



# TRACKING

DECEMBER 2013

## TASRAIL GOES LOCO



November saw the first public outing of the new TR locomotives at our East Tamar Junction facility in addition to the new tamper and a selection of TasRail's new prototype wagons.

The Premier, the Hon. Lara Giddings MHA, reflected on the significant amount of work TasRail has undertaken, not only in relation to the delivery of new Locomotives Project but of the continuing revitalisation of the rail network, and the critical role the company plays as an enabler for Tasmanian industry.

The assembled VIP's and media were also treated to a tour of the new assets along with the obligatory chance to blow the new loco's whistle.

TasRail would like to thank the generous sponsorship of Downer and Progress Rail Services for the event. ▽

*For full specs of the new locomotives see page 15*



TasRail is pleased to announce it's working alongside the Maydena Railtrack Riders to allow the group to extend their present operations.

*Continues page 11*



# FROM THE CEO

*Damien White*

November saw the official unveiling of the first of our 17 new locomotives at our East Tamar Yard.

The arrival marks another significant milestone for the project since TasRail signed the contract for their design and manufacture with Downer EDI and Progress Rail in December 2011.

The new locomotive fleet will allow TasRail to significantly increase its capacity with the new locos having a haulage capability of around 45 per cent more than the existing fleet, thereby allowing us to move more with less.

Other productivity gains include fuel savings in the vicinity of 20 per cent along with a similar figure for carbon emissions, combined with lower maintenance costs.

While the locos are perhaps the most visible aspect of the transformation of the Tasmanian rail network, they are only part of a greater story.

The past year has seen many other significant milestones in this journey come to pass.

For example the arrival and testing of our eight new prototype wagons, ahead of the arrival of the remaining fleet of new wagons next year.

The new wagons will also allow the company to standardise maintenance routines as all four wagon classifications are identical below the deck, which simplifies the sourcing and stocking of spare parts along with training.

The existing fleet is basically a loose collective of other operators' 'hand me downs,' with each providing significant challenges with regard to maintenance, securing of spare parts along with issues around interoperability.

On the network itself, our concrete re-sleeping program is now well advanced, with more than 50,000 new sleepers installed across the network, with our initial efforts focussed on the southern sections of our main line.

We've also replaced or refurbished three large bridges on the North West Coast, with the final bridge at Forth nearing completion.

The cumulative effect of the new locomotives, wagons and track upgrades is to better position the company to provide more efficient freight transport for Tasmanian industry.

All of this from a company that four years ago didn't employ a single engineer, had no business development capability and had no experience in project management.

In terms of growing our freight volumes, TasRail is also presently trialling the movement of logs from Brighton to Bell Bay for Forestry Tasmania, which is the first time in a decade logs have been moved via the rail network.

We estimate that moving log freight via the rail network, equates to around 3000 log trucks per year off Tasmanian roads.

There's also been growth in our bulk commodity haulage, demonstrating a renewed confidence from our customers in the viability and longevity of our rail services.

This is reinforced by the fact that most of our customers have now signed on to long-term contracts.

This marks a significant change from the period where the network was under private ownership, where rail services were literally a week to week proposition.

When viewed collectively these milestones clearly show TasRail is well on the way to being recognised as a world-class vertically integrated short haul railway.

At the end of another year at the helm of TasRail, I'd like to thank all of our hardworking staff, executive and the guidance of our Board. I'd also like to acknowledge the strong partnership with our customers, and the importance of their belief in our capacity to deliver the revitalisation of TasRail that was promised in 2009.

To all of the Tasmanian community we share TasRail with, I wish you a safe and happy Christmas. 🍷



Damien White

## SAVE THE DATE



TasRail is busy planning the new TR class Loco's 2014 TasRail Tour de Tas. Our new loco will be stopping at key points around Tasmania to meet the locals and let the local community connect with the new assets and explore the future of rail in Tasmania. We are keeping the details under wraps, however keep the 8th, 9th & 10th of February free! The events will be for everyone, with plenty of activities for the big and little kids, including fun rail safety games, and we will be announcing the winners of our 'Name The Loco'

competition at each of the party stops.

To enter the competition, click on [www.tasrail.com.au/nametheloco](http://www.tasrail.com.au/nametheloco) and send your entry by 31st January 2014. Conditions and guidelines for the competition can be found on the website. TasRail Board, Staff and Executive are very excited about finally being able to share the new assets with people across Tasmania, and we look forward to meeting you at one of the events and hearing your stories about what the railway in Tasmania means to you and your family. 🍷

# TASRAIL GETS ON-BOARD TO PROMOTE RAIL NATIONALLY

TasRail is part of a newly established Australasian Railway Association (ARA) Communication Committee, designed to create a unified voice in campaigns to raise awareness of the freight rail industry.

