

# NEWSLETTER No 7/2004



Railway Technical Society of Australasia  
SA Chapter  
Engineering House, Bagot Street  
NORTH ADELAIDE SA 5006

JULY 2004

**THURSDAY 5<sup>th</sup> AUGUST AT THE  
IE AUST PREMISES, BAGOT ST, NORTH  
ADELAIDE at 17:30.**

## **CORE2004 REVISITED PRESENTED BY MALCOLM OWENS OF ARTC**

The CORE2004 conference in Darwin in late June was a great success and in this writers opinion was the best so far. Whilst there were a goodly number of South Australians going to Darwin it was realized that there would be quite a number of members who were not able to be there. In addition even those who were in Darwin might not be able to get to all sessions of interest to them since there were three parallel streams running throughout the technical sessions. It was decided long before the Darwin event that the assembled presentations from people or organizations based in SA would make an interesting topic in any case. So here it is.

Malcolm Owens, GM Engineering and Infrastructure at ARTC and a dual presenter at CORE2004, has accepted the task of pulling together at least seven papers presented at the conference, and doing so within the relatively limited time available at this single chapter meeting. Topics that will be covered include

- RailBAM acoustic monitoring of bearings – initial operational performance results
- A holistic approach to route selection (for new or re-aligned railways) based on whole of life costs
- Benefits arising from curve easing – an initial exploration of the cost benefits.
- Freightmiser fuel saving on long haul trains – initial trial results.
- ARTC's rail infrastructure maintenance strategy – the successful contemporary model
- Integrate Rail – Why Would you Want to do That? – a look at rail integration into the wider supply chain picture.
- Infrastructure alliances as a part of achieving good maintenance outcomes.

There is something for everyone in this lot – civil, mechanical, operations and business to name the most obvious. It promises to be a fairly full program but one that is of unusual interest, and more than likely will have a fair degree of interaction as the evening wears on..

The usual finger repast will be provided from 17.30 prior to the meeting proper at around 18.00. We look forward to a most interesting evening.

## **FUTURE MEETINGS**

Although it is now into the last half of the year (or the first half of the New Year for those who have to treat with the tax man) we have an interesting series of meetings coming up before the annual holiday season. Subject to the usual caveats the program through to our last event scheduled for late November is

2<sup>nd</sup> September at Bagot St: a joint meeting with PWI hosted by RTSA at Bagot St, Nth Adelaide will have Keith Charlton and Daniel Martucci giving a presentation on concrete sleepers on the Trans Adelaide network.

7<sup>th</sup> October at Bagot St.: a presentation by Dean Phillips on TransAdelaide's experience in outsourcing railcar maintenance

4<sup>th</sup> November at Bagot St.: Subject to sufficient progress having been made we will hear about the new Port River rail bridge.

30<sup>th</sup> November at a Very Pleasant Location: the annual dinner with AGM attached.

## **LAST MEETING**

Our last meeting was in the week following CORE2004 and was part of an 'eminent speaker' tour of the country on the topic of the rollout of GSM-R communications on the German Railways. It may not have been the most electrifying title (at least for non comms people) but the presentation was first class.

The two key speakers not only made the topic very interesting but they also had their presentation technique extraordinarily well organized. The actual presentation will be on the RTSA web site ([www.rtsa.com.au](http://www.rtsa.com.au)) for those who missed it (or those who were there who might like to revisit it). An audience of around 30 were in attendance.

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## WHAT IS YOUR VIEW

A reader recently responded with the observation that the two column layout is hard to read on a typical computer screen. Ironically I was reading a past copy of the Newsletter at the time, so appreciated his view.

It would be reasonably easy to run the electronic version of the Newsletter in single column format and retain the double column format for the hardcopy recipients. However before rushing off to making any changes I would be interested in readers views (and ultimately the Committees views as well) – email me at [samrom@bigpond.com](mailto:samrom@bigpond.com) before the meeting on August 5<sup>th</sup> next.

## THE OBSERVERS SEAT

An interesting situation has arisen in Victoria that would be quite entertaining if it wasn't so serious. I refer of course to the simple act of selling Freight Australia to Pacific National; the entertaining bit is not the overt sale but rather the murk that seems to be lying beneath it.

