



## Message from the President – David Bainbridge



Welcome to this edition of EnGauge. I hope that there is something for everyone to enjoy! It is rapidly approaching the end of another year and I think that, whilst it has been a challenging one for the industry as a whole, Australian rail is in a stronger position than it was at the same time last year. There is an air of optimism as the possibility of new major projects becomes a reality, for example, Sydney's NWRL and Canberra's Light Rail.

I think that, whilst we are still struggling with the low prices for iron ore and coal, more innovative solutions need to be explored and developed to provide lower cost construction and maintenance of the rail infrastructure. The series of RTAA Technical and Networking meetings has continued to focus on technology and innovation and this was no exception last week in Newcastle.

AusRAIL 2014, back in Perth, is just around the corner. This is an opportunity to meet the RTAA's Management Committee and Executive at the AGM. I look forward to lively debate, so please, join us.

As I come to end of my fourth year as President it is time to identify a successor to bring new and fresh ideas to the RTAA. Are you interested? If so please contact me and we can have a chat about transitioning in 2015.

Looking forward to seeing many friends, colleagues and new faces at AusRAIL - see you in Perth.

David Bainbridge – RTAA President

### HAVE YOUR SAY IN OUR ELECTIONS

Our 2014 Annual General Meeting (AGM) will be held during AusRAIL 2014 in Perth. We invite all members, including personal and corporate representatives, to join us on 12 November 2014 for this important meeting.

Please join us over breakfast to learn what the RTAA has accomplished over the past year and what we aim to achieve in the next. This will include an update on the Field Days Event 2015.

We especially invite new faces to join our Management Committee. This committee meets twice a year in Sydney however we encourage participation from all states and territories.

Members may assist us in the following areas:

- a) Field Days Organising Committee
- b) RTAA Technical Stream Review Panel
- c) Regional State Champion for (your state)
- d) Rail Standards Committee
- e) Frank Franklyn Award Review Committee
- f) Young Member Champion
- g) Women in Rail Champion
- h) Indigenous Communities Champion.

To register your attendance at the AGM, please contact Sandy Bull on [secretary@rtaa.org.au](mailto:secretary@rtaa.org.au) by Friday 7 November 2014. The meeting will start at 7:30 and be held in Meeting Room 12 at the Perth Convention Centre. Please download your nomination forms from our website [www.rtaa.org.au](http://www.rtaa.org.au).

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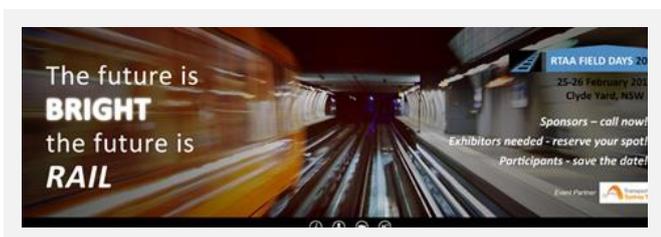
**NO TIE DINNER 29 AUGUST 2014**



Above left: Comedian – Tommy Dean right: Kathryn Crestani, 2<sup>nd</sup> place winner, Frank Franklyn Award.

Below: Rod Pomroy with Bill (RTAA Life Member A.M.) and Linda Killinger

Bottom: Jim Mahood, Barry Yardley and Allan Logan (RTAA Treasurer)



**RTAA FIELD DAYS 2015**



The 2015 Field Days Organising Committee has been overwhelmed by the strong interest in the Fettle's Shed, which offers exhibitors an opportunity to speak directly to the audience.

**This program is now fully booked with all timeslots accounted for over the two days.**

We hope to offer visitors to the 2015 Field Days event (25 to 26 February) a wide range of live demonstrations to draw in the crowds. Also on display will be the *huge shiny yellow machines* to wow rail enthusiasts. And, we have a number of new-comers onboard for 2015.

