

From the Editor

It has been some four years in coming, but at last the sale of National Rail, jointly with FreightCorp, appears to be well and truly under way. Indicative Expressions of Interest closed on 18 September with four groups believed to have registered their interest for the combined business.

There are few surprises in the line-up of prospective bidders, other than it is probably a bit thinner than the Federal and NSW Governments had hoped for. Diversified transport groups Toll and Lang have formed a partnership to make joint bid, which they claim will operate as a stand alone rail operator, with no split up of the various operating components.

Private rail operators Australian Railroad Group and Freight Australia have both opted to go-it-alone while rail newcomer Linfox has teamed with infrastructure group Thiess and GrainCorp to form a consortium.

Regardless of who is the successful bidder, one thing is for certain and that is that the railway landscape in Australia will be vastly different a year from now. The post-sale permutations are endless as the successful bidder comes under competitive pressure from those that are unsuccessful, and customers start to seek alternatives to dealing with a monopoly operator.

There are several concerns in regard to the sale that have yet to be addressed. One is the reluctance of the Commonwealth to fund long overdue infrastructure upgrades. It is hoped that by selling its shareholding in National Rail the Commonwealth is not seeking to eventually absolve itself from any future involvement in the industry. Some commitment to the ARTC Track Audit would probably go some way to generating a bit more enthusiasm into the sale.

Another issue and one that is unlikely to attract much political attention, is the potential loss of the technical expertise and innovation that has characterised the government owned rail systems in recent decades.

While in no way belittling the efforts of certain individuals working with the new breed of private operators, these

companies have concentrated more on improving sound operating practices rather than on technological advancement.

In a number of areas National Rail has been an industry leader in adopting new technology and applying innovation. This is especially true in the areas of rolling stock design and fleet management. The introduction of a large, single, all purpose fleet of locomotives, capable of coast to coast operation was a major achievement along with large production runs of purpose built, intermodal wagons and new design wagons for its steel business. It has also been a leader in the development of integrated management and reporting information systems.

The recent establishment of the Cooperative Research Centre for Railway Engineering and Technologies with Federal Government funding assistance will hopefully go some way to addressing the potential loss of expertise. It is also important that the new owner of the combined National Rail/ FreightCorp business also recognises the need for technological innovation in enhancing their business and the rail industry in general.

Mark Carter

POINT OF VIEW

by Max Michell

Just imagine for a moment the following media statement:

"The Minister for Transport today announced that plans are being drawn up to replace the heavily graded and winding highway over the Ballyhoo Range with a new divided freeway standard bypass. The new road would avoid the worst of the range and would be aligned so that speed would be unrestricted over its full length.

The Minister stated that the go ahead for this project would depend on funding, and particularly coming to agreement with commercial users. He indicated that the government would fund one lane each way with adequate formation for up to 4 tonnes Gross Vehicle Mass (GVM). The remaining two lanes, and formation to upgrade the initial two to 45

tonnes GVM, would be dependent on the government reaching agreement for an industry funded package for that aspect of the project. In the absence of agreement the new road would not go ahead. The government and council of road users will meet tomorrow to start negotiations.

The Minister indicated that if agreement could not be reached the old road would remain, but a curfew would be placed on heavy road users running over the winding section of the highway, reflecting its limited capacity and the priority that the government wanted to give to private motorists."

It is most unlikely that we will ever see such a media release, but in the context of our own industry the same issues are symptomatic of the problems that we have created for ourselves in this modern supposedly competitive world. Which brings me, in a somewhat obscure way, to the issue of open access.

Open access originated in Scandinavia and has spread in a somewhat desultory way to a number of countries including Britain and Australia. It has not spread to the USA, Canada, South America, South Africa or Russia, all of which are major rail freight operators. Britain has gone furthest with their version of open access with the privatised Railtrack providing infrastructure for more than 20 passenger franchisees and around four freight operators. Recent events in that country have uncovered a rather unfortunate situation where the 'today' cost of delaying trains has had priority over the 'tomorrow' cost of maintaining a fully fit for purpose railway. The consequence has been that eventually 'tomorrow' became 'today', resulting in loss of life followed inevitably by massive disruption and cost blowouts over the whole network. There is now some question over the long-term viability of Railtrack, and certainly over the model that the British have used up to date.

While the British experience is unique to that country there are a number of disquieting issues that are of relevance to every open access regime. Key among these must be the objectives that the open access regime is intended to meet. Is it competition, profit, efficiency or what and more importantly at what level? If profit is the objective, and presumably as much so for the track authority as the operators, are the 'rules' structured so that all players have an equal chance? Or are the monopoly powers of the track provider more powerful than the competitive powers of the operators? If competition is the objective exactly who or what is the competition with? Is it between rail operators, between rail track providers and operators, or is it between all transport providers? Once again are the structural arrangements appropriate? If efficiency is the objective, then efficiency for whom? I can be extremely efficient in my own backyard, but it may be

extraordinarily inefficient for the nation. Just look at things like land salinity or waste disposal to see the outcome of sub-optimised objectives.