In 1999 Rail America successfully bid \$163 million to acquire the V/Line freight operation and a long term lease of the Victorian non metropolitan track. The next highest offer was reported at the time to be around \$40 million lower than the RA winning bid. Initially the new organisation was branded Freight Victoria, but within a matter of months re-badged itself as Freight Australia. It lived up to its name and cheerfully extended its domain to Perth and the northern reaches of NSW making good use of the access provisions that applied to the tracks involved. It regularly reported profits from its undertaking (possibly excepting during the height of the last drought) and frequently pointed out how much better it was doing than the previous (government) administration. Despite the go ahead image of FA there were a few disturbing side shows going on such as FA's ongoing difficulty with the open access conditions of their track lease (they successfully kept all other prospective operators at bay for the five years they have been in charge) and the perpetual confrontations that seemed to get in the way of any (all?) government sponsored and funded infrastructure improvement projects.

I guess the old adage that 'if it ain't broke don't fix it' has some merit. By putting FA on the market RA has opened a whole can of worms in regard to the track, and from the information available in the public domain it would appear the FA may not come up entirely

smelling of roses when all is resolved. At this point I should declare that apart from acquired knowledge from my past history with V/Line the following is based on information that has been in the media as a result of the three-way slanging match now going on, with my interpretation overlaid on the events as I see it.

For a start, it is my understanding that the sale price of V/Line Freight was a lump sum and the (then) Kennett Government did not require (or receive) a separate offer for the above rail business and track lease. So any claims about the cost of the track lease must be internal to FA and/or Rail America and not of any significance for the current value of the sale to either PN (as potential buyer) or the Victorian Government. Secondly, the agreement included a contribution from government (in the form of access charges paid by the passenger operators) of around \$30 million per annum to maintain the passenger lines at the higher standard required for up to 130 km/h running. Despite claims of by FA of 50 years of neglect prior to 1999, V/Line had brought all but a very small amount of its residual network up to a standard capable of handling 3000 hp locos and at least 76 gross tonne wagons by the late 1980's – the only state other than WA to have achieved a single all embracing track standard on its entire network. This involved significant re-laying and improvement to formation and sleeper condition and, at least up until the time I left Victoria in 1993, was reflected in a good track structure and a comprehensive mechanised track maintenance regime that was able to hold the track at a steady state condition. There has been some suggestion that in the few years prior to the sale to FA the sleeper renewal rate had been allowed to fall below the level of sustainability. However from all accounts the same philosophy has been followed since the sale (possibly more so depending on who is talking) such that there is now a very significant accrued track maintenance backlog. Freight Australia claims to have spent \$130 million over the last five years on track maintenance (which it describes as capital investment), but seems to have overlooked the larger sum it apparently received from government as support for the passenger network. My simple accounting exercise would suggest that FA took in more in financial support than they actually spent on the overall track, passenger and freight lines combined. Maybe this is not the case but FA certainly seems to ignore the passenger payments in its arguments. In any case the accrual of any maintenance (relative to 1999 condition) should be an offset to any valuation of the lease (assuming it had an identifiable and valid valuation in the first place).

# NEWSLETTER No 7/2004



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Almost more mystifying is why Pacific National (wholly owned by Toll and Patrick) would want to take on what by now must be a substantial liability in terms of the track. If reports are anywhere near correct there must be well over \$100 million catch up work required just to restore the track to around its 1999 condition. PN, as was the case with FA, is well aware of the open access requirement attached to the lease so the risks of taking up the lease and its attendant liabilities are even more daunting. The PN owners are not risk averse, but equally they are not renowned for throwing money at losers. There is little doubt a premium has been placed on the valuation of FA because of its strategic value to PN, but this can hardly extend to the track. One can only conclude that PN are playing some elaborate game of bluff that in the end is intended to acquire the FA empire on the most favourable terms.

Whatever gain there has been in the above rail part of FA over the last five years has been at least partly offset by the decline in value of the below rail part. In simple terms (my accounting skills are simple) Rail America stands to collect around \$120 million in capital gain upon completion of the sale. This means that RA's five year investment in Victoria will have made a return of more than 100% in their books. At the same time the value of the State asset on lease to FA will have declined more than \$100 million in value. Eventually someone (not RA or FA presumably) is going to have to recover the track condition, or alternatively Victoria will have to simply accept that large chunks of its rail network have no future. Therein lies the conundrum for the government – a damned if I do and damned if I don't situation if ever there was one. One way or another the government is the only entity both financially competent and likely to be willing to restore the track, which of course means that it will be taxpayer's money in the end that will have to rescue the Victorian freight rail network. As such it seems only reasonable that the government should recover control of the track, and it would be more than surprising if PN long ago had not factored that into their due diligence of Freight Australia.

