

# NEWSLETTER No 4/2004



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

**APRIL 2004**

## **NEXT MEETING**

**\*\*\* NOTE DIFFERENT DATE \*\*\***

**THURSDAY 29<sup>th</sup> APRIL AT BAGOT ST,  
NORTH ADELAIDE (Institution of  
Engineers) - at 17:30.**

## **THE EVOLUTION OF RAIL SAFETY**

Our own sectional Treasurer and well known senior engineer with TransAdelaide, George Erdos, will be giving us a presentation tonight (a week earlier than originally intended – note the new date) on the concept and development of rail safety.

Recent events in NSW, particularly the Glenbrook and more recent Waterfall crashes have highlighted the need for continual vigilance if rail safety is to be a realistic objective. The Waterfall crash in particular has highlighted how, given the wrong combination of circumstances, the latent failures within a rail network can result in a major disaster. As a result of the driver in that crash (presumably) suffering a disabling coronary attack, something that should have been apparent with any reasonably well run medical condition monitoring, it has now become evident that a quite substantial proportion of CityRail drivers are 'medically unfit' by contemporary transport safety standards. It is likely that it will be many months before CityRail is back on an even footing in regard to train crewing, by which time there will most likely be a residual lack of morale and enthusiasm for the job to overcome. The price of lack of vigilance is not just the immediate disaster but the after effects that come in its wake. All of which is to set the scene – rail safety has (unfortunately) been rocketed into prominence for the worst of reasons.

George will start by touching briefly on the history of railway safety which will include showing of the video "Red for Danger". He will talk about rail safety in SA in the context of the earlier part of his presentation, then discuss where we are currently and where we are likely to go from here.

The meeting starts at 17.30 with the usual nibbles and refreshments, followed by the presentation at around 18.00.

## **FUTURE MEETINGS**

3<sup>rd</sup> June at North Terrace: Joint meeting hosted by PWI at their normal North Terrace venue on the topic of the 'AK' track condition monitoring train.

20<sup>th</sup> to 23<sup>rd</sup> June: CORE2004 in Darwin – a not to be missed event. Registration brochures, for anyone who missed out (or needs additional copies) contact the CORE2004 Secretariat at [techrev@core2004.on.net](mailto:techrev@core2004.on.net) or by writing to GRMS Media at PO Box 595, Prospect East, SA, 5082 without delay.

An update item is included later in this newsletter.

30<sup>th</sup> June at Bagot Street: Eminent speaker, Hans Bier, Project Director of GSM-R Communications in Germany will talk about communications upgrade for the DB (German Railways).

5<sup>th</sup> August at Bagot St.: Malcolm Owens of ARTC will present on CORE2004 revisited – a précised version of papers presented by South Australians at CORE2004.

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.

This program is, of course always subject to the vagaries of life and may therefore change as the year moves on. Newsletters (or at the very least a flyer) is sent out before each meeting with confirmed details of the up coming meeting and up to date version of the future program.

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## **LAST MEETING**

In April we had the pleasure of Col Rees, co-owner of CRT Transport Group, giving us a presentation on the CargoSprinter train. Col is one of those infectiously enthusiastic people and his presentation was full of the joy of working in transport (and particularly with rail).

Col started by giving a backgrounder on CRT and it's niche business. Col commented that he became frustrated by the lack of innovation in rail and started searching for rail solutions that might suit his business. He investigated Road Railer (Trailerail as run by PN), Iron Highway, 3R eco-rail and CargoSprinter. The latter attracted attention as being suited (with suitable modification to 'ruggedise' the prototype unit design). It is a pair of freight carrying power units, each powered by a pair of Volvo truck engines, bracketing a number of container wagons. The whole train is electrically plumbed so that all functions can be controlled from a single cab and in fact up to six 'trains' can be run in multiple (that is 24 engines all under one command). The existing 360 hp engines are likely to be superseded by 450 hp engines in the near future which will enhance the capability of the train. The train uses low tare wagons (they don't have to be able to withstand normal heavyweight train stresses) with low deck height to achieve the best combination of load and cubic. They are greenhouse friendly and part of this is their very low noise emissions.

Col highlighted the key lessons gained from his experience with the prototype – get involved, work in alliance with the manufacturers, listen to the 'troops', work with the regulators and keep the unions involved.