With just four months to go, we are delighted to announce the following sponsors:

**Platinum Sponsors:** Vossloh Cogifer Australia

**Gold Sponsors:** Leighton Contractors

**Silver Sponsors:** Indec Consulting, Kennards Hire- Rail, Pandrol Australia

**Bronze Sponsors:** Plasser Australia, Kennards Hire, Key Source Rail and Thermit Australia

**Our exhibitors so far include:** Azbuild, Bull Head Services / Dawn Alliance, Delkor Rail, DPW Plant Hire, Earthmoving Equipment Australia, Encompass, Geofabrics Australasia, Kennards Hire, Key Source Rail, KH1, Kinshofer Australia, Legend Power Systems, Leighton Contractors, Linmag, Martinus Rail, Melville Equipment Corp., Pandrol Australia, Plasser Australia, Progress Rail, Speno Maintenance Equipment Australia, Vesco Plastics and Voestalpine VAE, with many more still in the process of completing their registration.

**Of course our event would not be possible without the enormous contribution of Sydney Trains/Transport for NSW.**

**WE ARE TAKING SPONSORSHIP AND EXHIBITOR BOOKINGS NOW!**

See our website [www.rtaa.org.au](http://www.rtaa.org.au) for more details

**The Field Days event is the biggest outdoor rail industry event in Australia.**

**CAN YOU AFFORD NOT TO BE THERE?**

**PLEASE NOTE** Our New Field Day Manager:

Sandy Bull 02 9980 5211 [secretary@rtaa.org.au](mailto:secretary@rtaa.org.au)



## Meet our RTAA 2014 Frank Franklyn Award Winner – Thomas Kerr



I was inspired to enter the award by a former colleague of mine and recipient of the 2012 PWI Young Achiever Award, Prath Nanthakumaran, who also introduced me to the RTAA Frank Franklyn Award Champion, David Bull.

As part of my civil engineering degree at Sydney University, I undertook 12 weeks of work-experience. In my penultimate year I applied for an internship with RailCorp (now Sydney Trains) at a Careers Day. I had never contemplated a career in the railways. However, since my first day on track, trying to perfect my gait while nearly stumbling over a sea of ballast, I knew I was in a challenging environment and was excited to see where the next step might take me. It was a great decision. **The rail industry has so much to offer due to its size and complexity and gives young engineers like myself fantastic opportunities and a rewarding, lifelong career.**

At the start of 2011, I graduated from university and became a Graduate Engineer in the Track Renewals Unit. I was eventually successful in gaining a permanent Project Engineer position. Over the last three years, I have been part of a team delivering track reconditioning and reconstruction projects for Sydney Trains in the metropolitan, north, west and Illawarra regions.

My submission for the Frank Franklyn Award was a compilation of all the track reconstruction projects I have been involved in delivering over the last three years. It contained a selection of projects that were very challenging and highlighted the difficulties overcome, applied innovation, technical excellence and relevance to the rail industry.

I am motivated by all the people around me. We are all good at what we do and constantly looking for ways to do it better. It is a dynamic and collaborative environment where we learn from each other's experiences, and continuously improve.

I plan on spending the prize money to fund a trip through Europe in 2015. I have travelled to Europe before, but this will be an entirely different experience as I'm representing Sydney Trains and RTAA

## NO TIE DINNER 29 AUGUST 2014



Above: No Tie Dinner attendees 2013

### Save the Dates

**11 – 12 November 2014**

RTAA Technical Stream at AusRAIL 2014

**12 November 2014**

RTAA AGM Breakfast Meeting 7.30am Perth

**4 December 2014**

Brisbane Joint Networking Meeting with PWI Queensland

**26 January 2015**

Australia Day Train Ride – more details to follow

**25 – 26 February 2015**

RTAA/Sydney Trains Field Days event

**25 February 2015**

No Tie Dinner – Parramatta

**12 March 2015**

Sydney Networking Meeting and Management Committee meeting

**Julie Tassone**  
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## RTAA Technical Stream at AusRAIL 2014 Perth

**Peter Milton RTAA Chief Technical Reviewer**

The AusRAIL 2014 RTAA Technical Stream has six papers which cover a number of innovations and approaches in delivering projects, managing assets using remote technology and developing new approaches to identifying issues that may affect asset performance. The two sessions focus on rail track issues with the aim of expanding and developing the knowledge and understanding of track specialists in construction, maintenance, operation and design, as well as provide interesting solutions to problems that may be encountered in real life.