In the USA there is a war of words (and influence) raging over the issue of open access. In the light of some pretty ordinary experiences following recent mega-mergers a number of significant and influential rail users are arguing for an open access regime to allow them more 'competitive' access to the rail network. On the other hand the US railroad industry is vehemently opposed to such a move and is marshalling its big guns to lobby for the status quo. Henry Posner III, Chairman of Railroad Development Corporation (a regional railroad that has had past interest in acquiring assets in Australia), in an article in the April 2001 TRAINS magazine highlighted a number of the issues that strike fear into the heart of US railroads. Notable are:

- Open access doesn't take trucks off highways; it takes existing railway business and hauls it with someone else's locomotives.
- Operational control is given over to the hands of a third party, the regulator. The (operator) has no control over the infrastructure, thus no control over the quality of its service.
- The fundamental thrust of open access is transfer of value from the operator to the customer to the point that the rail business may not contain any value at all.
- If most of the value goes to the customer and little remains for the rail operator, why invest in railways?

In one form or another all these issues have been raised in this country in relation to one or other of the several access providers.

Australia is relatively unique in that it is providing open access over what are predominantly freight railways. In just about every jurisdiction where open access is in place it is for predominantly passenger railways. We are therefore something of a stalking horse for the wider application of open access, and not just for our own immediate sake but for the wider application or rebuttal of the concept for other freight railways. We already have a mixed bag of structural arrangements, from the entirely separate track provider such as ARTC and RIC (after deducting the political baggage that the latter carries) to the vertically integrated railway with 'paper' walls such as QR and Australian Railroad Group/WestNet Rail.

There are any number of examples where competition policy has produced a contrary outcome – look at the airline mess, or the power price hikes in South Australia for instance. Competition policy is imperfect and therefore is not, on its own, able to be the defining criteria for fully successful open access. The track access arrangements

themselves are far from perfect, and in some cases are further burdened with self-imposed inherited cultural baggage that is akin to lead in the saddlebag. Rather than get into the details (and reduce my career opportunities) it would be infinitely more useful to look at what we should be trying to achieve from the existing Australian arrangements. These could be simply categorised as

- Create sustainable wealth for the rail industry as a whole, not just part of it.
- Produce continuing efficiency for land transport as a whole – a transport focus rather than rail focus.
- Attract investment to sustain and enhance that efficiency. Investment imbalance is probably the major land transport issue right now.
- Encourage continuous improvement in rail including innovation and experimentation.
- Be based on competition across all modes of transport, rather than sectionally within rail.
- Be based on increasing use of rail up to the point of optimised 'national efficiency'.

In the end it should be outcomes at a national level that are the true measures of open access, not the profit and loss statements and balance sheets of track providers or individual operators. If we are to succeed we need to take the negative issues raised by Henry Posner (and others) and the awful example of Railtrack and either neutralize those aspects, or even better turn them to advantage within our own domain. The true measure of success of the Australian access regime will be international (not necessarily universal) acceptance of the Australian model. Failure to achieve that will flag that, at the very least, we are not doing the best we can with our rail network.

RTSA Government Relations Committee

The RTSA has continued its interest in mainline track upgrades, as follows:

1. Supporting the implementation of the main finding of the Australian Rail Track Corporation (ARTC) National Track Audit - that in view of the economic benefits (BCR = 3.2) that the recommended \$507 million optimal program proceed. Most of this program (\$398 million) is recommended for Melbourne - Sydney - Brisbane.

A Government announcement of this investment would have gone very well with the statement on August 24 of the sale of National Rail and Freight Corp. We join with the ARA (their media release of 3 September) in

supporting the ARTC track audit scope of works. RTSA has produced a special brochure to complement the earlier 'Fix the rails' series. The new brochure is enclosed with this newsletter

2. An East Coast Very High Speed Train Scoping Study is now under way. The RTSA has sought a commitment that the option of a T-Line between Goulburn and Yass with a spur to North Canberra will be examined. The T line was proposed in 1981 by the IE Aust National Committee on Railway Engineering (NCRE). The T line coupled with tilt trains, and other track upgrades (big by NSW rail standards, but small by Hume Highway upgrade standards) could see 2.5 hour Sydney - Canberra and 5 hour Melbourne - Canberra train services. As shown by the Queensland tilt train, intermediate regional centres would be big winners.

Since it started operations in November 1998, the Queensland tilt train has now carried over 800,000 passengers. Like the new Acela tilt trains linking Boston, New York and Washington it is a resounding success.

3. Whilst on tilt trains and mainline track upgrades, the RTSA has asked the Queensland Government to expedite Caboolture to Landsborough duplication and track straightening. This single line, with intermediate crossing loops, is now operating at capacity. Indeed, demand for Caboolture to Nambour trains has forced QR to put on 12 bus services each way each weekday. We have also asked for other selected track upgrades between Gympie and Townsville, including kilometre 218 with a 40 km/hr curve, and at Aminungo near Mackay.

4. A brief submission has been made to the Fuel Tax inquiry enclosing our 2001 Pre Budget submission and supporting fuel taxes to cover land transport external costs, with some returned for urban rail and intercity track upgrades. This submission is on the RTSA web site.

Philip Laird

Chair Government Relations Committee



The RTSA's own dedicated web site.