CargoSprinter is being used on Port shuttles between CRT at Altona in western Melbourne and the Port of Melbourne. This port is growing at 8% p.a. and the need for satellite containers terminals away from the immediate waterfront is becoming increasingly apparent (as most other cities are also finding out). Melbourne is forecast to grow from 1.6 million TEU in 2003 to 5.4 million in 2030. Even if the government requirement for 30% of port traffic to be on rail is met there will still be a growth in the number of truck movements serving the port (and annoying the roadside neighbours).

Col highlighted a number of important advantages that satellite terminals can deliver, particularly when rail served, but he also listed a number of institutional difficulties. Rail access through the 'grandfather' rights of older established trains, and the bias of access fees to longer trains mitigates against rail on short haul, train control systems are not oriented to efficient utilisation of

fast trains, single driver operation is required, insurance rates and cover are out of proportion to the operation and the use of gate control tactics by the port (double dipping on the container handling). A key comment is that customers will NOT pay for environmental benefits of anything – if environmental outcomes are to be achieved then governments must get 'on board', otherwise their policy objectives will be so much hot air.

During question time after the presentation Col produced something of a surprise by indicating that the four prototype Iron Highway train sets (originally run in Canada) are now in Australia for eventual modification and operation here. Which makes CRT the proud owner of two of the more interesting and innovative trains around today. All in all a very enthusiastic and interesting presentation.

## **ENTHUSIASM – PART TWO**

As indicated in the above report Col Rees is a person of great enthusiasm in whatever he does. The following story (edited) may give some insight into what makes Col tick (and makes CRT a successful company).

"This is a great CRT story; Don asked me about a young boy still at school who had rung and had asked if he could visit CRT as he is very interested in freight on rail and he had been following the progress of the Cargosprinter. Of course I agreed.

During Don's discussion with Scott he asked him would he like to not only come down to CRT but would he like to ride the Cargosprinter to the wharf. Well he didn't have to be asked twice let me tell you. As we were to find out later Scott had done extensive research on the Cargosprinter and had a very good understanding of the technology.

His dad brought him down, he rode the train, he sat with Brian who explained all the engineering detail, he took his photos of Cargosprinter during the trip, Don brought him round to meet with me, and his dad came and picked him up late in the day. This was a big day for this young boy.

As you will see from Scott's web page, not only did he go straight home to tell of his adventure of the day, but you can buy his photos of CS of his web site. Now there's a young boy going places.

I was just so rapt when I opened Don's email this morning ..... It's the get up and go, the dedication that this young boy shows that is a reflection of what I see is the heartbeat of CRT, it's the reason our customers want to engage CRT to do business, and it's the reason

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corporate robber barons will live a lonely life. .... CRT is first and foremost about people - the more we communicate with each other, the more we share the knowledge, the more we help each other and the more we are kind to each other the better this journey we are all on together will be. Young people like Scott is where it all starts."

If only the corporate world were more attuned to this sort of attitude!!!!

## **THE DRIVERS SEAT**

Regardless of our own perceptions the fact is that nowadays there is (and will be for some time) a neurotic community concern about terrorism, fuelled in part by political imperatives that have little if anything to do with that issue. In such a climate, where breakdown and normal failures can be confused with terrorism, there is an obvious need for contingency plans to cope with untoward events. It is of no use at all to start learning how to deal with an 'event' after the event has arrived. Quite inadvertently I was involved in two 'events' recently, one in Sydney and one in Brisbane, that had very different outcomes which rather highlight this issue.

One Friday afternoon I arrived at Central in Sydney (both events happened at a 'Central') to change to an airport train with a small but adequate margin for error. A mumbled announcement advised that a 'police event' in the airport tunnel had stopped train to that location and intending passengers should go to the <mumble> on platform 10. The <mumble> turned out to be the Station Manager, who was quite incapable of managing the half a train load of rather perturbed prospective flyers that had descended on his doorstep. After giving a few passengers a refund and a taxi voucher (or something along those lines) the security man suggested that the whole large group of troubled souls should head to the roadway past platform 1 where taxis would be found (on a Friday afternoon in Sydney - in your dreams). The staff that were at that location initially wanted to send us back to the Station Manager, but a communal outbreak of bolshie-ness quickly put paid to that. Someone asked about a refund, to which some wit responded by suggesting that it be claimed as a donation to the welfare organisation upon whose soil we now stood! Taxis intermittently arrived, but almost all had been pre-booked (by batphone) by one of the unfortunates who in some cases went of in lofty isolation surrounded by empty taxi seats. Virgin undid two years of good image building by refusing to deal with this little Vegemite on the phone unless he could produce a booking number - but he didn't make the

