issue is penalties. Motoring infringements are handled by police and attract a fine of \$300 (plus 3 demerits) while pedestrian infringements are handled by Transit Officers and attract a \$400 fine (There is something a bit skewed in that I would think).

ALCAM (Australian Level Crossing Assessment Model) actually started in Queensland, was picked up and developed in NSW and now is national with support from NTC. The model looks at a wide range of parameters, assesses risks, and prioritises site for upgrading. The model also allows cost / benefit analysis of treatment alternatives. A feature is that the model produces consistent results across the range of level crossings. In NSW ALCAM is managed by the RailCorp Level Crossing Unit.

The ALCAM process involves up to 70 parameters. Accident mechanisms, such as competing stimuli, inability to see clearly, traffic queuing, long vehicles and driver behaviour are part of the modelling process. Other inputs are road / rail geometry, road vehicle characteristics, rail vehicle (train?) characteristics, approach visibility and visibility at the crossing. Visibility includes the incidence of fog for instance, so the coverage of these characteristics is quite wide.

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Outputs include a total risk exposure score, risk areas (risk mechanisms), flags, priority, and in the end a safety improvement program.

Future developments proposed for ALCAM include a characteristics fault tree, a consequence event tree and legal review from a coroner's perspective.

A lively question and answer time followed the presentation.

THE OBSERVATION POST

How curious the colonies are. Anyone in Sydney cannot be impressed by the consistent bagging the city railway gets in the media, despite the fact that it generally works reasonably well over a very wide and diverse area. Nevertheless the media, particularly the smaller of the morning newspapers and the execrable afternoon give away, seem obsessed with pointing out the failings of the rail system, ranging from major cockups such as the train breakdown on the harbour bridge a couple of months ago through to a plethora of meaningless issues such as underarm odour and belly button lint of fellow passengers (is RailCorp now required to be responsible for the personal hygiene of its passengers?). Little attention is given to the real problems of CityRail, nor is there much media patience with the relatively long timespan taken for new investment (in capacity and trains) to come into operation.

There is some light at the end of the tunnel – the Chatswood to Epping railway, various Clearway projects and the massive new suburban train order, all of which will progressively come to fruition over the next five years or so – all of which we are assured will give us a faster, more reliable and more comfortable journey. There are downsides – the endless weekend shutdowns and the excessive time taken for new rolling stock to be infused into the system – which seem to be a colonial version of the British disease. There are also 'old' trains (media speak for non airconditioned trains), which have a generally scruffy interiors (as do some of the newer trains) and travel times are very slow (a combination of

'slow' timetabling and a train design appropriate to high capacity few stops operation but not to short stop operation).

Some of the major irritants to users are outside the direct control of the railway, perhaps the most significant of which is the antediluvian fare system and lack of public transport integration. It is little wonder that the much touted and even more delayed 'smart card' project is foundering – trying to make a 21st system work with 19th century fare structures (buses and ferries are part of this issue too) is asking for trouble. The other major downside here (and again not limited to the railway) is micromanagement from Macquarie St, often by default by those irresponsible but invisible sods that are passed off as 'spin doctors'. Ministers (and their minders) here tend to get in the way of good governance, rather than being part of good governance. Knee jerk reaction to (sometimes trivial) events is hardly the source for inspirational governance.

The outcome of all of this is that there has been some braying (mainly in the media) to 'privatise' the suburban railway here, presumably along the lines of Melbourne (the only 'privatised' passenger rail operation here) or Britain. Well I have news for you.

The Melbourne suburban railway has not been travelling well lately. The original 'privatisation' there split the metro area into two separate railways, nominally in the interest of competition; but the two railways actually served two quite distinct 'pie slices' of Melbourne with no real competitive interface at all. (mind you one of Kennett's Neanderthals is still whinnying about the desirability of yet again splitting the now unified railway to get the benefits of competition – a continuing glaring example of the stupidity of putting ideology ahead of practicality and real need). But the damage had been done – Melbourne's fleet of Comeng trains were turned into two incompatible fleets, while two completely incompatible fleets of new trains were introduced – so now there are four fleets rather than the previous two. The same happened with drivers – they became isolated to their railway with no route

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or train qualification for the other half of Melbourne so a driver shortage in one part of Melbourne could not be covered by a surplus in the other.

In time one of the private operators tossed in the towel, the outcome of which (over quite some time) was reconsolidation of the suburban rail back into one entity – albeit still privatised and still with two largely independent operating entities within it. Time has healed some of those issues, but a combination of events (particularly some unfortunate braking issues with one of the new train types) has brought the Melbourne system and even more charming image than CityRail has in Sydney. Now, given that much of the railway image stuff is driven by the media, what do you think the Melbourne media and others are suggesting as a solution to the woes there – why, re-nationalise the railway of course!!

So in one city we have a proposed privatisation as a solution to suburban train woes, while in the other the opposite is proposed to deal with the same problem. It is almost inconceivable that both these propositions are right, and in reality it much more likely that neither is. In fact it might just be that ownership (or stewardship) of the railway is not the issue. Maybe it is all about the relevance, convenience, reliability, accessibility and travel speed of the network as applied to a majority of the denizens that is important. Get the political governance issue under control, get a mindset that focuses on people's need (not on production), get a culture that is concerned about the business of moving people, get a fare structure that is user friendly (and can really work with a smart card) and above all get a truly integrated train / tram / bus / ferry operation that works for all people and the issue of privatisation (or otherwise) will just whimper into the distant past. It is surely worth a try.

