

# Rail Horizons

The Journal of the Railway Technical Society of Australasia



No. 41 October 2008

## From the Executive Chairman

CORE years are always exciting and demanding for the organising committee, authors/ presenters, sponsors and participants alike. I would like to thank all those who spent so much time preparing for CORE 2008 in Perth.

I would also like to thank Ravi Ravitharan and the Executive Team for continuing to develop a very healthy and vibrant organisation over the last two years, doing new things and assisting the industry in whichever way we can.

CORE 2010 in Wellington will again take much attention and energy and there are other events such as the Metro seminar in Sydney during November and forward planning for an Asian Study Tour (STORE) in 2009.

At the AGM I outlined some things I would like to see happen over the next 2 years. We need to continue to promote the industry to young engineers and reinforce the initiative of the Professional Development Assessment Program, use the Transport Engineering in Australia Journal provision and roll out a program for the newest group in RTSA, the Investigation sub-group.

I am also conscious of the need to provide the members with more services. With email and web based technology I plan to open up avenues to a wide range of information services, including libraries and industry information. Over the last 10 years - our complete RTSA history - during, a time of privatisation of the industry there has been a diminution of information availability within the rail industry

Of course, sensitive commercial information will never be available widely but standards, practice and education should be available so that industry can function easily and those who wish to learn can do so. I applaud those at the CRC, QUT, ARA and elsewhere that make accessing learned material easy.

I want the RTSA to also assist in providing information about issues within the industry, solutions, policy directions, and technological advancement.

You will have recently received a web-link to a newsletter that is "climate change aware" of the role that rail can play in that wider debate. This will be one area where rail can enter the policy and technical debate on high moral ground. We will use the technology of rail to

good effect. So please expect to be given the opportunity to access the wider information available about our industry.

CORE2010 will be the first time the event has been held in New Zealand. To be held in Wellington from 12-15 September 2010, now is the time to start thinking about making some early travel plans.

*Martin Baggott*  
**RTSA Executive  
Chairman**

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# Rail Horizons

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## 'Metros - Future Rail for Sydney'

Members are encouraged to attend the Railway Technical Society of Australasia's (RTSA) seminar on 'Metros - Future Rail for Sydney'

The one-day seminar is being held on **Wednesday 12 November 2008** at the Old Customs House, Circular Quay in Sydney.

With some uncertainty hanging over the NW Metro project following the political turmoil in New South Wales the seminar will be extremely topical.

It is being held the day after the NSW Government announces its mini-budget and against the background of the Federal Government's bringing forward of its Infrastructure Australia priority plans to the end of this year.

The seminar will hear from experts around the world, including representatives and experts of the Barcelona, Paris, Hong Kong and Singapore metro systems. They will showcase how these systems have developed and the technologies utilised.

The seminar will hear from Sydney experts in transit orientated development and planning, and the role metros can play in developing and maintaining the urban fabric.

There will also be a case-study of the highly successful Perth metropolitan rail system and consideration of the institutional issues in promoting rail through government agencies.

The one-day seminar has been organised by the RTSA as a non-profit venture for professionals to debate the issue of metro rail systems and their impact on society.

The seminar's aim is to inform and educate transport professionals / planners as well as the general public at large of the benefits improved metro rail links.

Details of the program and bookings can be found at [www.rtsa.com.au](http://www.rtsa.com.au)



## ► Cooperative Research Centre (CRC) for Rail Innovation

Although it has been established for some time now, the Cooperative Research Centre (CRC) for Rail Innovation was officially launched by Senator Kim Carr, Minister for Innovation, Industry, Science and Research at Parliament House in Canberra on 27 August.

The centre, based in Brisbane, will receive a Federal CRC Program grant of \$21 million over seven years and will also attract investment of around \$100 million over this period from industry participants.

"The Government is proud to support what is the single biggest research program in the history of Australian railways," Senator Carr said.

"This is a huge vote of confidence in the rail industry and it reflects the Government's determination to work closely with researchers and industry to ensure that rail makes its full contribution to Australia's transport mix. According to one estimate, the CRC's research could generate up to \$6.5 billion worth of benefits nationally in the long-term.

"The Government fully recognises that world class rail infrastructure and services are critical to Australia's economic and social growth - and we expect the CRC for Rail Innovation to play a vital role in this process. By addressing operational efficiencies, supply chain issues, engineering technology, and up-skilling of workers, the CRC will greatly contribute to improved transport infrastructure."

The new CRC is a collaborative venture between leading organisations in the Australian rail industry and Australian universities.

"The CRC's work will be good for rail transport, it will help Australia develop a balanced transport infrastructure and it will be beneficial to the broader national economy. Australia's future prosperity and productivity hinges on a strong mix in transport infrastructure," Senator Carr said.

"The Government's investment in Infrastructure Australia coupled with innovation grants such as the CRC Program will assist Australia in delivering reforms and innovative solutions to meet our growing demands and secure our economic future."

The CRC for Rail Innovation has recently seen TransAdelaide, the Public Transport Authority of Western Australia and TTG Transportation Technology all commit to joining the CRC as Supporting Participants.

