

SYDNEY NEWSLETTER



ENGINEERS
AUSTRALIA

RTSA

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

JULY 2006

NEXT RTSA SYDNEY CHAPTER MEETING

Thursday 24th AUGUST

THIS WILL BE A JOINT MEETING WITH PWI (HOST) and IRSE. IT WILL BE HELD AT THE MASONIC CENTRE – CORNER OF GOULBURN AND CASTLEREAGH STS CITY. STARTING AT 17.00 sharp

Presentation by Alan Logan, Sales and Marketing Manager of Plasser Australia.

WORLD'S LARGEST PERWAY EQUIPMENT EXHIBITION – AN OVERVIEW

Once every three years the Association of German Railway Engineers (VDEI) organises an International Exhibition of Permanent-Way Technology (iaf). The 24th exhibition was recently held in Muenster, Germany, following on from a tradition of highly successful events.

More than 160 exhibitors occupied large areas in both indoor and outdoor displays – indoor space of over 10,000 sq. metres and outdoor space of over 8,000 sq. metres on 3 km of track. The world's leading manufacturers presented machines for track renewal, tamping machines for plain track and switches, machines grinding rails and cleaning ballast as well as cranes for installing points and building bridges, inspection vehicles, rail/road vehicles and track-mounted welding machines.

Allan Logan was one of a large contingent of Australian railway industry visitors to the exhibition and will provide members with a broad overview of some of the more interesting items of equipment and new developments in the field of permanent way maintenance and construction.

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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LAST MEETING

CITYRAIL TIMETABLE PLANNING

Dick Day, G.M. Timetable Strategy and Development, RailCorp

Dick introduced his topic with some delightful quotes (entirely worthy of the afternoon MX handout!)

- 'I didn't think they did any.'
- 'Who is responsible - they should be sacked.'
- 'Why are there less trains and slower than (fill in year of choice)?'
- 'My train is still overcrowded in the peak.'
- 'You've made the connections awful and they didn't hold the train.'

In CityRail, our 'supply chain' delivers customers to and from their destinations. CityRail has 306 stations which are serviced by around 1500 rail carriages over 2,080km of track in the greater Sydney metropolitan area, running for about 20 hours every day. 2,365 train trips per day provide for nearly 1 million passenger journeys per weekday.

The timetable is the plan we design and implement to accommodate as many of our customers' travel plans as possible, it is the basis of the services we deliver to our customers and quite obviously it is important that we get it right.

The timetable is a balance of Demand Factors:-

- Origin-destinations
- time of day
- safety
- reliability
- comfort
- journey time
- price (including competition)
- third party operators

with Supply Factors:-

- Infrastructure
- geography - signals, curves, etc
- trains - stabling
- train characteristics
- power supply

- crew
- maintenance
- station capacity

The fundamental timetable principles are:-

1. Understand demand - resources - constraints.
2. Identify key locations - pivot points - for timetable (usually CBD and approach junction capacity).
3. Set up regular repeatable patterns.
4. Work on principle of fill peak train in catchment area and then run express as outer suburban distances too far and too full for all stops.
5. Where possible, allow ample recovery at termini and some recovery approaching critical junctions.
6. Trade off all the above and seek a workable compromise.

The CityRail timetable before 2005 was essentially the 1992 version. By 2004, it was not possible to run trains reliably according to the 1992 timetable because of changes in operating conditions and population growth. By 2004 patronage on the network rose by around 20 million to 270.3 million journeys per year, but peak hour patronage to the CBD had risen 20% in the same time. Longer dwell times at platforms were required for increased passenger safety, given increased passenger numbers since the last timetable was written in 1992 and increasing emphasis on comprehensive door warning and monitoring procedures. The Cumberland and Airport Lines were introduced in 1996 and 2000 respectively, increasing network complexity. As a result of these factors the timetable was becoming increasingly fragile.

Following the Waterfall Train Crash in January 2003, RailCorp introduced a further range of new safety measures which impacted on the timetable's ability to deliver reliable services.

- data loggers which monitor a train's activities like an aeroplane's black box
- speed guns which monitor train speeds in targeted locations, much like a police radar system
- Considerable caution by drivers in approaching speed limits

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Availability of 80 more carriages by 2005 assisted planning and development of a new timetable in that year. Rail timetablers worked to develop a timetable for introduction in September 2005 to deliver on the following objectives:-

To safely improve service reliability so that 92% of peak trains arrive at their destinations within five minutes of their scheduled arrival time through:

- Ensuring running times are safely achievable.
- Increasing dwell times at stations.
- Reducing the flat junction crossovers (where trains are timetabled to cross in front of each other).
- Ensuring that the timetable can operate with the crew resources available.
- Reducing the number of lowly patronised trains arriving and departing Central Station between 10am and 2pm, so that there is more scope for the CityRail network to “reset” in time for the PM peak.

To improve PM peak performance by:

- Reducing inter peak congestion.
- Slowing off peak running times.
- Providing rostered stand-by train sets after the a.m. peak.
- Providing robust windows for “track walk” maintenance inspections.
- To standardise frequencies to quarter hourly during peak times, and a minimum half hourly during off-peak and on weekends for *most* suburban services (“clock face timetables”).
- To regularise train stopping patterns to reduce complexity. For example, variability in stopping patterns was reduced on the East Hills Line – previously there were 103 patterns, but this was reduced to 38.
- To achieve fewer service cancellations and reduce the number of times that CityRail services need to skip scheduled stops at stations in order to regain timetable.

The Independent Transport Safety and Reliability Regulator undertook a survey of CityRail customer satisfaction in July 2005 (before the new timetable was introduced) and afterwards in November 2005. The results showed significant improvements in

the number of CityRail customers with expectations met across all service aspects.