TRIVIAL THOUGHTS

When the Sydney single deck trains were on their way out they were demonised by referring to them as 'red rattlers'. Melbourne used the same derogatory name for genuine rattlers. In a feature item in the SMH a couple of months ago the author

mentioned passage of 'red rattlers' past his back fence, but of course these trains are no longer red and haven't been for many years. Since there is a goodly proportion of the Sydney fleet to be replaced in the not too distant future what are we to call the older silver cars to demonise them, but at the same time without demonising the newer silver cars. Clearly colour will not work, so what is the answer? Over to the media savvy bright sparks.

The afternoon give away paper is called MX, but this name conceals a very provocative secret – so much so that the publishers have never cared to reveal it in case the paper founders. However we are braver than they are, and in any case have little regard for a concern that is obsessed with train travellers belly button lint (and other equally important matters), so we can reveal that MX stands for Melbourne Express. There I have said it – the M word. But Sydney needs to know what subversive elements are afoot and surely this is one of them?

MX in fact originated in Melbourne and expanded to Sydney sometime later, while keeping the same name. No wonder it is given away!

PATTERNS OF STEAM

We seem to be getting a bit back into steam in the Newsletter, what with last month's write up of Malcolm Cluett's March presentation and this month the release of a new fine art photographic book covering the final years of steam operation in Australasia. The photographer and publisher is Shane McCarthy, a well known local photographer who among other things is represented in the National Gallery of Victoria collection. Patterns of Steam covers both Australia and New Zealand and has no less than 350 evocative black and white images from final days of steam in those countries (black and white is almost a forgotten art these days, but Shane is a master exponent of this medium). For those who may be interested go to www.patternsofsteam.com or contact Shane on patternsofsteam@netspace.net.au. A reduced price option exists for members of ARHS, NSWRTM, ARE or Steamrail.

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MEMBERSHIP – JOIN UP A NEW MEMBER

While this newsletter is primarily intended for members it is distributed more widely than that. Readers who are not members of RTSA should seriously consider joining the organisation. Details of membership and how to join will be found in the RTSA website at www.rtsa.com.au

Although RTSA is a technical group under the auspices of Engineers Australia it is open to everyone who has a real interest in railways. It is the only technical group which covers all disciplines (civil, mechanical, electrical, signalling, communications etc.) and as such is one of the most rewarding rail technical networking groups in the country. The annual cost is very reasonable, and the rewards are considerable.

RTSA offers a number of regular activities for its members, including meetings, visits and technical tours. The every other year Conference on Railway Engineering (CORE) is a highlight. A number of awards are made annually to encourage recognition of meritorious activity in support of the rail industry. A particular RTSA attribute is that it engages in considerable well reasoned and structured lobbying in support of the rail industry with regular submissions and presentations to policy study groups and enquiries. Membership, in support of this activity alone, is very worthwhile. Consider joining RTSA now if you are not yet a member. If you are a member see if you can introduce a friend as a new member.

Remember - www.rtsa.com.au

150 YEARS IN THE COUNTRY

Celebrations are planned in Geelong and nearby on the weekend of 23rd and 24th of June to celebrate the 150th anniversary of the opening of what was Australia's first 'country' railway, which initially ran between Geelong and Newport, soon after diverted via the port at Williamstown and again not much later from Newport through to Melbourne at Batmans Hill (subsequently Spencer St and now Southern Cross). A variety of events are planned to celebrate this rather auspicious occasion in a modern way.

Anyone expecting or intending to be in the area around that time would be well advised to make a bit of extra time available and join in. Michael Menzies, at railexp@bigpond.com can provide information and details of the weekend program.

MURPHY'S LESSER KNOWN LAWS

- Light travels faster than sound. This is why some people appear bright until you hear them speak.
- He who laughs last, thinks slowest.
- Change is inevitable, except from a vending machine.
- Those who live by the sword get shot by those who don't.
- Nothing is foolproof to a sufficiently talented fool.
- The things that come to those who wait will be the things left by those who got there first.
- The shin bone is a device for finding furniture in a dark room.
- A fine is a tax for doing wrong. A tax is a fine for doing well.
- When you go into court, you are putting yourself into the hands of 12 people who weren't smart enough to get out of jury duty

Why do truckies get really excited around mid-November? Only one more sleep to Xmas of course!

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CONTRIBUTIONS TO THE SYDNEY NEWSLETTER

Part of the function of RTSA is to keep members in touch with what is going on in the industry and with each other and to that end we are only too happy to publish items of interest. Articles or editorial comment for Newsletter are very welcome. We have several hundred members locally some of whom have stories, events or developments of interest that could make an interesting item for Sydney Newsletter.

Contact details are –

The Editor, Max Michell, e-mail to samrom@bigpond.com, phone 02 9331 5662 or post to P.O.Box 279, Potts Point, NSW, 1335. (but just hold back between early May and mid June while I absent myself from my appointed place of duty)

For all other matters relating to RTSA Sydney Chapter contact Malcolm Cluett (Secretary) or Bill Laidlaw (Chairman) as above.

CPD CREDITS

Engineers Aust members who attend RTSA meetings and events will qualify for CPD credits as per the Engineers Australia criteria. Members are responsible for recording their own CPD for audit.

NOTICE TO MEMBERS RECEIVING RTSA NEWSLETTER BY EMAIL

If you should receive this Newsletter by post but would prefer to get it by e-mail (quicker and more reliable) then please let the Canberra know (address in the page header). E-mail saves time for you and costs for RTSA, which in the end can only mean better service to our members

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