"The additional participants will provide the CRC with scope to examine progressing additional transformational change projects such as increasing system capacity, further climate change research as well as passenger related

projects including demand management and managing vandalism/ graffiti," said CEO David George.

"A total of 26 research projects have already commenced or are awaiting approval. The seven year research program for the CRC for Rail Innovation is diverse in nature and twice as large as that of the first Rail CRC (CRC for Railway Engineering and Technologies)."

There are six interrelated research themes emerging. These are:

- Reduction in emissions/climate change
- Unleashing rail capacity
- Improving rail safety
- Developing human capital
- Urban mobility and
- Application of technology

The CRC is working closely with its participants, including the ARA, in each of these areas. The CRC already has a \$500k program underway to model transport missions and examine a range of initiatives to underpin a comprehensive rail climate change strategy.

"This research is vital as the rail industry has a dual role to play in reducing transport emissions, both by improving our already strong environmental performance and carrying a greater share of the transport task," added Mr George.

## ► Consultants Announced for Inland Rail Alignment Study

Australian Rail Track Corporation (ARTC) has announced the project consultants as part of the study commissioned by the Australian Government to determine a preferred alignment and the likely success of a multi-billion dollar standard gauge inland railway between Melbourne and Brisbane.

ARTC has commissioned consultants to examine technical issues relating to the proposed Melbourne to Brisbane inland railway, both engineering and environmental; and its financial and economic benefits and costs.

The Lead Technical Consultant is Parsons Brinckerhoff with Connell Wagner and Halcrow; and the Financial and Economic Consultant is PricewaterhouseCoopers with ACIL Tasman and SAHA.

The Australian Government commissioned ARTC to conduct the study, setting aside up to \$15 million to ensure the study is completed in the second half of 2009.

In developing a detailed route alignment, the ARTC will generally follow the far western sub-corridor identified by the previous 2006 North South Rail Corridor Study.

The ARTC study will build upon this earlier work and determine the optimum alignment of any future inland railway after taking into account the needs of potential users as well as possible engineering, planning and environmental considerations.

As well as determining the route alignment, the ARTC study will provide both the Government and private sector with information that will help guide their future investment decisions, including likely demand and an estimated construction cost.

Importantly, the study will provide the Government with a basis for evaluating private financing options for part or the entire project.

Given the level of interest in the study, the ARTC will undertake thorough consultations with all stakeholders, including state governments, industry, local government and major rail customers.

### ► Metro networks sag under weight of passengers *by Mark Carter*

Patronage on Melbourne's public transport network hit a record high for the 2007/08 financial year, with 450.8 million passenger trips made, representing growth of 7.7% on the previous year. Rail was the standout performer, experiencing record growth of 12.7% for the year and surpassing 200 million journeys in a year for the first time since the late 1920s/ early 1930s.

Passenger numbers on Melbourne's tram network recorded only modest growth of 2.2% increasing from 154.9 million to 158.3 million journeys, while bus patronage rose by 7.4% to 91.3 million passenger



journeys.

Over the last seven years, total patronage on Melbourne's suburban rail network has grown by staggering 54.4%, from 130.3 million journeys in 2000/01 to 201.2 million in 2007/08.

Over 600 million individual journeys per year are made on city train networks almost half of these undertaken in Sydney. In 2007/08 there were 296 million passenger journeys on Cityrail services, an increase of 5.2 per cent on 2006/07.

Surprisingly a recent survey conducted by the NSW Independent Transport Safety and Reliability Regulator found overall that commuters' perceptions of their Cityrail travel experience were improving.

Overcrowding was the key area where there was no improvement, with 25% saying they were unable to join a Cityrail services at least once a month because the train was too crowded.

In Melbourne, Victorian Department of Infrastructure figures show that most of Melbourne's suburban rail lines are already operating above capacity, with twelve out of 15 lines exceeding the contracted passenger limits for the morning peak. Some media reports have suggested that some passengers face up to 40 minutes standing into the city.

Official figures in Brisbane show peak hour overcrowding of around 20% on four of its five key suburban rail routes.

### ► Rail: Part of the Climate Change Solution

The Australasian Railway Association (ARA) has welcomed the *Garnaut Climate Change Review Final Report*, which strongly urges greater use of both passenger and freight rail.

Professor Ross Garnaut has reiterated the policy positions which the rail industry has been making to Government for some time. At the same time he has recognised the failure of Governments in the favouring of road infrastructure over rail.

"It is very clear you cannot be serious about tackling climate change without enhancing rail networks." said ARA CEO Bryan Nye.

The report notes that "shifting bulk freight from road to rail could reduce emissions and fuel use by 60 per cent" and the emissions intensity of the average commute is more than 6 times less for rail than passenger cars. Clearly rail transport is part of the climate change solution in the move towards a low carbon economy.

