

NEW SOUTH WALES NEWSLETTER



ENGINEERS
AUSTRALIA

RTSA

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

JANUARY 2009

NSW CHAPTER MEETING

Wednesday 4th FEBRUARY

11.30 for 12.00 in the

CENTRAL STATION - CONCOURSE MEETING ROOM

(next to Lost Property, opposite platform 2)

RESEARCH AND TECHNOLOGY: THE KEY TO UNLEASHING RAIL



AC traction, ECP brakes, concrete sleepers, head hardened rail, LED signal lights, 30 tonne axle loads, fuel efficient engines.

DAVID GEORGE, CEO of the CRC for Rail Innovation, will give us a presentation outlining what the CRC is, what it is doing and what it aims to achieve as a result of its work. The CRC for Rail Innovation has five main study streams – Economic, Social and Environment / Operations and Safety / Engineering and Safety / Education and Training / Commercialisation and Utilisation. This Rail CRC has six universities (3 in Qld and one each in NSW, Vic and SA) and a number of industry participants including RailCorp and ARTC. As with all CRC's it is supported by the Commonwealth Government.

Prior to David taking up the CRC CEO role in 2007 he worked extensively with British Rail (when such a thing existed!), QR and ONTRACK (New Zealand), providing him with a wealth of varied and valuable rail experience.

The usual light lunch and refreshments will be available prior to the meeting proper.

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PROPOSED STORE STUDY TOUR TO ASIA: SEPTEMBER 2009

The STORE is developing nicely with Candice Ng making a lot of headway with a very interesting range of international contacts. As has been previously advised the tour will take in **Singapore, Kuala Lumpur, Beijing, Shanghai and Hong Kong** and will focus on Metro's. Further details including a call for expressions of interest / bookings will be in the next few months, once the itinerary is sufficiently robust and definite dates set with our travel agent.

Keep an eye on the RTSA web site (www.rtsa.com.au) for progress on tour planning, or email MetroTour@rtsa.com.au if you have any queries, issues or suggestions.

GRAFTON CONVENTION – 12th to 14th JUNE 2009

IE Newcastle Division, in conjunction with RTSA and IE National Committee on Transport is holding a Convention in Grafton from Friday 12th June to Sunday 14th June this year. The topic is **Transport and Communication: Australia's Backbone – Past, Present and Future** and is in Grafton as part of the 150th anniversary of the founding of that city as well as the 75th anniversary of opening of the double deck rail and road bridge which completed the standard gauge rail link between Sydney and Brisbane.

A number of keynote speakers have been invited including David Marchant, CEO of ARTC and Wal King, head sharang of Leighton Holdings both of whom are natives of Grafton.

Conference streams will include

- The past – our transport achievements
- Our communications heritage
- Transport resources and infrastructure
- Transport and communications in the future
- Engineering challenges
- Future directions and challenges

Coen Stoltz is RTSA's coordinator for this event. Coen can be contacted on Coen.Stoltz@ttgtt.com.au, but it would be wise to look at the IE Newcastle web site (www.newcastle.engineersaustralia.org.au) first to get more detail on the Convention before contacting Coen.

It is anticipated that more details including how to register, will be in next months Newsletter.

If any RTSA member feels they might be able to contribute a paper to the Convention then please get in touch with Coen immediately. There is a need for more rail related papers if the Convention is to be balanced, particularly since the Clarence River bridge, the engineering centre piece of the Convention, is a major rail asset

POINT OF VIEW: Max Michell

Back in November 2008 I wrote how railways here abandoned quite a significant volume of rail traffic in the last half of the 20th century. Some traffic went when it was realised that it was an unsustainable financial drain on the railway, but added to that was a rather myopic zeal that threw out the baby with the bathwater. Inter-modal is good, so out went the majority of wagonload traffic. Shunting is bad so out went anything and

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everything that had any connection with shunters and shunting. Effectively the main line railways of this country converted in a fairly short time from a variety of traffic in relatively numerous trains to fewer (but larger) trains that were mostly made up of inter-modal (container) traffic. The big bulk traffics, coal, grain ores and a few other strays survived as block trains running point to point, but most of these did not involve hauls between the major population centres. That was left to the inter-modal business.