booking so didn't have the requisite. In the fullness of time, and only when asked, the CityRail staff indicated that the trains were again running (or about to start running as it turned out) and the remaining now rather cranky passengers should return to platform 23, from whence they came some 30 minutes earlier. A train for the airport line did turn up some time later and a large number of now totally stressed flyers joined it with some relief - including quite a few overseas travellers who stood to lose much more than the local punters if they missed their flight. I arrived just in time to see the rear end of my plane departing, but as a result of a bit of skulduggery, was already booked on the next flight anyway. The 'police event' looks as if it may have been a practice (it was not real??? on a Friday afternoon), which of course was not CityRail's doing, but their complete inability to handle what should have been anticipated was more than distressing - it just highlighted how misused the word 'Manager' is and how far the much maligned CityRail has to go to get back somewhere near the place it occupied during the Olympics in 2000.

Event number two occurred in Brisbane barely a week later. Once again it started at Central, but all similarity ended there. A clear and lucid announcement advised of a train disruption at Dutton Park (on the through route between Gold Coast and the Airport - all trains run through between these places at that time of day). Suburban passengers were given clear direction as to what to do while Gold Coast passengers were advised they would go via Corinda (an alternate route) and Airport passengers could expect their train to be around six minutes late. And so it came to pass with no more fuss than that - a tribute to a centralised control centre and more than adequate training in how to deal with disruptions. The contrast could not have been greater.

## **MELBOURNE'S SUBURBAN TRAIN COMPANY**

The two parts of Melbourne's suburban railway network, Connex and M-Train, have been combined into a single operation under the Connex banner. As most will remember National Express walked away from their contract (the erstwhile Bayside cum M-Train company) late in 2002, leaving Connex as the sole survivor of the much vaunted Kennett experiment in non competitive competition (the two train companies did not serve the same parts of Melbourne so could hardly compete except on the more esoteric aspects of KPI's). At the time the suburban network was carved up there were two main train types - the 1970's vintage non air-conditioned Hitachi's and the 1980's air-conditioned

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Comeng trains. Each of the privatised train companies were allocated a share of each type and were contracted to acquire a number of new trains to basically replace the Hitachi's as well as cover somewhat pie eyed growth forecasts. Both companies did as they were required to do which of course has resulted in two new and incompatible types of train being introduced to the network. At the same time both companies engaged in makeovers of the Comeng trains, with interior and exterior cosmetic changes plus some internal information systems to better inform travellers of their whereabouts and destination. You guessed it, the two fleets of Comeng trains are now incompatible with each other. So the bold experiment in competitive suburban railways has (for the time being) trebled the number of train types in the interests of proving that relying on political wisdom to solve problems will simply re-invent another break of gauge.

There are of course a whole heap of other 'two company' problems that will no doubt come to light as Connex wrestle with their inheritance. It will be interesting to watch what is revealed as time goes by on this one.

## **AURAL GRAFITTI**

Sydney has taken to filling in time between trains with what might be called general purpose messages over the 'tannoy' to the waiting punters – such as 'do not leave your bags unattended' and 'stand behind the yellow line at all times'. However around 0930 recently I was intrigued to be told to 'mind the gap when boarding or alighting from the train' when not one of the eight 'electric' platforms at Central had a train in attendance. Unless they meant the 7 metre gap to the next platform?

## **CORE2004**

The number registered for this conference is approaching 300 so anyone out there who has yet to register should do so as soon as possible

CORE2004 will see a total of 54 technical papers presented plus an in depth plenary session on the planning and construction of the Alice to Darwin railway.

For 2004, both delegate and exhibitor fees have been kept at the same levels as for CORE2002, which not only is recognition of the fact that delegate travel costs may be a little higher than usual to Darwin, but also represents excellent value for money!

Members should regularly check the web site for more details, see [www.core2004.on.net](http://www.core2004.on.net)

It has recently been updated with details of the Technical Tour and the Gala Dinner and a downloadable registration form has been added.

The Gala Dinner will be held on the Lawns of the MGM Grand & Casino, Darwin on Tuesday 22 June and will include the RTSA Engineering Awards and Guest Speaker, the Hon Tim Fischer. Entertainment will be provided by Pot Pourri without doubt Australia's leading music theatre ensemble, presenting a unique and innovative blend of opera, classical music, music theatre, cabaret and comedy

A full day accompanied Technical Tour has been arranged for Wednesday 23 June including inspection of the East Arm Port, Elizabeth River Bridge, Berrima yards and facilities, civil and signalling works south to Adelaide River.