The rail industry supports the rigorous conclusions of the Garnaut report including:

- Giving higher priority to increasing capacity and improving services in public transport;



- Governments major role in planning for rail and public transport;
- Involvement of government in efficient provision of infrastructure and services for public transport;
- The introduction of mass-distance-location charge of road use;
- Describing the environmental value in transferring freight from road to rail;
- The high risk of degradation to transport infrastructure and the low ability to adjust or adapt.

“Governments must now invest in both freight and passenger rail, remove impediments to efficient rail and implement policies which enhance rail as a preferred mode of transport.” said Mr Nye.

Now that we recognise the problem, issues and solutions, there is a huge amount of work required to implement the required changes.

“Various Government Departments, Infrastructure Australia and ultimately all Australian Governments must now put these policy positions into practice.” concluded Mr Nye.

► **Loco boom for manufacturers**  
*by Mark Carter*

For the first time in a decade, Australia’s two major railway locomotive manufacturers have bulging order books. At least 70 new standard gauge diesel locomotives, worth around \$400 million, will be built in Australia during 2008 and 2009,

Downer EDI Rail (EDI) has just finished delivery of the final GT46C ACe SCT class locomotives for SCT Logistics which are now exclusively in control of all SCT’s Melbourne-Perth and Parkes-Perth services.

Following the success of the new GT46C ACe design, EDI Rail says that it will manufacture its own fleet of nine

similar locomotives prior to receipt of any specific order, for possible lease or sale to the industry. Rumour is that the option on these has already been taken up by an operator.

In a deal announced earlier this year CFCLA Australia placed an order with United Group Limited Rail (UGL Rail) for ten new locomotives - with an option for 30 more - for lease to the broader rail industry, rather than for use by a specific operator.

The CFCLA locos will be similar in some respects to the Pacific National 92 class (model C44ACi). The first of these were officially launched at Port Waratah on 3 October (see image). PN will receive fifteen of these 4400hp ac traction locomotives for use on Hunter Valley coal trains. Originally it was thought the PN units would also be used on interstate intermodal services, but does not now appear to be the case.

Also coming off the UGL Rail production lines at Broadmeadow in Newcastle will be eight 4300hp locomotives for Australian Railroad Group, to be delivered between April 2009 and August 2009.

QR National has also recently announced that it will invest in a further 18 new locomotives, mainly for intermodal freight service.

► **Light rail for Gold Coast?**

Queensland Transport Minister John Mickel says a preliminary business case for a Gold Coast rapid transit system has recommended light rail as the solution to keep the city moving into the future. The business case found light rail to offer greater capacity, reliability, and a longer lifespan than buses to cope with future growth.

“Traffic on the city’s main roads is estimated to be increasing by an average of 4.3% each year. Currently only 4%, or 65,000 trips, are made by the Coast community on public transport, and with rapid transit it is projected to grow to 10% by 2026. By making public transport faster, more efficient and more reliable, this project is estimated to take up to 40,000 car trips off the roads – that will have a significant effect on future congestion and avoiding gridlock.”

The Gold Coast City Council has endorsed the State Government’s choice of light rail as the preferred mode for the city’s rapid transit system. The Council says that the first stage - from Griffith University to Broadbeach - is expected to be operational by June 2013. The next stage of development would include the sections from Griffith University to Helensvale, and Broadbeach to Burleigh, expected to be operational by June 2015.



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# Postgraduate Courses in Railway Engineering

A **Master of Engineering (Railway Infrastructure)** course is being offered through Queensland University of Technology in Brisbane and commenced in July 2008. Roughly 20 people applied for the first intake and most of them were offered places in the course. QUT has also received quite a few enquiries already for the 2009 intake.

The course comprises 8 subjects for a full Master degree. Alternatively one can exit early with a Graduate Certificate in Railway Infrastructure after completing 4 subjects.

The course is offered entirely by distance education using online resources, so applicants can study the course from anywhere around Australia or the world.

The 8 subjects cover such topics as geotechnical issues, ballast, sleepers& fasteners, rail, turnouts and other rail structures, track-train interaction, track design and stability, track construction, civil structures, assets, environment, and safety. There is also an in-the-work-place project subject and one elective. People who have completed QUT's NRE001 Railway Business & Engineering or NRE002 Railway Management Operations & Safety may be eligible for credit against that elective.

Applicants must have a Bachelor of Engineering with either a good overall grade or at least 2 or 3 years of relevant industrial experience. Applicants with a different qualification may be considered if substantial industrial experience has been obtained. Applicants also need to be working in the railway industry and their employer must indicate their support for the applicant to do the degree. Many employers for the 2008 intake are also paying the full fees for their employees studying the course.

The website address providing information about these degrees is:

<http://www.bee.qut.edu.au/study/cpe/railwayinfrastructure.jsp>

Postgraduate courses in other railway engineering disciplines are also available from Australian Universities. All courses have been developed by the Rail CRC, with the assistance and support of the RTSA, and of the universities at which they are being presented.

A program of courses in **Rolling Stock Engineering** is being presented by the University of Wollongong.