Regularly updated with news of RTSA activities

<http://www.rtsa.com.au>

CORE2002 Wollongong November 2002

Current information can be found at

<http://www.core2002.on.net>

High Speed Scoping Study

The following is an edited version of an update on progress (to July) on the East Coast Very High Speed Train Scoping Study from the Department of Transport and Regional Services (DOTRS) web site.

www.dynamic.dotrs.gov.au/land/HighSpeedTrain/ScopingStudy.cfm

In December 2000 the Commonwealth announced that it would conduct a Scoping Study to examine options for an east coast Very High Speed Train (VHST) network, linking Melbourne, Sydney and Brisbane, together with Canberra, and major regional and coastal centres along the route. The Scoping Study is being managed by the High Speed Train Branch within DOTRS.

The goals of the Scoping Study are:

- i** To investigate at a broad and balanced level, and from an national interest point of view, the range of key economic and social factors involved in the construction and operation of an east coast very high speed train network;
- ii** To appropriately engage key stakeholders and potential partners (industry, other governments and the community);
- iii** To develop from **i** and **ii** a small number of practical scenarios for the possible construction and operation of an east coast very high speed train network and to assess the costs, benefits and funding options for each scenario;
- iv** To provide indicative interim reports and develop a report for government consideration by December 2002, summarising the results of the study and canvassing options for Commonwealth action.

The Scoping Study is being undertaken in cooperation with NSW, Queensland, Victoria and the ACT.

Phase 1 of the Scoping Study has now begun and will be a Preliminary Study conducted over approximately 3 months by Arup-TMG International. Phase 2 will be commissioned from late 2001.

Parallel with Phase 1, a number of consultation mechanisms have been or are currently being established to ensure that the views of key stakeholders can be incorporated. In addition to a State and Territory Government Reference Group consisting of representatives of the governments of the ACT, NSW, Queensland and Victoria, there is also a Local Government Reference Group. Industry consultations are planned during the second half of 2001. A community information and relations strategy is also being developed.

Rail Projects – Benefit/ Cost Manual

In 1999, the RTSA commissioned a report, "Comparative Transport Investment Multiplier Effects: Road/Rail" by Margaret Starrs. The report noted in part:

"There is no manual for the evaluation of rail projects as there is for road projects. A consistent procedure across road and rail or at least information on the details of the methods used (eg in Booz. Allen & Hamilton) are necessary to make sensible comparisons of relative investments. An important component of any manual would be unit costs of externalities (noise, air pollution, greenhouse gases) and/or a procedure for their valuation to ensure they are included on a consistent basis in economic evaluations."

The RTSA has continued to seek the support of public rail systems and track owners for the publication of an Australian wide Benefit Cost Manual for rail and/or urban public transport (UPT) projects that would:

- include guidelines for estimating the wider benefits of rail and/ or UPT projects including reduction of road system costs, road transport externalities, and greenhouse gases.
- be similar in format to the 1996 Austroads Benefit Cost Manual.

The matter was referred to the Rail Group of the Standing Committee on Transport in 1999, and again in 2001. RTSA looks forward to progressing this issue, along with encouraging all rail systems concerned with track quality to formulate detailed advanced planning for track upgrades.

We should not forget the words of Mr Ron Christie, who when addressing the Sydney Chapter of the RTSA in May 2001, mentioned the Roads and Traffic Authority of NSW or RTA. Mr Christie's career included Deputy Chief Executive of State Rail, and, Chief Executive of the RTA.

"The RTA has developed, over a long period of time, a comprehensive planning group that has successfully implemented many projects compared to that of the various Rail Authorities."

CORE2002 – Call for Papers

The Call for Papers for CORE2002 has closed. If anyone still has an abstract in preparation would they please immediately contact the Technical Review Secretariat on 08 8261 2292 or

e-mail - techrev@core2002.on.net

to discuss acceptance.

Chapter Reports

Western Australia

The WA RTSA technical meeting on 23 August received a presentation by Mr. Howard Revell on his attendance at the conference of Signalling Engineers in Lisbon this year. Eighteen people attended this meeting.

This was an interesting and informative lecture, which gave us a visitor's view of Lisbon and beyond as well as much detail of local railway operations.

Passengers on the Lisbon network ride in comfort on heavy rail with a very broad gauge of 5 feet 6 inches. Light rail is also in service and being extended based on 3 feet 3 inch (one metre) gauge tracks, with trams controlled by on board computers. These trams have a sophisticated system of failure control levels from driving by lap-top right down to last ditch manual operation.

Howard also showed us current and future developments in signalling and train control. In part this illustrated sensors between rails which transmit information regarding speed, distance, grade or other specifics as required. Then the future, with smart cards fitted to each consist and monitored by radio LAN, and GPS technology for location control.

Our thanks to Howard for his excellent presentation.

All members are reminded to maintain their correct e-mail address with the Institution office to ensure advice of future meetings is given. Any further information regarding matters associated with the WA Group should be forwarded to the Secretary, Mr Bill Singleton (phone 9281 6247).

Meetings

The October meeting will be held at 5.30 pm for 6.00 pm Tuesday 9th October - "The New Prospector Rail Cars" - a presentation by Mr Brian Duncan (Goninans).