## **SAFETY AS SHE IS DONE**

A correspondent writes "I caught train to the city recently and read a notice that says petrol driven machines are not allowed on the train.

My thoughts went back twenty years or more.

A motor cyclist was tired of riding so at Benalla decided to take a train to Sydney and send his bike along. The staff advised him that motor bikes had to be drained of petrol. They helped him and filled a plastic cordial bottle. When they loaded the bike into the van they put the bottle of petrol in with it. After all when he got to Sydney he would need to get petrol to ride home!"

## **HOW THEY ARE GOING**

Both Freight Australia and ARG have been recording significant increases in activity, mainly as a result of the good harvest year compared to drought conditions last year. At the same time they have both recorded some growth in non agricultural activity although not on the same scale.

Freight Australia recorded 19556 wagon loads for March 2004 as compared to 13234 a year earlier. 'Agriculture and Farm' (predominantly grain) recorded a jump to 7332 wagon loads in 2004 compared to a 2003 total of 2974. Other traffics (dominated by inter-modal which actually recorded more wagon loads than grain) showed up with 12224 wagon loads this March compared to 10260 last March.

Year to Date results (from 1/1/04) show 54763 wagon loads in 2004 compared to 40148 in 2003.

These figures highlight how FA has been quite successful in diversifying away from grain as its

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mainstay activity to a portfolio that has something of the order of two thirds of its business in other products – inter-modal, minerals, forest products, and paper in the main.

ARG have a similar story, although their non grain business is dominated by extractive products. March wagon loads were 84416 this year compared to 67040 in 2003, while first quarter wagon loads are 247,595 compared to 192,893. As with FA there has been growth in non grain activity, in this case helped by the Darwin hook and pull and the 2 million tonne plus Manildra contract in NSW. Grain for the first quarter 2004 was 66,563 compared to 27,812 in 2003, while all other traffic amounted to 181,032 in 2004 compared to 165,081 in 2003. Of note is the iron ore haul from Koolyanobbing to Esperance which is now moving considerably more ore than was hauled to Kwinana for BHP (and was used to largely justify the standard gauge west of Kalgoorlie) in 1970.

## **VICTORIAN GAUGE STANDARDISATION**

RTSA has put out a media release which should be of interest to members: -

The Railway Technical Society of Australasia (RTSA) has called on the Victorian Government to ensure that any new track ownership arrangements associated with the sale of Freight Australia to Pacific National will be accompanied by a programme of track upgrading, selected gauge standardisation and the maintenance of an open access regime.

RTSA spokesperson, Dr Philip Laird said, "We would support the Victorian Government taking back its rail track and committing funds to deferred maintenance and major upgrading of that track. If we are to have an open access, then it needs to be administered by an independent body dedicated to infrastructure development and transparent dealing with those wishing access to the rail network."

Dr Laird said that the RTSA would conditionally support the Victorian track subsequently being leased to the Australian Rail Track Corporation, which already holds a lease over the Victorian standard gauge interstate track.

The Victorian Government has previously highlighted the problems experienced with the long term leasing of rail infrastructure and how this has imposed limitations on its own rail reforms.

A major concern for the RTSA resulting from the proposed Freight Australia sale is the long-term future of regional grain lines in Victoria. The lack of investment in the export-orientated grain lines has led to numerous speed and weight restrictions and a drop in the efficiency of the grain industry logistics chain. This is despite the good work previously undertaken by the Victoria Government investing in gauge standardisation of the grain lines into Portland during the mid-1990s.

A significant effect of any closure of country grain lines would be a transfer of cost from the State government to Local Government in the form of increased construction and maintenance costs for rural arterial and local roads.

RTSA has written to Transport Minister, Peter Batchelor requesting a full study of the grain transport and logistics chain to determine the most suitable network that would take full account of both future financial and economic costs, including road costs and all externalities.

According to Dr Laird, "This would allow Governments to make informed decisions, rather than allowing things to take their present course on the basis of narrow commercial interests. We are now awaiting Mr Batchelor's response."

"Gauge standardisation of the Victoria broad gauge network appears to have been abandoned and many opportunities have been missed by both Freight Australia and the Victorian Government during the last five years. This includes the failure to use gauge convertible sleepers as part of the specification for the Regional Fast Rail project.

"If Victoria is to achieve its stated ambition to be the freight transport and logistics centre of Australia, then it is essential that selected broad gauge freight lines be upgraded and converted to standard gauge as soon as possible," said Dr Laird.

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## **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 must 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