Over the last few decades inter-capital rail traffic (which is closely aligned to the rail inter-modal traffic) has declined on all but the Perth corridor from a modest market share (30-50%) to negligible volumes (10%), which suggests that in among all the other issues inter-modal is not the mechanism to save rail in the retail and consumer freight business.

There are many issues related to inter-modal, particularly on the east coast routes, and market share loss. Pricing is one – rail line haul on large trains (up to 1500 metres long) is relatively low cost, far lower than road, but when the pickup and delivery (PUD) costs are added the price virtually doubles. End on PUD by road costs as much as the rail line haul? Is there not some way that the rail line haul could be coupled to something that is less costly for that last little bit at each end which at the same time would strengthen rails position? Somewhere in the terminal and delivery process there are gross cost 'penalties' which are very much to rail's detriment, but have we ever seriously tried to work our way out of these?

Which brings us to another issue with inter-modal – customers who use inter-modal 'learn' how to use road trucks but have no idea about using (or dealing) with rail. We are effectively setting up all our customers to be road users, rather than providing them with a choice from source. The fact that the truck at the loading dock carries a container is purely incidental to the sender – a non inter-modal truck would look and be just the same to them. So now we have our customers trained to deal entirely with road, using road services that more or less double the cost of our product which surely has to be a recipe for failure. All the key decision making issues (as far as the customers are concerned) are virtually out of our hands.

Rail of course has taken this another stage further. The love affair with Forwarding Agents, back in the 1960's and subsequently, detached the rail systems from their real customers – rail became the third person in a two party arrangement. Our visibility to the major originators and receivers of freight was eroded to the point where rail was essentially irrelevant to most freight customers. Even where Forwarders were essentially set up to make use of rail for line haul rather than being a large road operator (e.g. FCL, SCT) the invisibility of rail (and its poor service record) eventually drove these operators into acquiring line haul road capability.

Allied to the passion for all things inter-modal was the 'long trains are better' belief. Long trains, or rather trains that have increased revenue freight aboard, are indeed good, but only in the right context. In the case of inter-modal the extension of train lengths from around 600 metres (maybe 80 TEU at best) to 1500 metres (over 200 TEU) in the mid 1990's virtually halved the frequency of trains between east coast capitals. In most cases adjoining capitals were reduced to a single daily inter-modal train with 24 hour gaps between successive departures which had only 14-20 hours transit time to the destination. From a customer's point of view (ignoring a number of other dargs in the system) the real transit time was between 14 and 44 hours for a journey that in most cases could be done by road overnight. With shorter trains there potentially was greater choice in departures and therefore a reduction in excessive wait times prior to the next inter-modal departure, but the line haul cost would then be higher – a classic trade off between service and price which the railways never really came to grips with.

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A major impediment to efficient inter-modal rail operations that are competitive with road is the time taken at terminals to interchange between PUD road trucks and the trains. Based on the typical terminal operation in most capital cities a 1500 metre train will take something like 3 to 4 hours to fully load or unload – which is another blocker to road competitive transit times. Not only is the load and unload time excessive but the interface between rail and individual road trucks is quite unpredictable, leading to considerable truck waiting time – a major factor in the high PUD costs. In effect the efficiency of the rail line haul is being optimised by adoption of gross inefficiency in other parts of the supply chain, which is hardly a recipe for success on the part of rail.

Inter-modal is not the devil in the system – it is just that, in typical rail fashion, it has been used as the ‘one size fits all’ answer where such an approach is quite inappropriate. Intermodal works well on long haul, where there is break of gauge or where the customer is well away from any rail track, but it is not always useful where these factors are absent. Abandonment of wagon load capacity has reduced the main line freight task in an industry where high volumes are required to support the high cost of track – a cost that is substantially indifferent to volume and is therefore sensitive to changes in rail volume. In many ways the obsession with inter-modal over the last four decades has contributed to changes in the demographics of industry that would be hard to rectify – industrial estates with no rail connections (not even close to rail in many cases) with plants designed only for road access with an obsession with ‘just in time’ that is another of the ‘one size fits all’ attitudes that is less important than it pretends to be.