Monday 29 October - 6pm "Changing Trains" The George Stephenson Lecture on Engineering in train design. Mr Tony Roche (This is a Mechanical Panel and IMechE joint meeting but all RTSA members are invited)

Victoria & Tasmania

Our July meeting was well attended (especially considering the miserable weather). Presentations by Westinghouse Brakes and Wabtec were followed by forum discussion of ECP braking systems, generally

regarded as a significant step forward in railway braking technology, especially for long, unit trains.

The Annual Dinner Meeting was held on September 7 at the recently renovated Savoy Park Plaza Hotel. Nearly 60 attended (including, for the first time, partners). The Guest Speaker was Mr. Tim Fischer, Federal Member for Farrer and former Leader of the National Party, Minister for Trade and Deputy Prime Minister. Mr. Fischer mixed informally with members and guests, and spoke enthusiastically about recent progress and future roles for railways in Australia. He spoke of railway gauges, the VFT proposal and infrastructure needs. All who attended enjoyed the evening.

On September 12, RTSA members have been invited to attend a joint meeting with the IRSE for a presentation on the new Connex Trains, currently under construction. This will be followed by a report on the recent International Signalling Convention in Lisbon, attended by Richard Bell.

David Ferris
Chapter Chair

New South Wales

Engineering Passport Scheme

As part of a demonstration in Australia of the Passport Scheme currently in operation in the U.K., a Graduate Engineer from Interfleet Technology visited MainTrain in July and worked on a number of projects relating to the Sydney Suburban Cars. He enjoyed getting his hands dirty and he also worked in other locations prior to his return to England.

Further opportunities for industry placement will arise particularly with the commencement of the Co-operative Research Centre for Rail Engineering where graduates will be required to gain experience in a number of companies involved with the rail industry. We are pressing the Institution to commence and administer a nationwide Passport Scheme in order to address the desperate need to train more Engineers for the Industry.

Meetings

Brian Duncan from UnitedGoninan at our July meeting gave us an insight into the design of the new Prospector railcars for Western Australia.

A CAD presentation and photographs of the mock-up of the railcars were featured and the detailed design considerations required for all passenger, crew and equipment requirements were graphically illustrated.

The Passenger Information System now installed on major Sydney Rail Stations and commissioned in time for the Olympic Games was shown at our joint meeting with the IRSE in August by Alan Topfer of RIC. The project and implementation was a major project undertaken by RSA and various subcontractors and the displays have met with wide acceptance from the travelling public for their clarity and comprehensive information provided.

On 25 September our joint meeting with the Civil and Structural Panel will cover the new Parramatta to Chatswood rail link currently being planned for commencement next year. The link which will increase the long-term capacity of the system and ease congestion on the Western Line will be presented by the Project Director, John Barraclough.

Westinghouse Train Braking Systems will be featured by Lindsay Day at our 18 October meeting and at our joint IRSE meeting in November, Raymond Black of Bombardier, will present Interflow, an advanced train control and signalling system.

The planned Study Tour of Newcastle has been postponed until next year.

Our meetings are held at the Harricks Auditorium, Institution of Engineers, Milsons Point, North Sydney, 5.30pm for 6.00pm.

Meeting Videos

Some members unable to attend meetings have suggested the videoing of presentations for distribution and showing to other meetings.

We are seeking comment and advice from any group or member who has had experience with the recording of meetings.

Please contact the Sydney Division Chapter on (02) 9330 7975.

CORE 2002

The arrangements for CORE 2002 are progressing well and are on schedule. At this stage more abstracts of papers are required so all who are considering writing a paper, please email your abstracts as soon as possible, refer to the CORE 2002 web page: www.core2002.on.net for the template. We urge all members to encourage staff, colleagues, friends or themselves to submit a paper, as the CORE Conferences are arranged for members to be able to present their views to the rail industry at large, it is one way of getting your message across.

Sponsorship letters will soon be sent out so please encourage your Company to become involved. The same will of course apply to exhibition space.

We have had a welcome offer from Freight Australia to exhibit locomotives and rolling stock, and again we would like support from other Companies for Track Machines, Passenger or other Vehicles to join our static exhibition which will be held on available sidings in the Wollongong area.

This is shaping up to be a good conference, please help us to get it all together by advertising CORE 2002 on your work notice board, use the call for papers as the notice.

John Watsford

Queensland

Meetings

The scheduled technical meeting activities for the quarter involved two technical meetings and a half-day workshop; a technical meeting on 24 July, a half-day workshop on 28 August and technical meeting on 25 September.

Technical Meeting, 24 July – this meeting concerned a presentation of the newly established Cooperative Research Centre for Railway Engineering and Technology (Rail CRC) by the CEO of the research centre Dudley Roach, who coincidentally is a member of the RTSA Queensland Chapter Committee. The presentation explained the background to the approval submission, the management structure, the participants and the various project themes. This presentation was ‘video streamed’ – this is an initiative of the IEAust Queensland Division. The presentation can be “viewed” from the division’s Web page <http://qld.ieaust.org.au/jetspeed/> The meeting was attended by 33 members and guests.

This meeting also included a Special General Meeting to consider and vote on the proposed changes to the RTSA Constitution relating the change from calendar year to fiscal year. The proposed changes were unanimously supported.