### Innovations in Projects

**Chairperson, David Bainbridge, RTAA President and Regional SH&E Manager - Eastern, Leighton Contractors**

Many rail projects are delivered in brownfield environments with impacts to both the rail networks and other adjacent third parties. The three projects in this session look at the impacts and issues which had to be resolved in order to deliver their projects, each impacting various stakeholders in different ways.

The Epping to Thornleigh Third Track project required the installation of a third track as part of the Northern Sydney freight corridor. This track provides the ability to run freight trains between Epping and Thornleigh, independent of the passenger trains on the adjacent tracks during peak hours. A key component was the construction of a rail overpass bridge over the M2 freeway and an adjacent, environmentally sensitive, area. The paper describes how an innovative approach to the design delivered the project when working within the environs of a major freeway, the major passenger line and the environmentally sensitive area.

The Auburn Stabling project provides an essential rail stabling facility for passenger trains on Sydney Trains network. The new depot located in an old rail precinct contained some less than desirable materials resulting in the adoption of methods to minimise impacts of the environment. This was achieved through use of design and construction methodology. Additional works included providing a level crossing over 11 tracks that could be safely accessed and the redesign of noise barriers.

The separation of the interstate Adelaide to Melbourne standard gauge line from the local suburban rail network at Goodwood Junction was a project under consideration for many years. Since the freight line was standard gauge (1,435mm) and the passenger lines were broad gauge (1,600mm) there was always a challenge in how to undertake the work in an effective manner. This decision was assisted when the Seaford Line was closed for major upgrades, providing an opportunity to undertake the separation. The paper describes the process adopted to undertake the grade separation whilst keeping the freight network operational.

### Monitor, Maintain and Design

**Chairperson, David Bull RTAA Vice President and Director, Bull Head Services**

The papers in this session look at a number of technical methods of resolving and managing rail related issues in design, construction and maintenance.

The maintenance of turnouts (switches and crossings) is a significant issue in all railway networks. The first paper looks at how data can be collected and used to provide information to the maintainer to enhance decision making in execution of maintenance programs.

The second paper looks at how remote monitoring of data is managed on a rail network covering in excess of 5,000km in isolated areas of Australia. The use of in-house resources to design a technology-based solution, that permits level crossings and rail temperatures to be effectively monitored, has resulted in the provision of information in a timely manner to management, thereby enhancing the operational decision making process.

The construction of heavy haul railways requires track earthworks that can meet the rigours of time. However, building in an environment where the terrain may contain unknown cavities (not detected during conventional geotechnical investigations) requires close attention to investigation and design. The third paper discusses how the issue of karst terrain was handled when designing a heavy haul rail extension and what solutions were adopted to solve the problems and reduce the future risk of sub-grade failure.



## Newcastle Technical Session & Networking Meeting

The Harbourview Function Centre was the venue for our Newcastle Networking Meeting held on 23 October 2014. Overlooking the beautiful Newcastle Harbour sunset, David Bainbridge introduced Tim Ryan, EGM Enterprise Services of ARTC who addressed the audience on changes within the Australian Rail Track Corporation.

Our sponsors, Leighton Contractors gave a presentation on the Hunter Valley Ballast Cleaning Project. New RTAA corporate members, Zoellner Australia enlightened the audience on the use of the Zoellner Automatic Track Warning System (ZATWS), in conjunction with track maintenance machines, to enable adjacent line working.



## Join the RTAA LinkedIn Group

<http://www.linkedin.com/groups/RTAA-4370409>