The course structure is similar to the Railway Infrastructure course, in that students are required to complete eight units to achieve a Masters Degree in Rolling Stock Engineering, or four units for a Graduate Certificate in Rolling Stock Engineering.

Enquiries about the course can be directed to Lorelle Pollard at the University of Wollongong, [lorelle@uow.edu.au](mailto:lorelle@uow.edu.au), or phone (02) 4221 4247.

Central Queensland University is offering postgraduate courses in **Signalling and Communications**, and also Rail Operations Management.

Students are required to complete six units to achieve a Graduate Diploma of Railway Signalling, or three units for a Graduate Certificate of Railway Signalling.

The Graduate Diploma of Railway Signalling is recognised by the IRSE as an acceptable qualification for Corporate Membership.

Full details of these courses are available at:

<http://www.seh-postgrad.cqu.edu.au/FCWViewer/view.do?page=4489>

The **Rail Operations Management** course is structured over three years, with three units being presented each year, leading to the degree of Master of Rail Operations Management. Exit after one year leads to a Graduate Certificate of Rail Operations Management, and exit after two years leads to a Graduate Diploma of Rail Operations Management.

Full details of this course are available at:

<http://www.seh-postgrad.cqu.edu.au/FCWViewer/view.do?page=1934>

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## Society and Chapter News

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### 2008 Conference gets to the CORE of railway engineering

The 2008 CORE Conference held in Perth in September has been hailed as the most successful ever, attracting more than double the number of delegates than the 2006 conference in Melbourne.

The contemporary and highly relevant conference theme – Rail, the core of integrated transport – and the high quality of speakers and technical papers contributed to the unprecedented success of what has now become firmly established as the premier rail industry event in Australasia.

Nearly 1000 delegates registered for the conference, which was opened by the Governor of Western Australia, His Excellency Dr Ken Michael AC - himself an engineer.

The Governor stayed on to listen to the first plenary session, with keynote addresses delivered by Reece Waldock, CEO of the Public Transport Authority of Western Australia, and Andrew McCusker, Operations Director of MTR Corporation Limited, Hong Kong. Both keynotes explored the value and benefits of fully integrating rail into overall land use and transport planning, and demonstrated outstanding success of this strategy in both cities.

Chair of the CORE 2008 organising committee, John Goodall, said the success of the 2008 conference was due to the high calibre of delegates and information on offer from some of the best in the business.

“The excellent mix of keynote speakers, technical presentations, social functions, technical tours and the trade exhibitions provided delegates with a full schedule and enjoyable experience,” he said. “The future of rail in providing services within integrated systems is certainly in good hands.”

Perth was chosen as the venue for CORE 2008 to showcase the unprecedented expansion of the city’s urban rail network, and the major development of the north-west railway system in response to the world’s increasing demand for iron ore.

With a challenging technical program, complemented by technical tours throughout Western Australia, the focus was on leading edge technology and techniques. The conference included a tour of Perth’s \$1.66 billion Southern Suburbs Railway project - the largest public transport infrastructure project ever undertaken in Western Australia.

Delegates also enjoyed several different technical tours to the Western Australian Pilbara to explore the railway infrastructure used by mining giants Rio Tinto and BHP Billiton. Rio Tinto provided delegates with an excellent in depth look at the iron ore export industry and arranged a fascinating tour of aboriginal rock art at Karratha.

The next CORE conference organised by the RTSA will be held on 12 to 15 September 2010 in



Wellington, New Zealand. The conference will be tailored to the theme ‘Rail – Rejuvenation and Renaissance.’

**The RTSA Annual General Meeting was held during CORE2008. At the AGM, Martin Baggott (left) was confirmed as RTSA Executive Chairman for the next two years, taking over the reigns from Ravi Ravitharan.**





**Bill Singleton (Technical Chair, CORE 08) and Maggie Frazer run the Red Carpet gauntlet at the CORE200 Gala Dinner**

**Rebecca Taylor & Luis Sanchez, Public Transport Authority (WA) with the Train Simulator at the PTA stand at the CORE2008 exhibition**

**John Reeves (Track & Signal) and Pearl Ansley (RTSA Secretariat) at the Track & Signal exhibition stand**



**Yvonne Dring, John Dring (RTSA Executive Secretary) and John Goodall (Chair, CORE 2008 Organising Committee) at CORE2008**



**Thomas Francon at CORE2008 along with RTSA Scholarship Award Winners, Andrea Gasparini, Pascal Muller, and Ramin Khan**



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## RTSA Life Membership for Dr Philip Laird



The Railway Technical Society of Australasia (RTSA) values the contribution made by its members to the railway industry. At the CORE2008 Gala Dinner in Perth Dr Philip Laird was honoured for his outstanding contribution to the railway industry over a long period of

time. In recognition of his impressive academic career and valuable contribution to the industry, the RTSA bestowed upon Dr Laird, Life Membership status of the Railway Technical Society of Australasia. This made him only the fifth person in the history of the RTSA ever to receive this coveted honour.

Dr Laird has a PhD in Mathematics from the University of Calgary, two masters degrees also in Mathematics from The Australian National University and the Victoria University in Wellington, New Zealand where he also received his bachelors degree.