Half-Day Workshop, 28 August – this workshop was the major activity of the quarter. Following on the joint panel session at the 7th International Heavy Haul Conference and AusRail 2001 concerning vertical separation where the jury is still very much out as to the realisation of the perceived benefits, and the third party access issues that are still evolving in Queensland, the Queensland Chapter facilitated a workshop to highlight and explain the issues. The theme of the workshop ‘*Is above rail competition good for Queensland?*’ was selected to provoke robust discussion given the different perspectives of the invited panellists. The panellists were Paul Bugler, Manager New Business, FreightCorp, Steve Cantwell, Group

National AGM

National Convention Centre, Canberra
12 November 2001

(see advertisement back page)

General Manager Network Access, QR and Euan Morton, Principle Network Economics Consulting Group (former Director, Queensland Competition Authority). The panel session was moderated by Martin Baggott, Director Railway Management Services.

QR's proposed undertaking for third party operator access to its infrastructure was rejected by the Queensland Competition Authority (QCA). QR is currently responding to QCA's proposal. If legislation is such that if QR and the QCA can not agree on the third party operator access regime, then QCA can force QR to adopt the QCA's proposal. There was consensus that this would be resolved in the near future.

It was clear that despite the good intentions of competition, the regulatory regime would not necessarily lead to growth in rail's share of the total land transport task. Investment in new infrastructure is now more dependent on the real likely rate of return from its utilisation by operators rather than the speculative rate of return. It is unlikely that Queensland would see the level of investment in rail infrastructure that it has over the last 20 years unless there are operators who have the business to pay for it. In Queensland, the narrow track gauge is a barrier to competition – it is difficult to readily procure heavy haul rolling stock.

The attendance at the workshop was somewhat disappointing with only 35 members and guests. The "electronic" advertising by the IEAust Queensland Division did have an impact on the attendance. Electronic registration was a deterrent – the general RTSA membership it seems has not yet gotten comfortable with the World Wide Web.

Technical Meeting 25 September, - at the time of writing this workshop was yet to occur. The presentation concerns the Rail Industry Shiftwork and Workload Study being undertaken by the Centre of Applied Behavioural Science (formerly known as the Centre for Sleep Research) located at the University of South Australia. The presenter will be Frank Hussey, a consultant working with centre (formerly Transport Manager, National Rail Corporation and locomotive driver).

The program and topics to up to November 30 are as follows:

23-Oct-01 Site Visit to QR's Redbank Workshops – Re-engineering the Brisbane EMU Fleet"– 18:00 at QR's Redbank Workshops, Weedman Street, Redbank

27-Nov-01 To be advised.

Please note that due to unforeseen circumstances, the date, time or venue may need to change. Please contact the Queensland Chapter either through the Queensland Division Office for specific details e.g. time and venue or via the RTSA Web Site

<http://www.rtsa.com.au/qldchapter.shtml>

The technical meeting calendar for 2002 has yet to be developed. Typically the technical meetings are held on the 4th Tuesday of the month from February to November. This may vary depending on availability of presenters.

Undergraduate Project Competition

To encourage undergraduates to consider a career in the rail industry the Queensland Chapter has proposed a scheme whereby rail related projects undertaken by undergraduates would be eligible for an award. It is also intended that the scheme would also encourage competition between participating tertiary institutions. Letters to all Queensland tertiary institutions offering engineering were sent mid May 2001. The response to date however has not been encouraging, with only one response received from Central Queensland University. A very disappointing response to say the least.

Airtrain having a rough ride

Responding to a question on notice (in Parliament, Transport Minister) Mr Bredhauer conceded that Brisbane's "Airtrain" service was performing below expectations. He said that Airtrain managers were disappointed due to patronage being well below that average forecast of 6000 a day. In August, rail staff estimated as few as 6000 passengers a week were using the service.

Source: The Courier Mail September 12, 2001

\$10 billion for super rail project

A ceremony on the banks of the MacIntyre River near Goondiwindi on October 26, 2001 will signal the start of the \$10 billion, 4500km standard gauge rail link between Melbourne and Darwin via inland Queensland with spurs to major ports. Only the MacIntyre River separates the NSW town of Boggabilla from Carrington a tiny Queensland spot on the line between Inglewood and Goondiwindi. The ceremony will take place where the

bridge over the MacIntyre River will be built to enable the linking of the 15km gap between Boggabilla and Carrington.

Source: *The Sunday Mail* September 2, 2001

Tilt train five hours slower and overdue

According to the State Government, the Brisbane to Cairns diesel tilt train is more than a year behind schedule, millions of dollars over budget and the high-speed trip will now take 5 hours longer than expected.

The original expected cost of \$102 million for the rolling stock and maintenance facilities, with a further \$20 million for track upgrade has now blown out \$138 million for rolling stock and associated maintenance facilities i.e. an increase of \$36 million according to Transport Minister Mr Bredhauer. He also stated that no track upgrades would be necessary. Not only has the cost of the rolling stock blown out, but also the original two 10 car trains have each been reduced to 9 car trains.

Mr Bredhauer also admitted that the travel time had increased from 21 hours to 26 hours still some 5 hours improvement on the current passenger train services.