Abandonment of wagon load traffic has seen the end of virtually all the regional freight originating on main lines so that between Melbourne and Sydney there are now only about five locations that generate any rail traffic at all (other than grain and coal) – and these are mostly train load traffics that were outside the ‘wagon load is bad’ remit. Between Newcastle and Brisbane the same situation applies – apart from coal and ballast there are only about five locations that deal in wagonload traffic and all but one are basically single commodity sidings. In nearly 2000 km of main line through the more populous parts of regional Australia we can hardly get to double figures in the number of places that now are able to do business with rail. A sad situation indeed.

It may be too late to recover the situation, but even if not it will take years if not decades to change the habits of a whole generation of companies and freight dispatchers back to a viable relationship with rail. Maybe a starting point would be to reverse our attitude to one of ‘how can we adapt ourselves so that we become an essential part of the supply chain’. Wagonload by definition is a complete service since it (should) provide transport between one private siding to another, cutting out all the problems of terminal handling and PUD that bedevil the current inter-modal operations. Wagonload may not be everyone’s cup of tea but it should be an integral part of a viable rail freight portfolio.

Henry Posner III, Chairman of RDC (regional USA railroad) with experience in Estonia, Africa and South America as well as USA is quoted as saying “Wagonload is the canary in the coalmine - if it goes you have a sick business. But wagonload (in Europe, unlike America) is still considered a liability. If you convert customers from wagonload to inter-modal ... you are teaching them how to use lorries, and if you are successful another open access operator will try to take the business off you” Henry’s comments are directed to Europe but look to be entirely appropriate for Australia.

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LETTERS TO THE EDITOR

Letters to the editor are very welcome. In general letters should be relatively concise (no more than half a page) and should relate to either past material in the Newsletter, events or activities of interest, or reminiscences or future watching of the rail industry as a whole. If in doubt write anyway – the editor is quite pleasant to deal with after that first cup of coffee in the morning.

Of letters there are none!! If you write a letter and it is published you will receive the readers acclaim and ovation forever (to paraphrase the Iron Chef between large bites of capsicum!).

MEETINGS

The next meeting will be at our usual Central Station venue on the first Wednesday of February (4/2). Details are provided in the usual front page flyer in this Newsletter.

Future meetings are listed in the table toward the back of this Newsletter. Meetings are normally on the 1st Wednesday of the month at 11.30 for 12.00 in the large meeting room off the main concourse of Sydney Central (Steam) Station. The venue can be found in the North West corner of the main concourse opposite platform 2, next to the Lost Property Office. For those who want to keep up to date with their books and magazines the ARHS Bookshop is only a few metres east of the meeting venue – usually quite a few of our attendees can be found in the bookshop after our meetings!

TELL US WHAT YOU WANT (OR IS EVERYTHING PERFECT?)

There are a multitude of activities and developments happening within our industry, ranging from the high level (policy and the like) through major construction and acquisition to relatively minor matters that often go completely unrecognised and unreported are all part of our industry and in most cases are only known in detail by relatively few of us.

We are always on the lookout for interesting and varied topics for meetings. Basil does a great job in getting an interesting and varied program up, but he would welcome any, all or more bright ideas from members. So if you have a pet topic, or are overcome with curiosity about something of interest in the rail domain, then contact Basil at basil.hancock@railcorp.nsw.gov.au and let him know.

It may be that there are activities (such as visits, 'out of town' locations for meetings, social gatherings or whatever) that we could do additionally or instead of the existing range of goodies provided by our Chapter of RTSA. Let us know and we can then consider what and how we might be able to improve the things that we do for members. Contact in this instance should be to Andrew Honan in the first instance – details of how to let Andrew know are on the back page.