The first meeting of senior communication representatives from member companies was held in conjunction with AusRail and was well attended by Australia's leading freight companies.

With a change of Government at a Commonwealth level it is critical that the

gains achieved from investment's into the national rail system through Nation Building 1 and 2 funding are maintained and investment into below rail infrastructure remains at current levels.

While rail is ubiquitous across Australia, it has lacked a profile as an industry, and consequently the many benefits of the sector are largely unknown to the wider community.

The preliminary focus of campaigning will be a combination of digital marketing and

strategic lobbying with a sequence of key messages regarding the benefits of freight on rail for the community including safety, the reduction in road trauma, and the environmental benefits of rail.

Funding for the campaign is being shared between the members of the ARA.

More updates on the development of the campaign and a chance to have your say about freight on rail will be released during the next couple of months. ➤



*The Australasian Railway Association (ARA) is a not-for-profit member-based association that represents passenger, freight, track, manufacturing, construction, supply and other rail companies in Australasia.*



[www.burnieten.com.au](http://www.burnieten.com.au)

## TASRAILERS TRAIN HARD

This year once again saw TasRail field a team for the 2013 Burnie 10 with seven employees prepared to line up. The course commenced in Mount Street before running parallel to TasRail's Burnie yard. Runners then swung left onto the Bass Highway, where the highway overpass took them directly above the rail yard, then past the site of the former pulp mill to reach the outer marker and then running back into the city.

This year saw ideal running conditions with the infamous 'Burnie Docker' failing to materialise sparing athletes a head breeze for the final 5km of the race, although it was quite warm with the sun making an appearance toward the end of the event, ensuring the final 3km, which is uphill even harder.

We've been informed a good time was had by all with highlights including one competitor

dressed as Batman while another sporting pony tails dressed as Superman.

Several other TasRailers participated in the gruelling 22km Point to Pinnacle event from the Wrest Point Casino to the summit of Mount Wellington. The enthusiasm and commitment of the TasRail staff to get out and have a go gives new meaning to "train hard".

## NEW WAGONS UPDATE

Eight prototype wagons were successfully unloaded and railed via East Tamar Junction in late September before being moved to Conara for the first aspect of the commissioning and testing process ahead of the arrival of the remaining 181 wagons.

The prototype wagons consisted of two examples of each class of new wagons, coal, ore, cement and intermodal (which are used for moving containers).

Noise, base ride and hunting tests have been conducted with preliminary analysis of data yielding some positive results, which will allow TasRail to make significant efficiency gains compared to the existing fleet.

Following these initial results the project team then commenced under-take loading/unloading interface and infrastructure clearance tests, which provided some valuable information that will allow TasRail to streamline the commissioning process for the remainder of the wagons. ➤

## TASRAIL LAUNCHES TR-ECS

TR-ecs is a new automated information management system that's in the process of being retrofitted to our existing locomotive fleet. At present the new system receives Track Speed Restrictions and Banner Notices, along with other critical network information and updates.

Next to be incorporated into the system will be fault finding guides for every type of locomotive.

The TR-ecs will also allow for the existing locomotive fleet to be integrated with our new Train Control system.

Other features include a digital speedometer for comparison if there is any doubt on the accuracy of the loco speedometer, as well as other creature comforts such as Internet access.

Drivers also have the ability to use the camera to photograph or film any issues or concerns and relay them via email to operations, train control, infrastructure or workshops in real time. ➤



## TASRAIL WELCOMES TAMPER'S ARRIVAL IN TASMANIA

In addition to the arrival of our new locomotives and wagons TasRail is also pleased to announce it's also in the process of taking delivery of a new tamping machine and ballast regulator.

While slightly less glamorous than the locomotives, these machines are critical to our ongoing efforts to upgrade the rail network.

For those unfamiliar with work the new machines undertake here's a brief summary:

A tamping machine works via vibrating the ballast and forcing it under the sleeper; and at the same lifting and lining the track. These combined actions cause the ballast to form a close matrix to support the track effectively. Track tamping is critical for the track geometry (being top, line, twist and superelevation) and directly affects track speed and a train's performance.