In September 1998, Mr Bredhauer told *The Courier Mail* that the first services would be running late this year. Yesterday he said that the 2001 timetable had been for the delivery of the trains, with the first services scheduled for next year. Now, due to construction delays, the trains will be delivered next year, and carry their first passengers in 2003. No explanation for this further delay was provided by Mr Bredhauer.

Mr Bredhauer did say that the Government accepted the cost increase and added, "It (the Brisbane to Rockhampton tilt train service) has proven to be a major boost to regional economies between Brisbane and Rockhampton."

Source: *The Courier Mail*, July 31, 2001

What's On

The Federation Steam Train will steam through the Darling Downs on October 16-27 and tickets are on sale now.

The train begins its journey in Brisbane and follows the tracks of the Father of Federation, Sir Henry Parkes, through the Downs to the border town of Wallangarra, where Parkes changed trains on his way to Tenterfield to deliver the Tenterfield Oration.

The restored heritage fleet of carriages will make 33 stops on its journey and it can be joined at any of these during the 11-day trip.

Tickets are limited and can be bought from Harvey World Travel, Stanthorpe, for \$5.50 a person one way.

Information: Tickets (07) 4681 2144 or for more general details check www.stanthorpefederation.cjb.net.

Source: *The Courier Mail Outdoors*, September 14, 2001

George Nikandros

South Australia

Pichi Richi Site Visit

The Pichi Richi railway extension to Port Augusta which involved constructing several kilometres of 3'6" gauge track alongside the ARTC mainline, was officially opened on 15 September. Advice has been received that while the rail works will be complete by the time of our planned visit, level crossing works will be delayed, resulting in postponement of regular train running until around Easter 2002. Consequently the proposed RTSA/PWI joint visit has been postponed until normal services are running sometime during April or May being the most likely.

Alice Darwin Update

The Darwin rail project is gathering pace with over 160 km of clearing completed by the end of August along with about 70 km of formation. Culvert works are expected to start any day while the Katherine sleeper plant will be commissioned in November. Tennant Creek sleeper plant will follow a month later, with full production from both plants expected by Feb 2002. Austrak have contracted Adelaide-Brighton Cement and OneSteel to supply cement and reinforcing wires respectively. Shell and NT Fuels have been awarded the contract for supply and delivery of 20 million litres of fuels and 0.1 million litres of lubricants per year for the next 2.5 years. That volume is equivalent to a rail tank car per day for the next 900 days – although it will be interesting if supply is on rail through Alice or by ship through Darwin. It is after all a railway that is being built!

The Adrail Internet site, www.adrail.com.au, has details of contracts let and pending, updated on the first and third Monday of each month. The site www.nt.gov.au/railway is worth watching as well.

Obituary - Dr Don Williams

'Dr. Don' as Don Williams was commonly known during his days at AN, passed away suddenly on 7 August last, not long after taking up a management role with the Darwin railway commercial freight arm FreightLink. Don was by birth a West Australian and initially began his rail career with WAGR (as it then was) before heading overseas to undertake advanced studies where he ultimately gained his doctorate name. Don's speciality

included engineering design of bulk carrier ships and box girder bridges, and this writer remembers the pride Don had in his role in reconstructing the WestGate bridge in Melbourne after its disastrous collapse.

Don returned to the rail fold in the formative days of Australian National as AGM Engineering and Planning, but within two years, by 1979, was Chief Executive. AN, an amalgam of the relatively efficient Commonwealth Railways with two 'basket case' state systems in SA and Tasmania, had the dual problem of combining and standardising the activities of its constituents, while at the same time getting the new enterprise onto an even (and break even) financial keel. Don set a break even agenda that to those outside his immediate domain looked quite impossible, but in the time frame he set the result was indeed achieved. He surrounded himself with some innovative and visionary people, and in so doing amplified his own ability to achieve the results that he did. In the mid 80's AN was a clear leader in Australian government rail management and it is for this perhaps that he is most remembered. After time as CEO of the Submarine Corporation in a quiet way Don came back to the rail industry in about 1997, joining Kinhill to work for the Darwin railway project, particularly on the operations and design side. His appointment as Chief Executive of the FreightLink group, a pivotal part of ADrail responsible for literally all the income side of the consortium's business, was a statement of faith in Don's past record as a focussed and successful railway manager.

Don was a distinctive individual, not so much in his appearance as his voice and mannerisms. In much the same way that Gough Whitlam stood out in this regard so did Don. A measured rate of speaking, not machine gun as so many now seem to be, but always to the point, erudite and focussed.

Vale Don Williams.

This is an edited version of the Obituary prepared for the SA Chapter Newsletter by Max Michell

IE Aust Transport Branch Meeting

Thursday 4 October at 17.30 (5.30pm)

A special presentation by Franco Moretti from ADrail entitled "A progress report on the design and construction of the Alice Springs-Darwin Railway Project". The technical presentation will be from 18.00 (6pm) at 11 Bagot Street North Adelaide with light refreshments from 17.30.

The Transport Branch AGM will precede this meeting at 16.30. All interested RTSA members are invited to attend.