Successful implementation and operation of the 2005 timetable is attributed to good planning

- The 2005 Timetable worked because we spent considerable time planning – from concept design, drafts, reviews, risk assessments, validation and finalisation, to implementation and introduction planning.
- Demand and station impacts assessed.
- Early consultation with representatives from bus companies.
- Comprehensive public consultation.
- Effective communication.
- Close coordination within RailCorp planning, operations and crewing divisions.

Where to next

- CBD market still increasing. Major investments underway with 96 *additional* carriages in traffic by 2008 and 104 more by 2013 to meet growth.
- Epping Chatswood Railway and clearways between 2008 and 2010 providing infrastructure to support reliable, higher frequency to CBD.
- 2008 timetable will increase capacity and regularise services.
- Infusion of improved trains will allow reduced journey times from 2011

THE OBSERVATION POST

The editor has been significantly disrupted over the last three weeks, moving home yet again, so begs you forgiveness if there is no editorial comment this month.

While on the subject this Newsletter is later than usual due to the date of the joint meeting being some weeks later than our normal ‘first Thursday’. Since there will be a September meeting on the regular day (in this case Sept 7th) you can expect another newsletter in about a fortnight, and at that time the editor will hopefully make amends.

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FUTURE MEETINGS AND EVENTS

A meeting program has been determined for the remainder of 2006, although always be aware that changes to topic, location or date may occur. We will always despatch a newsletter, or in extreme situations a flyer to advise of any changes to the advertised program. In most cases the next couple of months are firm.

AUGUST 24th: see cover page this issue

SEPTEMBER 7th: "New Developments in Track Maintenance Machines" by Alan Logan of Plasser. Although this is the same speaker as on 24/8, the topic is quite different

OCTOBER 5th: to be confirmed.

NOVEMBER 2nd: Government and Opposition transport spokespersons debate their policies ahead of the 2007 election (subject to confirmation)

2007 will start with a meeting on **Thur 1st February**, on the topic of "Advanced Steam" by Malcolm Cluett

AusRAIL 2006 (the annual rail industry conference) will be in Brisbane between 21st and 22nd and November.

NEWSLETTER FORMAT

You will notice that the front page of the newsletter has the 'Next Meeting' notice done in poster style. Where the opportunity arises consider printing off this front cover and placing on your work or other suitable notice board – more attendees at meetings means better informed people engaged in the industry.

THE WOES OF A COMMUTER

The following is a bit of a cheerful chortle that drifted across the editorial desk recently. In view

of the July presentation (summarised earlier) it is fair to say that RailCorp are neither the source nor the recipient of the 'A Commuter' letter, and what's more if they now do get one they will know where it came from!

Dear Sir

I have been riding trains daily for the last two years, and the service on my line seems to be getting worse every day. I am tired of standing in the aisle all the time on a 14 mile trip. I think the transportation system is worse that that enjoyed by people 2,000 years ago.

Yours truly,
A Commuter

Dear Sir

We received your letter with reference to the shortcomings of our service and believe you are somewhat confused in your history. The only mode of transportation 2,000 years ago was by foot.

Sincerely,
The Railway

Dear Sir

I am in receipt of your letter, and I think you are the ones who are confused in your history. If you will refer to the Bible, Book of David, 9th Chapter, you will find that Balaam rode to town on his ass. That, gentlemen, is something I have not been able to do on your train in the last two years!

Yours truly,
A Commuter

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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, or if you are a member see if you can introduce a friend as a new member. Remember www.rtsa.com.au

NEW WORDS FOR 2006:

A new vocabulary for the workplace

(an occasional series to keep members up to date with the wider corporate world)

BLAMESTORMING: Sitting around in a group, discussing why a deadline was missed or a project failed, and who was responsible.

SEAGULL MANAGER: A manager, who

flies in, makes a lot of noise, craps on everything, and then leaves.

ASSMOSIS: The process by which some people seem to absorb success and advancement by kissing up to the boss rather than working hard.

SALMON DAY: The experience of spending an entire day swimming upstream only to get screwed and die in the end.

CUBE FARM: An office filled with cubicles.

PRAIRIE DOGGING: When someone yells or drops something loudly in a cube farm, and people's heads pop up over the walls to see what's going on.

CROP DUSTING: Surreptitiously passing gas while passing through a Cube Farm.

MOUSE POTATO: The on-line, wired generation's answer to the couch potato.

SWIPEOUT: An ATM or credit card that has been rendered useless because the magnetic strip is worn away from extensive use.

PERCUSSIVE MAINTENANCE: The fine art of whacking the crap out of an electronic device to get it to work again.

OHNOSECOND: That minuscule fraction of time in which you realize that you've just made a BIG mistake. (Like after hitting send on an email by mistake).

XEROX SUBSIDY: Euphemism for swiping free photocopies from one's workplace.

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NOTICEBOARD

KEY RTSA SYDNEY CHAPTER COMMITTEE CONTACTS

Bill Laidlaw	Chairman	0409 602 833	blaidlaw@bigpond.com
Malcolm Cluett	Secretary	9589 0226 (H)	malcolm.cluett@bigpond.com
Max Michell	Newsletter Editor	02 9331 5662	samrom@bigpond.com
Basil Hancock	Committee	Bob McCotter	Committee
Arnold Aranjo	Committee	Trevor Moore	Committee
Andrew McKay	Committee	Chris Venn-Brown	Committee
Andrew Honan	Committee	John Watsford	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 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.

The Editor has upped stumps and moved – although only about 3 km away. The new 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 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

Members receiving this Newsletter by email should note that all Sydney Newsletters will be sent in a PDF format prepared using Adobe Acrobat Version 6.

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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