Barracking from the sidelines have been a number of so called experts who would like you place your financial trust in their wisdom. Utterances from these experts that they would be worried about the condition of the track if the state took back control of it suggests that they never learned how to spell 'rail' let alone have any expertise to impart to the world at large. At least I now know where NOT to place any accumulated wealth (I live in hope☺).

In the end there are a number of important projects in Victoria that need to be brought to a successful

conclusion if rail is to have a regional future there and if the government is to continue to have the political will to invest in rail. Until the FA saga is brought to a sensible conclusion there is little likelihood of that happening.

## CORE2004

The CORE2004 conference in Darwin was a great success with a range of excellent keynote, plenary and technical sessions, a most enjoyable series of evening welcome cocktails and dinners (including some really grand entertainment), an interesting technical tour that was unique in that it would not have been possible just twelve months earlier, and of course the 'tie free' lifestyle that is Darwin. The hard working lead organiser, Mark Carter, has now been involved in at least three CORE conferences (Adelaide, Wollongong and Darwin) and his accumulated wisdom and knowledge about this event is now such that he should be regarded as a compulsory acquisition by each successive CORE organising committee. From personal experience I can say that 'head' wisdom and knowledge is a vital ingredient of any serious enterprise and we (in SA) were lucky to have just that for the recently completed conference. Many thanks must go to Mark, Cheryl (the Darwin representative and cheery face at the front desk), Julie, Sonia and in fact all those who gave up their 'swanning around' in Darwin time to help in the preparation and running of what was a large and complex event. Well done everyone.

## LOSING SIGHT OF REALITY

NSW has a total of 26 different country train services, ranging from daily XPT's to once a week Explorers. These have been numbered in a four character system that identifies the region and train type along with a random two digit number. It does not require much schooling to be able to recognise the individual trains by number, or at least it didn't until now. Somebody with far too much time to spare has now come up with a further refinement of the numbering system so that the third digit (the first number character) is dependent on the country location of the service. Inevitably most, but not quite all, of the existing numbers (including the hallowed numbers 1, 2, 3 and 4 on both the Brisbane and Melbourne lines) have now been replaced with new numbers, no doubt causing considerable confusion in the first instance with no obvious gain to be had at any time. As an old compatriot once observed computers are capable of handling random numbers as easily as well ordered numbers, so it presumably wasn't to satisfy the computers that this change has been made. Since

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it will cause confusion where presumably there was none before it could not be to satisfy the humans. So why would such an action, wasteful of both electrons and trees, be made unless it was to keep a number of slumbering souls in a job? Interesting.

## 2004 RTSA RAILWAY ENGINEERING AWARDS 22 JUNE 2004 AT CORE2004 in DARWIN

Under the stars and looking out over the lawns of the Darwin MGM Grand Casino, where some 450 CORE2004 delegates, sponsors, exhibitors and other guests were gathered, was a fitting setting in which to hold the annual RTSA Railway Engineering Awards ceremony on Tuesday evening 22<sup>nd</sup> June. John Dring, the Chairman of the Awards Committee, facilitated the event at which the awardees in four different categories were announced and the particular presentations made.

The categories in question were the Railway Engineering Student Theses Award, the Young Railway Engineers Award, the Annual Individual Award and the Biennial Industry Award.



The Award Presenters (from left to right; Professor Philip Laird, Robert Schweiger, David Marchant, John Dring and Bruce McGowan)

## Railway Engineering Student Theses Award

The announcements with respect to the runner up and the joint winners of the "Student Theses Award" were made by Awards Committee member, Professor Philip Laird.

The joint winners were:

**Nick Stephens** of the University of Queensland with his Thesis entitled "A Relationship Analysis of the effects of Saturation and Compaction on the Top Misalignment of Rail Track"; and

**Savithri Shimada** from the University of Sydney with her Thesis entitled "A Study of High-Frequency Vibration Response of Resilient Rail Baseplates".

A runner up prize was also awarded to:

**Liam Walls** of the University of Queensland with his Thesis entitled "Test Rig Design for Simulation and Identification of Rail Corrugation".

As none of these recipients were in attendance at the Conference, arrangements have been made to make the actual presentations of the awards at local RTSA Chapter Meetings.

## Young Railway Engineers Award

Robert Schweiger, Chairman of the CORE 2004 Organising Committee and a member of the Awards Committee, made the presentation to the winner of the inaugural "Young Railway Engineer's Award" to **Jacob Latter**, an Area Engineer with the John Holland Railway Division at Rutherford in New South Wales.