Cooperative Research Centre for Railway Engineering and Technologies

Rail CRC – Industry Forum Report

The Rail CRC started operations on 1 July 2001 and the agreement with the Commonwealth Government for the establishment of the Rail CRC under AusIndustry's Cooperative Research Centres Program was signed on 12 September. The Rail CRC will be funded for seven years through the support of the industry and research partners and the \$11.2m grant from the Commonwealth.

On 14 August an industry forum was held in Brisbane for representatives of industries and research establishments either participating in or interested in the future work of the newly formed Cooperative Research Centre for Railway Engineering and Technologies.

John Hearsch, Deputy Chairman of the Board welcomed attendees and announced the creation of the Rail CRC to the attendees. Dudley Roach outlined the structure of the CRC, its mission and goals. The research program will be overseen by the Research Management Committee comprising the six research theme leaders, the six Industry Advisors associated with each theme, the Research Director and Industry Liaison Director. The latter two positions together with the CEO and Business manager form the Executive Management Group.

Industry Presentations

To set the scene for the days activities, four rail industry representatives were invited to briefly address the forum and outline the major challenges facing their section of the industry and areas where significant benefits could be gained through the application of research efforts of the CRC.

- Mike Houston, General Manager Access, Freight Australia outlined the key areas where the general freight railways were looking for cost reductions to improve business prospects.
- Ian Domleo, Strategic Planner, Australian Rail Track Corporation spoke of the challenges facing the rail track owners looking to provide access at rates that will enhance the competitiveness of rail.
- Chris Warnock, General Manager, Citytrain, QR spoke of the issues facing operators of urban networks and the expectations of passengers if rail transport was to be an attractive option.
- David George, Group General Manager, QR's Coal and Freight Services spoke on the issues facing the heavy haul rail sector.

The audience could draw interesting comparisons. While heavy haul operators tend to focus on achieving maximum utilisation of their large capital investment, general freight operators tends to focus on operating costs and urban operators are particularly concerned with operational performance, on time, etc. The track owner has the problem of meeting the operational requirements of all three sectors made more difficult when corridors may be shared by more than one type of business.

Workshop Session

Delegates attended one of six facilitated workshops associated with the work of each research team. The first activity was a more expansive address by the research theme leader on the proposed work of each theme bearing in mind that the research direction of a CRC must be industry driven and that this workshop was to assist in formulating the research program. A variety of exercises were undertaken by each group in ranking the current levels of research, nominating research that they were aware of, nominating a list of activities called "Best Imaginable Research" and selecting the top five priorities for each theme. Many of the suggested projects could be grouped into broad categories.

Smart Train Intelligent Systems

The focus was on train handling, train protection, and optimisation for the train and the rail system.

Innovative / Automated Track Maintenance And Upgrading Technologies

Projects focused around a better understanding of the track structure and its behaviour and degradation under load. This group also wants to optimise track maintenance with respect to asset management, operations and safety. There was considerable interest in use of new materials and processes to reduce both construction and maintenance costs. There are significant synergies with the work of Theme 5.

Optimal Traffic Control and Scheduling

Delegates envisaged significant benefits from integrated scheduling systems for long haul networks and the ability to undertake dynamic rescheduling on long hauls and metropolitan systems when the need arises. In-cab advice systems were seen as a way of improving train operation and reducing energy consumption. This approach compliments the Smart Train of Theme 1 and the need for uniform communication standards for Australian rail networks is also identified in Theme 4.

Systems and Standards for Rail Management

It was apparent that despite some differences between rail systems, uniform standards for issues ranging from E-Commerce to condition monitoring of rolling stock would

benefit the industry. This Theme also determined the importance of management tools to aid resource scheduling. Another item for consideration is the development of a manual for assessment of major land transport projects.

New Materials and Components for Railways

The workshop strongly supported continuing research in the area of interaction between rolling stock and the track structure and ways to improve the life and lower the total cost of these assets. As in Theme 2, new material and processes were thought to hold the key to benefits. This group also urged the establishment of strong global links with other railways and rail research groups.

Industry Skills Development

It was obvious that the railway industry is very concerned about the future availability of skilled staff. Nationally accredited and accepted training at all levels were seen as important. Through the work of these identified research themes, the technical developments of the CRC will be transferred to industry. Through the development of suitable course options the profit of the rail industry as a career should be improved and there may be opportunities for international marketing of courses.

From the lists of ideas, proposals, projects and concepts generated it was clear to the CRC management that the Forum has in effect endorsed the original proposed program while at the same time proving invaluable in adding substantially to the original ideas and assisting greatly in the setting of priorities.

David Schonfeld

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Contributions, especially short technical papers, are always most welcome - ideally they should be 500 to 750 words in length.

Deadline for next Newsletter - 1 December 2001

Railway Materials Seminars

Late last year, the CE2 Committee of Standards Australia conducted a series of presentations in five state capitals. The aim was to help railway engineering practitioners to be aware of the standards, what they are and the technical issues they cover. Presentations mainly focussed on the existing suite of Standards on Railway Track Materials. Besides describing the content of these Standards, a review of the work in progress was also given.

Support from the Railway Technical Society of Australasia enabled the presentations to be taken to a wider audience and thus to better spread the information within the industry.