Philip Laird was the Inaugural National Chairman of RTSA serving between 1998 and 2000. He has significantly contributed to the railway industry as the Chairman of the Government Relations sub-committee of the RTSA over a period of 7 years and served in various other important roles within and outside of RTSA.

He has published more than 60 refereed papers in land transport. He has jointly authored a book called Back on Track: Rethinking Transport Policy in Australia and New Zealand. He has also authored The Railway Technical Society of Australasia the First Ten Years, a book which was recently published to mark RTSA's 10th Anniversary. Dr Laird has actively contributed to various submissions to governments.

Currently Philip Laird is employed at the Faculty of Informatics at the University of Wollongong as the Associate Professor and Honorary Principal Fellow in the School of Mathematics and Applied Statistics. In 2008, he has been awarded with the University of Wollongong Vice Chancellor's Award for Community Engagement.

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## Presentation of the 2008 RTSA Railway Engineering Awards

The glittering backdrop of the Perth Conference Exhibition Centre BelleVue Ballroom provided the perfect venue not only for the delegates and their partners who were attending the CORE2008 gala dinner but also for the presentation of the RTSA 2008 annual awards.

This year celebrated the presentation of awards in four different categories, being; the Contact Mechanics award, the Young Railway Engineer award, the Industry award and the highly coveted Individual award

The **Contact Mechanics Award** is offered annually to the author of an outstanding final year undergraduate project, prepared in Australia or New Zealand, on a topic that is related to contact conditions between wheel and rail. The inaugural award in this category was presented by Mr. Paul Larsen, the General Manager of WestNet Rail, to Mr. Mina Hanna of the Institute of Railway Technology for his work on rolling contact fatigue.

Mr. Sakdirat Kaewunruen who is an engineer with RailCorp received his **Young Railway Engineer Award** from Mr. Glen Mullins, the Executive General Manager of QR Services. This award is made to a young professional engineer, technologist or associate working in Australia or New Zealand who is under the age of thirty five at the time of nomination.

Offered biennially in the years in which a CORE conference is held, the Industry award is made to reward an engineering achievement in the railway industry that is considered worthy of public recognition. In 2008 this category of award attracted an honourable mention as well as an outright winner. The honourable mention was made to the Institute of Railway Technology for its work on the development of an instrumented revenue vehicle for the continuous monitoring of track condition.

The clear winner of the **Industry Award** was the John Holland Rail Division for the Middlesborough Road Separation Project in Melbourne. This major project incredibly was completed in just twenty seven days – something many thought was not possible. All those associated with this significant achievement are to be commended on their efforts. The presentations were made by Mr. Angelo Demertzis, the ARTC General Manager East West.



The RTSA **Individual Award** is made to a person who is deemed to have made an outstanding contribution to the railway industry. In 2008, Dr. Martin Murray from the Queensland University of Technology in Brisbane was chosen to receive this prestigious award and he received his trophy from Mr. Reece Waldo, the Chief Executive Officer of the Passenger Transport Authority.

Dr. Murray was selected out of a number of high quality nominees for his outstanding achievements over a career spanning over thirty years and, in particular, the development of a number of high level university courses designed specifically for the railway industry.

**Dr Martin Murray receives his RTSA individual achievement award at CORE2008**

## The Next Generation - getting the message across

*by John Dring*

The RTSA is pursuing a number of initiatives to attract undergraduate students to consider a career in the rail industry and to encourage other young professionals already in the industry to remain.

### University Presentations

The benefits of working in the rail industry will be the focus of an RTSA program involving presentations to students and academic staff at specially identified universities throughout Australasia. The details of the RTSA Professional Development Program will also be included. (The PDP program has been designed to assist all young professionals within the industry to attain professional recognition in a structured manner.)

### Youth Scholarship Awards

The Youth Scholarship Award scheme was initiated at CORE 2008 and was hugely successful. For CORE 2008, Scholarships to attend the CORE Conference, valued at more than \$900 each, were awarded to fifty students and young professionals who demonstrated an interest in the railway industry. The scholarship holders enjoyed and learnt from their experiences at the conference, with positive feedback about the benefits to individuals in significant areas.

At a time of a significant renaissance in rail the aim of this initiative is to encourage a positive perspective of the rail industry, one that will encourage strong and

on-going participation in the industry. Offering similar awards for future conferences is being considered.

### Access to Information

Quick access to relevant information is vitally important for specialised professions, and the internet is the preferred medium for young professionals. The RTSA is currently developing a program to access industry publications via the Internet; accessing library services may also be an option. The RTSA Executive will continue to investigate appropriate and interesting opportunities as they become available.

## 2009 RTSA AWARDS

In 2009, the RTSA will be offering awards in four categories. These are; the Individual Award, the Young Railway Engineer Award, the Railway Engineering Student Thesis Award and the Contact Mechanics Award.

Nominations for the Student Thesis Award and for the Contact Mechanics Award will close on **Friday 28<sup>th</sup> November 2008**.