A ballast regulator is used to shape and distribute, through ploughing and brooming, the track ballast to support the sleepers. Before tamping the ballast regulator is used to redistribute the ballast from areas with excess ballast material, to areas where available ballast material will be needed for effective and efficient

tamping. After the track is tamped, any remaining excess ballast is distributed to areas where needed, when the ballast profile is shaped and broomed.

The current TasRail tamping machines include a Plasser UST 16, and a Plasser 79-800W Beaver. Both machines are of considerable age, with UST 16 being built in 1977 and the Beaver being 1984. They are not only aging, but have low productivity, high maintenance costs and are therefore unsuitable for TasRail's present requirements.

The current ballast regulators, TR 1 and TR 2, were built in 1998 and introduced onto the TasRail Network in 1999.

The new tamper is a Harsco Mark VI split head tamper. The machine has been designed and built in Columbia, South Carolina - USA. It has been designed for high quality production and points tamping.

The new ballast regulator is a Harsco BE-KR ballast regulator. It has been designed to complement the tamper and includes an 'X' plough assembly and side ballast boxes. The machine has been designed and manufactured in Brisbane, Australia. ➤

# \$85 MILLION INVESTMENT IN COATED PAPER WILL OPEN NEW MARKETS FOR BOYER MILL



Supply & Logistics Manager, Arnold Willems from Norske Skog and Premier Lara Giddings

In September last year Norske Skog announced the conversion of one of the Boyer Mill's two newsprint machines to the production of coated paper. The \$85 million project is part of a broader regional strategy aimed at transforming the business from being wholly a newsprint producer to having a more diverse future in paper, fibre and energy.

With support from the Federal and Tasmanian Governments, the project is in full swing and well on track for completion early next year.

The Boyer Mill has a long and proud history, producing Australia's first newsprint in 1941 and operating continuously for over 70 years. The production of coated paper will open new markets for the mill and help offset the recent global decline in newsprint sales.

Much interest has been received from printers across Australia as all coated paper is currently imported from overseas with the associated long lead times. Printers and their customers are therefore keen to see the establishment of a secure local supply.

In simple terms the project involves adding coating and gloss enhancing equipment capacity to an existing paper machine and extending the current building to house the new equipment. In reality however, the project includes a vast array of equipment upgrades and process changes to ensure the final product meets the high quality specifications and printing performance demanded by the market.

To complicate matters further, all the preparatory work is being undertaken while both paper machines continued to operate at full capacity.

General Manager, Rod Bender is full of praise for the employees and contractors working on the project as well as those operating the mill amongst all the construction activities.

"Over the last 6 years we have successfully completed several major capital projects at Boyer. On each occasion our employees and the local contractors we have selected have done an excellent job in delivering on expectations.

"Every project has its own challenges and the machine conversion is no exception, but it is fantastic to see the skill, commitment and team approach of everyone involved.

"We look forward to producing coated products that meet the needs of the Australian market. We expect the machine will be fully converted and operational by April 2014", Mr Bender said.

## FAST FACTS – BOYER MILL

- The Boyer Mill has two paper machines, PM2 and PM3. They run at speeds in excess of 60 km/hr. Every day they produce around 820 tonnes of paper
- The mill produced Australia's first newsprint on 22 February 1941 and has operated continuously for over 70 years. During this time the mill has produced over 12 million tonnes of paper
- Annual production is currently around 260,000 tonnes, which represents nearly 40% of the newsprint and related grades used in Australia each year
- The mill is one of Tasmania's largest employers and is a major contributor to the Tasmanian and Australian economies. Local expenditure is over \$140 million per annum
- The economic benefits of the mill extend far beyond the local community in the Derwent Valley. The mill is a significant customer for Tasmania's electricity, coal and plantation softwood
- The mill is a major customer of Tasmania's rail and road networks and Bass Strait shipping, contributing significantly to the viability of these operations. Each year the mill transports over 1,000,000 tonnes of finished paper products and raw materials such as radiata pine, chemicals and coal
- Norske Skog has invested significantly (\$72 million) at the Boyer Mill over recent years to improve operating and environmental performance and enhance product quality

## FAST FACTS – MACHINE CONVERSION PROJECT

- Total capital cost \$85 million, most of which will be spent in Tasmania
- The converted machine will have an annual capacity of around 140,000 tonnes of light weight coated (LWC) paper suitable for the production of catalogues and magazines
- The Boyer Mill will be the only Australian producer of LWC and will offset much of the current import of this paper
- At the peak in construction there will be 200 people working directly on the project
- The project supports the ongoing viability of the Boyer Mill which provides 330 direct jobs and over 900 indirect jobs and contributes over \$140 million each year to the local community in wages and salaries, goods and services and payments for wood, energy and transport 🚚