The recently revised Steel rail performance based Standard was covered in detail as well as concrete, steel and timber sleepers. Other related Standards included those on fishplates, sleeper plates, rail anchors, spikes and other fastening components, insulated joint assemblies and railway ballast. Nine of the 14 in the suite are less than 5 years old and the changes needed to be explained.

One of the main aspects needing explanation was the content and use of performance based Standards. Those Standards published within the last three years (7) had been revised into performance based format. All contractual type requirements had been removed allowing more flexibility for compliance. These Standards are purely technical documents that describe the performance of the product and give a deemed-to-satisfy solution.

Current projects were presented, covering new Standards on screw spikes, resilient fastenings and welding of rails. The current state of progress was presented and the invitation made for suggestions or proposed content for the new Standards.

The tour was very successful with a total of 165 attendees in 5 state capitals. Presenters included Chairman John Broadley and the Projects Manager Richard Weller who travelled to all states, and Richard Brown who presented in three cities. Julia Prudhoe, Ric Lewtas, Bruce Makin, Rob Schweiger and Steve Townsend also gave presentations. Many questions were asked and suggestions given for future work by the committee.

The committee was pleased to play a part in the RTSA's initiatives for continuing education in the railway industry.

John Broadley, Standards Sub-Committee



The Railway Technical Society of Australasia

NE Corridor Upgrade wins Award

Australian Rail Track Corporation was recently awarded the Institution of Engineers Australia (SA Division) Award for Engineering Excellence in Infrastructure for its project to rehabilitate 320 kilometres of the interstate rail network between Melbourne and Albury. The award attracted stiff competition, with projects such as the Pelican Point Power Station and the Hindmarsh Island Bridge also up for awards.

According to the judging panel, the project demonstrated the potential to extend the life of the whole of the interstate rail network at reasonable cost with economic, social and environmental benefits to the community. The budget was tight and sound engineering practices were demonstrated.

ARTC Managing Director, David Marchant said, "I am delighted that ARTC has won this prestigious award. There is obviously a need for us to continue to develop innovative and improved engineering and management solutions for the interstate rail network."

On this strategic rail corridor a combination of poor track alignments and track condition have adversely impacted rail transit times, reliability and operating costs. This has been a major factor in the low market share held by rail on the Melbourne – Sydney – Brisbane freight corridor.

David Marchant continued, "The challenge was to develop a cost-effective solution to rehabilitation of a critical section of the Australian interstate rail network and to dramatically increase the load carrying capacity and speeds of trains on the line to Australian Transport Council (ATC) standards."

"However, the traditional engineering solution involved a near complete rebuild of the line at a cost in the order of \$100m to \$130m, considerably in excess of the market's capacity to pay. It was therefore clear that an entirely different strategy would be required."

The result was the development of a *five step holistic engineering approach* to address the condition of the rail surface and the modulus of the track and formation with a focus on improving the capacity and remaining life of the various track components.

The final project cost was \$30.3 million, around 25 per cent of the original estimate and funded by ARTC and the Commonwealth's Rail Infrastructure Fund.

Following completion of the project, the track is now able to meet ATC standards for speeds and axle loads on the interstate rail network.

ARA Seeks Better Deal For Rail (.....and Road!)

In the lead up to the Federal Election, the Australasian Railway Association (ARA) has launched a campaign arguing for better rail investment. A television commercial is the first stage of a public education campaign designed to explain the ARA's plan for better roads and better rail.

ARA Executive Director John Kirk said, "Government underfunding in rail is letting the nation down. Our roads also need help. They are congested, expensive to maintain, polluted and dangerous, putting pressure on truck drivers and motorists. But there is a way of easing the pressure on our roads, and that is by investing in rail."

The ARA's plan for better roads and better rail requires:

- full funding of the Australian Rail Track Corporation's \$507 million Interstate Rail Network Audit
- the abolition of the GST on public transport, and
- federal funding for urban rail projects

The plan has been put in a letter to all the major political parties, but unfortunately they have failed to grasp the real benefits it can bring to the Australian community.

"Australia can no longer afford the \$30 billion it costs each year for road crash trauma, road damage, traffic congestion, air and noise pollution. Our extensive research shows that the vast majority of voters want to see a lot more investment in rail infrastructure in both regional and urban areas," said Mr Kirk.

Further stages of the campaign will be announced, including a campaign specifically targeting the GST on public transport. The ARA is in the process of finalising a list of marginal seats that will be targeted.

NOTICE OF AGM

Where: National Convention Centre, Canberra

When: Monday 12th November, 2001

Time: 5:30pm till 6:30pm

All members and interested persons are invited along to the meeting.

The meeting will consider the work of the RTSA over the previous year and present the annual reports of the various committees and office bearers.

The incoming national office bearers will also be announced at this meeting.

ELECTION for COMMITTEE

Nominations for the positions of National Treasurer and National Secretary are being sought.

If you would like to help out in these roles please send your nomination **by 12 October 2001** to:

The RTSA Committee Manager
IEAust Engineering House
11 National Circuit
Barton ACT 2600

In the event of more than one nomination for a position an election will take place.

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13th International Rail Track Conference

The Impact of Competition Policy.
How Much Further can we Push the Asset?

National Convention Centre, Canberra
11-14 November 2001

Further Details from:

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