For the other three awards, nominations will close on **Friday 27<sup>th</sup> February 2009**. Further details, and nomination forms, can be found on the RTSA website

**[www.rtsa.com.au](http://www.rtsa.com.au)**



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## Chapter Reports

### South Australia

The South Australian Chapter continues to have a successful year.

The meeting on Tuesday 1 July comprised a presentation by Kevin Taylor, General Manager of the Rail Industry Safety and Standards Board (RISSB), on his organisation's objectives and business plans.

The Rail Industry Safety and Standards Board (RISSB) is wholly owned by the ARA and is responsible for development and management of the rail industry standards, rules and codes of practice, all of which have national application. The RISSB is accredited by Standards Australia as a Standards Development Organisation, and all new standards produced by the RISSB are published as Australian Standards.

On 7 August, the South Australian chapter held an innovative joint meeting with the mechanical engineer's SA Joint Technical Committee, and with Permanent Way Institution. The programme featured a presentation on Pacific National's new 92 class AC traction locomotives, by Graham Haywood from United Goninan. It is likely that a combined meeting with our mechanical colleagues will become an annual event.

On Wednesday 3 September we heard from RTSA's CORE Eminent Speaker, Andrew McCusker, Operations Director, Hong Kong MTR Corporation. Andrew spoke on "Delivering Sustainable City Transport". Key issues were:

- With rising energy costs, commodity and food price inflation and environmental concerns cities increasingly are turning to rail transport.
- The city economy depends on its vitality on efficient and effective transport.
- Citizens need affordable and reliable transport.
- City Governments need certainty in recurrent transport costs.

Our October meeting, combined with and hosted by the Institution of Railway Signal Engineers, featured an explanation by the Australian Transport Safety Bureau of their investigations into a serious derailment at Benalla, in which the signalling system became a specific focus of attention. The presentation was made by Chapter member and past National Chair George Erdos.

For the remainder of the year, the Chapter meeting on 6 November will comprise a presentation on the South Australian rail revitalisation programme, to be presented by Tim Warren, Project Director. Rail revitalisation covers a new railcar maintenance depot, infrastructure upgrading, and electrification.

Our annual dinner meeting will be held on Tuesday 25 November, with keynote speaker David Marchant, CEO of the Australian Rail Track Corporation. As usual, this promises to be an enjoyable and entertaining function.

*Duncan McLeod, SA Chapter Chair*

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## Queensland

### Chairman's Comments

Since the last report the Queensland Chapter has held five technical presentations, sponsored a historical visit, held our AGM, changed Chapter Chair and gained a new Chapter Committee member. I would like to welcome Mark Room to the Chapter Committee

### Recent Meetings

#### 25 June

Peter Josey and Steve Gelagin gave an update on the Trackstar Alliance projects in Queensland. Trackstar Alliance is undertaking a number of rail projects as part of the Queensland Government SEQUIP infrastructure upgrades. The alliance has also won a number of additional rail projects including the Beerwah Rail Bypass Project, four traction power upgrade projects, and the preliminary design work for the next stage of the Gold Coast Line extension. (*Attendees 60*)

#### 20 July

The RTSA sponsored a PWI walk to Camp Mountain. Camp Mountain is the site of Queensland's worst rail disaster. The walk was along the old railway formation from Ferny Grove to the Camp Mountain Derailment site then back to Ferny Grove for a BBQ. QR's historian gave a presentation about the derailment at the site.

#### 23 July

At the Annual General Meeting, Dinner Mark Room was voted onto the committee and Alex Howie took over from Mark Wishart as the Chapter Chair. Brendon Gill of Griffith University was presented with his Railway Engineering Student Thesis Award and Glen Bearham of CQU was awarded with his runners up award. Both awards were presented by the National President, Ravi. The railway trivia finished off the evening in a lighter mood. The Queensland chapter would like to thank the sponsors for their generous support of the evening. (*Attendees 110*)

#### 27 August

Ross Dunning gave an update on the progress of his role as the Central Coordinator of the Goonyella Coal Chain. Ross gave an interesting overview of the Goonyella Coal Chain and an insight into the problems that resulted in the creation of his role. The benefits of coordinating all of the stakeholders activities were also demonstrated.

(*Attendees 40*)

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## 2 September

The RTSA eminent speaker for CORE was Andrew McCusker of MTR in Hong Kong. Andrew spoke about the integrated land use and planning model used by MTR and the benefits of maintaining technical expertise within a rail organisation. This presentation was co-hosted with the PWI. (*Attendees 70*)

## 24 September

September saw the second presentation by David George on the New Rail CRC. In this presentation David outlined the projects that were now underway and those that are currently under review for funding. David emphasised the environmental focus of the New Rail CRC. David may be back in 2009 with another update of the projects. (*Attendees 37*)

## 22 October

Graham Dooley of the Surat Basin Railway explained the structure, proposed route, planned operation, and expected construction timeline of the proposed Surat Basin Railway. The Railway is a 200km link from tracks west of Toowoomba the Moura Line intended to permit the transportation of coal from the Surat Basin to the ports, existing and planned, at Gladstone. Graham conveyed his enthusiasm for the project and we look forward to a follow up presentation on the construction of the line. (*Attendees 69*)

## Upcoming Events

### 25 November

Colin Cole of the Centre for Rail Engineering will be giving a presentation on Technology Advances for Freight Trains in Rockhampton. The presentation will be held in the Auditorium at the Department of Main Roads in Knight Street.