SNIPPETS FROM UK NEWSPAPERS:

1) Commenting on a complaint from a Mr Arthur Purdey about a large gas bill, a spokesman for North West Gas said, "We agree it was rather high for the time of year. It's possible Mr Purdey has been charged for the gas used up during the explosion that destroyed his house." (The Daily Telegraph)

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2) Irish police are being handicapped in a search for a stolen van because they cannot issue a description. It's a Special Branch vehicle and they don't want the public to know what it looks like. (The Guardian)

3) A young girl who was blown out to sea on a set of inflatable teeth was rescued by a man on an inflatable lobster. A coast guard spokesman commented, "This sort of thing is all too common". (The Times)

4) At the height of the gale, the harbourmaster radioed a coastguard and asked him to estimate the wind speed. He replied he was sorry, but he didn't have a gauge. However, if it was any help, the wind had just blown his Land Rover off the cliff. (Aberdeen Evening Express)

5) Mrs Irene Graham of Thorpe Avenue, Boscombe, delighted the audience with her reminiscence of the German prisoner of war who was sent each week to do her garden. He was repatriated at the end of 1945, she recalled. "He'd always seemed a nice friendly chap, but when the crocuses came up in the middle of our lawn in February 1946, they spelt out 'Heil Hitler' ". (Bournemouth Evening Echo)

COMPUTER versus THE CAR

For all of us who feel only the deepest love and affection for the way computers have enhanced our lives, read on. At a recent computer expo, Bill Gates reportedly compared the computer industry with the auto industry and stated "If GM had developed technology like Microsoft, we would all be driving \$25.00 cars that got 1000 miles to the gallon".

In response to Bill's comments, General Motors issued a press release stating: If GM had developed technology like Microsoft, we would all be driving cars with the following characteristics:

- For no reason whatsoever, your car would crash twice per day.
- Every time they repainted the lines in the road, you would have to buy a new car.
- Occasionally your car would die on the freeway for no reason. You would have to pull over to the side of the road, close all of the windows, shut off the car, restart it and reopen the windows before you could continue. For some reason you would simply accept this.
- Occasionally, executing a manoeuvre such as a left turn would cause your car to shut down and refuse to start, in which case you would have to reinstall the engine.
- Macintosh would make a car that was powered by the sun, was reliable, five times as fast and twice as easy to drive, but would only run on five per cent of the roads.
- The oil, water temperature and alternator warning lights would all be replaced by a single "This car has performed an illegal operation" warning light.
- The airbag system would ask "Are you sure?" before deploying.
- Occasionally, for no reason whatsoever, your car would lock you out and refuse to let you in until you simultaneously lifted the door handle, turned the key and grabbed hold of the radio antenna.
- Every time a new car was introduced car buyers would have to learn how to drive all over again because none of the controls would operate in the same manner as the old car.
- You'd have to press the "Start" button to turn the engine off.

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COMING NSW MEETINGS: (black indicates confirmed, red indicates tentative)

DATE	SPEAKER	TOPIC	LOCATION	TIME
Wednesday 4 February 2009	David George Chief Executive, CRC for Rail Innovation	Rail CRC Program	Central Station Concourse Meeting Room	11.30 for 12.00
Wednesday 4 March 2009	Peter Moore Executive Director, UITP Australia	Presentation on the UITP	Central Station Concourse Meeting Room	11.30 for 12.00
Wednesday 1 April 2009	TO BE CONFIRMED	TO BE CONFIRMED	Central Station Concourse Meeting Room	11.30 for 12.00
Wednesday 6 May 2009	TO BE CONFIRMED	TO BE CONFIRMED	Central Station Concourse Meeting Room	11.30 for 12.00
Wednesday 3 June 2009	Ivan Waterfield Executive Manager, Cardiff Operations, Downer EDI Rail	RailCorp PPP A-Trains	Central Station Concourse Meeting Room	11.30 for 12.00

There are some very interesting topics in the pipeline and they will be listed in the table of coming meetings once speakers have been confirmed. Of course if you have something you would dearly like to see or hear about (or share with members) then by all means contact Basil Hancock and let him know.

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Andrew Mackay	Treasurer		
Tomas Magyla	Committee	Coen Stoltz	Committee
John Watsford	Committee	Paul Harris	Committee
Chris Venn-Brown	Committee	Lucie Mitchell	Committee
Malcolm Cluett	Committee	Katharina Gerstmann	Committee
Candice Ng	Committee		

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, letters 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 our NSW 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.

For all other matters relating to RTSA Sydney Chapter contact Andrew Honan (Chair) or Bill Laidlaw (Secretary) 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 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. There are occasions when email members are able to be advised of events or changes at very short notice which cannot get to mail members in time to be of any use.

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