The RTSA Young Railway Engineers Award presented to Jacob Latter (on right)

# NEWSLETTER No 7/2004



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## Individual Award

The Annual "Individual Award" was received by **Peter Mutton**, Associate Director of the Monash University Institute of Railway Technology, from David Marchant, the CEO of ARTC and a major sponsor of the Conference.



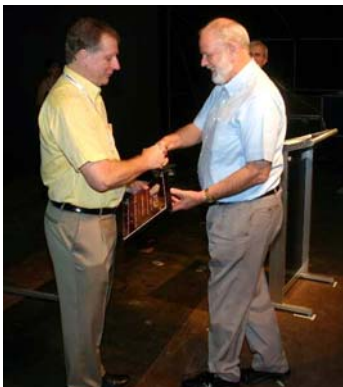
The RTSA Individual Award presented to Peter Mutton (on right)



The RTSA Industry Award Honourable Mention awarded to NRG Flinders and accepted by David Tasker (on left)

## Industry Award

Bruce McGowan, the CEO of FreightLink, another of the major sponsors of the Conference, presented the "Industry Award" to **David Swift of Fluor Australia Pty Ltd.** the Design & Construction of a New Railroad Project for BHP Billiton in the Pilbara, Western Australia. In addition an Honorable Mention in this category was awarded to **NRG Flinders** for their tie renewal project on the Leigh Creek to Port Augusta Rail Line. The award was accepted on behalf of NRG Flinders by **David Tasker**, GM of the John Holland Railway Division, who were the major contractor for the project.



The RTSA Industry Award presented to David Swift (on right) of Fluor Australia Pty Ltd.

## NEXT YEAR'S RTSA AWARDS (2005)

In 2005, the RTSA will offer three awards. They are; the Railway Engineering Student Thesis Award, the Young Railway Engineer's Award and the Annual Individual Award.

The Railway Engineering Student Thesis Award will be made to the author of an outstanding final year project on a railway engineering subject that has been completed by a student in his or her final year of an undergraduate engineering course at an Australian or New Zealand University.

The Young Railway Engineer's Award is for young professional engineers, technologists or associates in Australia & New Zealand.

The Annual Individual Award recognizes the outstanding achievement of an individual within the railway industry.

Further details, together with Nomination Forms can be found on the RTSA web site, [www.rtsa.com.au](http://www.rtsa.com.au) and applications will close on Friday 25<sup>th</sup> February 2005.

(thank you to John Dring for these interesting timely contributions)

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## NOTICE TO MEMBERS RECEIVING RTSA NEWSLETTER BY EMAIL

Members receiving this Newsletter by email should note that all Newsletters will be sent in a PDF format prepared using **Adobe Acrobat Version 6**. To ensure that the Newsletter is decoded correctly it is recommended that members update their copy of Adobe Acrobat Reader to Version 6.

Version 6 of Adobe Acrobat Reader may be downloaded free of charge from the internet at [www.adobe.com](http://www.adobe.com).

Alternatively, Adobe Acrobat Reader 6 is generally included on the CD ROM attached to most computer magazines.

## KEY RTSA CHAPTER COMMITTEE CONTACTS

Rob Schweiger	8238 3412	Chairman
George Erdos	8218 2209	Treasurer
Roger Wyatt	8344 6939	Secretary
Malcolm Menadue	8270 2873	N/L despatch
Max Michell	8390 3300	N/L Editor

Articles or editorial comment for Newsletter are very welcome. We have over 100 members locally some of whom will have stories, events or developments of interest that could be reported in 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.

Send copy to the Editor, Max Michell at [samrom@bigpond.com](mailto:samrom@bigpond.com) or fax to 08 8390 3772

Electronic despatch of Newsletter is undertaken by Malcolm Menadue – contact Malcolm on [mmenadue@ozemail.com.au](mailto:mmenadue@ozemail.com.au) if you have any problems receiving Newsletter electronically or in hard copy. Note that electronic subscribers will get their Newsletters and flyers as soon as the editorial stuff is done, while the hard copy mail will of course be some days slower.

For all other matters relating to RTSA SA Chapter contact Roger Wyatt (the Hon Secretary) at e-mail [januseng@chariot.net.au](mailto:januseng@chariot.net.au) or on phone 8344 6939

Roger will be away overseas until August, so please hold off until then. Urgent matters should be referred to George Erdos, Malcolm Menadue or Max Michell until Roger returns. Rob Schweiger will be away during August also enjoying a summer interlude in Europe (which brings the wicked thought that maybe next year, if we can get coordinated, we could have a committee meeting by the Seine or among the vineyards of Burgundy)