### 11 December

This year the chapter is hosting an extra presentation and Christmas drinks. Philip Laird will be giving a presentation on the Queensland North Coast line.

## 2009

The Queensland Chapter is working on an exciting program of activities for 2009. Planning for the first half of the year is underway and the committee is working on a number of interesting presentations and field trips. Larry Matters is expected to give another candid presentation on one of his investigations and other topics will include light rail, the Gap Project, Inner City Rail Capacity Sturdy and Rail and the Environment. The committee is also working to organise an inspection of QR's new 80 stone rail grinder and a field trip to the Varsity Lakes extension of the Gold Coast Line. Of course the first half of the year will climax with the AGM in July.

As always, the RTSA Committee would like to hear of any technical presentations the members are keen to include in the annual program. Please contact any of the committee members or email the chair at [qld-chair@rtsa.com.au](mailto:qld-chair@rtsa.com.au).

*Alex Howie, Queensland Chapter Chair*

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## Western Australia

Now that the planning and preparations for CORE 2008 are behind us we look forward to the remaining part of the year when there are several interesting and informative sessions planned for the WA Chapter.

CORE 2008 was the last official function to be attended by our long standing Secretary Mr Bill Singleton. Bill has taken up a new role in Victoria and we were sorry to see his departure after some 8 years in the local committee. He has been a strong member to the group and we wish him well in his new endeavours.

Membership of the WA Chapter has now increased dramatically to over 140 during the lead up to CORE 2008. This trend together with the encouraging attendances at the normal technical presentations fosters well for the future of the Chapter in WA.

Over the past three months there has been only one technical session conducted by the group;

### 28 August

North Fremantle Container Transit Terminal – Update of Rail Facilities, presented by Mr Doug Bridal, Manager Logistics at Fremantle Ports. Over the past few years the profile of rail serving the Fremantle Port has been forced to change to accommodate the increasing market generated by container traffic on the North Wharf. Extensive rail modifications have been carried out to provide direct access to the area by deviating the route on the North side of the Swan River Bridge bypassing the previous route via Leighton Yard. The presentation explained the background to the work and provided some insights into the future planning for the area.

As second meeting in the form of a site visit to the East Perth Communications and Control Centre did not eventuate due to the sickness of the organising committee member. A further meeting featuring the RTSA Eminent Speaker, Mr Andrew McCusker, MTR Corporation Ltd, Hong Kong was considered but was shelved due to his tight program associated with the attendance at CORE 2008.

## Upcoming Events

### Thursday 9 October

Plans are in place for a meeting to be held with a presentation to be delivered by a representative from MRX Technologies with a topic discussing the recent



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developments in research and development work associated with railways both locally and overseas.

### **Thursday 27 November**

The final meeting for the year will be held when it is proposed to invite a leading member of the transport field in WA to give some insights into the future planning for railways in the State of WA. The Annual General Meeting will be also staged at this session.

The RTSA website is being continually updated and all information relating to the management and proceedings of the Chapters including the current calendar of events can be accessed through this facility on [www.rtsa.com.au](http://www.rtsa.com.au)

*John Syers, WA Chapter Chair*

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## **New South Wales**

The NSW Chapter is in the midst of preparing its lunch-time talks' program for next year and it is shaping up to be a very solid and varied program of talks. Our preliminary plans show a talk for each month, and we plan to continue using the Central Station Concourse meeting room. The schedule of talks for the remainder of the year and up to February of next year is:

### **Wed 5 November**

Graham Haywood, United Group Rail Talking on Pacific National Class 92 Diesel Electric locomotives and the ARG derivatives

### **Wed 12 November**

Symposium – Metros - Future Rail for Sydney (Old Customs House, Circular Quay **ALL DAY**)

### **Wed 3 December**

Speaker from the NSW Office of Rail Heritage Sustainable Rail Heritage Management Strategy

### **Wed 4 February**

David George Chief Executive, CRC for Rail Innovation

### **Wed 4 March**

Peter Moore Executive Director, UITP Australia, Presentation on the UITP

Further details and confirmation of the program will appear up on our web site and will also be in our local newsletter each month. Any interstate or New Zealand members visiting Sydney at the time of a talk are very welcome to attend.

## **Engineers Australia Convention**

Also a reminder of Engineers Australia's (Newcastle Chapter) convention in Grafton on the weekend of 13 June 2008. This convention celebrates the sesquicentennial anniversary of the formation of Grafton as a town. The theme of the convention will be *Transport and*

*Communications: Past, Present and Future*. Also a heritage marker will be placed near the Grafton rail bridge to commemorate the anniversary of opening of the rail bridge and the connecting Grafton to South Brisbane by a standard-gauge railway.

The RTSA hopes to organise a joint meeting with the NSW PWI in Grafton at this time and also possibly a Young Engineers tour. This convention will be of keen interest not only to RTSA but also PWI members.

Coen Stolz (who is on the NSW Chapter Committee) is looking for support and ideas for a Young Engineer's trip associated with this convention.

The NSW Chapter Committee will start considering ideas formally for this convention in late November, but please email Coen with any initial suggestions at [Coen.Stoltz@ttgtt.com.au](mailto:Coen.Stoltz@ttgtt.com.au)

## **Asia Rail Study Tour**

I wish to also announce that the Asia rail study tour is firming up for March of next year. This event will be an exciting time and I encourage all members and their partners, but particularly young members to think about coming on this tour.

The lead coordinator for this event is Candice Ng, assisted primarily by Lucie Mitchell and Katharina Gerstmann. Candice provides the following report:

"To keep pace with the ever growing railway industry, RTSA has set goals striving to increase awareness and understanding of new technologies and developments, which are widely used and recognised for their contribution to the industry. This tour will allow members to appreciate metro development meanwhile advancing their skills for local industry improvement.

"This is another program in line with the Metro Symposium (in November 2008) for members who are interested to learn more about metros. It is 'STORE' (Study Tour on Railway Engineering), a metro study tour in Asia.

"The tour aims to educate members, in particular those from the younger sector, about metro systems. It provides a chance for members to personally experience some of the world-class metros and also learn their principles of success to become the central of transportation in different cities. Site visits to local operators will also be included to allow members to gain insight into metro operation from all angles of interest.

"With all due effort, a provisional STORE itinerary has been set. It is planned to take place in **March** next year, a season in Asia best in climate, and is with an optimal duration of 10 days. The journey set out from **Australia to Singapore, followed by Kuala Lumpur then a few major cities in China that include Beijing, Shanghai and Hong Kong.**

“Prime activity of the tour is, of course, the exciting metro developments. Metro tours will be arranged in major cities for members to get a feel of the conditions of metro operation. Opportunities will also be given to visit some local rail sites where members can expect to witness key support and coordination behind a successful metro operation.

“And whilst we are in a travel tour, why not we also make the most of it and be an absolute tourist as we all wish? Free time will be given in a couple of agreed locations such that members are able to have some private time to go sightseeing and do some shopping.”

The tour is planned for **6 March to 16 March 2009** and is open to **all Australian and New Zealand RTSA members and their partners**. Please lock in you vacation time now for 6 to 16 March 2009.

At this stage pricing has not been finalised but we will announce details at the Metros Symposium on the 12 November.

Many thanks to Candice and her colleagues in developing this tour and I recommend that RTSA members block out the time in their diaries for this event and give serious consideration to coming along, once further details become available.

**Andrew Honan, NSW Chapter Chair**

## An Invitation from Hong Kong

The China Hong Kong Permanent Way Society was established in 1998 to promote and encourage amongst the members of the Society, the acquisition and exchange of both general and technical knowledge of planning, design, construction, inspection, maintenance and renewal of permanent way and other associated railway works. It enjoys close ties with similar organisations in China.

Recently an open invitation to all RTSA members has been received from the Secretary of the CHKPWS.

This invitation confirms that, In the event that any member of the RTSA is visiting Hong Kong either on business, or for pleasure, they will be most welcome to make a presentation to the CHKPWS.

The Society's web site is: [www.chkpws.org](http://www.chkpws.org) and the Secretary can be contacted on: [chkpwi@chkpwi.org](mailto:chkpwi@chkpwi.org)

The one millionth concrete rail sleeper between Sydney and Melbourne was unveiled in Gunning NSW in mid-October, marking a significant milestone in the \$2.4 billion Melbourne-Sydney-Brisbane corridor upgrading project.

The Hon. Gary Gray, Parliamentary Secretary for Regional Development joined Australian Rail Track Corporation CEO David Marchant to unveil the one millionth concrete sleeper laid by the Southern Improvement Alliance (SIA) which highlights the resurgence in freight rail in Australia.

Some \$400 million is being invested in replacing wooden and steel sleepers on the Melbourne-Sydney-Brisbane rail corridor with around 2.25 million new concrete sleepers.



David Marchant said the unveiling of the one millionth concrete sleeper on the Sydney to Melbourne corridor showcased the upgrade of the Melbourne-Sydney-Brisbane rail line, which included new passing lanes and loops and signal upgrades.

“Once the re-sleepering, additional passing lanes, loops and signalling upgrades are completed, ARTC will be able to offer the freight industry transit times as low as 10 hours 40 minutes between Sydney and Melbourne and 15 hours 35 minutes between Sydney and Brisbane.”



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**AUSTRALIA'S  
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ISSN 1327-418X

Print Post Approved 349069/00099

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PUBLISHED JANUARY, APRIL, JULY AND OCTOBER

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