**Norske Skog**  
Boyer

OUR MILL | OUR FUTURE | OUR CHOICE

INSPIRE

INNOVATE

COOPERATE

**BOYER MILL**  
INVESTING in TASMANIA  
for over 70 YEARS

PARTNER OF CHOICE through a CULTURE OF PERFORMANCE

# TasRail's Digital Facelift

With 17 locos, 191 wagons, train control, IT systems and 100 000 concrete sleepers arriving in TasRail in 2013/14, it seemed to be a perfect time to update our website to reflect the contemporary feel of the TasRail brand. Websites age a little faster than locomotives, and in the time between TasRail's launch in 2009 and this Dec 2013 edition of Tracking, TasRail was definitely needing a little more horsepower to haul our load along the information superhighway.

One of the major changes in how websites are used and built has been driven by the growth and ubiquity of social media. Being able to engage in a '2 way' conversation is increasingly a mandatory part of how brands interact with their customers. TasRail

speaks to a diverse group of customers and clients with different needs and interests.

The trick was finding the balance between the business end of bulk and intermodal, sitting alongside our heritage and enthusiast users.

The website was a partnership between Walker Designs and the TasRail Corporate Relations team, and is designed to be dynamic, interactive and most of all easy to navigate on any device. In addition to the previous content, there is a blog, a news feed, a photo gallery and a kids section for the MiniRailers out there. Feedback on the site has been overwhelmingly enthusiastic, with many railway commentators sending through glowing reports on the new web presence.

Check it out for yourself, leave a comment, sign up for the newsletter, visit us on facebook, pin us or give us a tweet – wherever people are in the digital universe, TasRail is joining in the conversation. ➔

[www.tasrail.com.au](http://www.tasrail.com.au)



**Neale Tomlin**  
General Manager of  
Commercial and Strategy

## INTRODUCING NEALE TOMLIN: GENERAL MANAGER OF COMMERCIAL AND STRATEGY

Neale Tomlin is TasRail's new GM of Commercial & Strategy, a position created to help fully leverage the enormous Government investment into rolling stock, terminals and track infrastructure. This is an evolution of his previous role with TasRail as Commercial Manager.

Neale grew up in Hobart and graduated from University of Tasmania in 1998 where he studied Political Science and Environmental Studies. Over the past 15 years Neale worked across a range of industries in both large and small businesses including hospitality, manufacturing and tourism – including a number of "start ups".

In late 2007 Neale ran his own consultancy called Business Ignition, which specialised in helping small to medium sized companies grow profitably and navigate challenging operating conditions. Business Ignition's clients were from very diverse sectors including forestry, construction, healthcare and tourism

Prior to beginning his role with TasRail in 2012, Neale was Senior Advisor to the Minister for

Infrastructure, working with the State Owned infrastructure businesses such as TasRail, Tasports, TT Line and the Department of Infrastructure, Energy and Resources.

TasRail is entering an amazing period of commercial growth with excellent intermodal volumes in 2012/13 and the reintroduction of logs for the first time in around a decade. Over the next 6 months a number of new bulk ship loading and rail customers will come on line significantly increasing tonnages and revenue. Venture and Shree Minerals are both about to open new mines on the West Coast. These are the first green field mines in Tasmania in a long time, and TasRail's role in helping to enable these projects is one of the reasons why the Tasmanian Government made the decision to "buy back the rail". And importantly, boost revenue at TasRail and improve the TasRail's commercial position.

Neale will be working closely with the highly experienced members of the Business Development and Property group to assist TasRail to grow profitably and strategically.



## VEC ENGINEERING RECOGNISED FOR DON RIVER REFURBISHMENT

Following our last 'Tracking' update on the refurbishment of the Don River Rail Bridge Ulverstone based, VEC Civil Engineering, was awarded the prestigious Category Two Award at the Civil Contractors Federation, (CCF), Earth Awards.

The company was recognised for its work both rehabilitating and replacing sections of the Don River Railway Bridge on Tasmania's North West Coast at the end of 2012.

The \$2.3m works formed part of the 'Four North West Bridges' capital works program.

TasRail CEO, Damien White, congratulated VEC General Manager Mr Stuart Wiggins and his team, saying VEC's effort in completing the on-site works in only 84 hours, from December 26-29, was nothing short of amazing.

"Months of planning went into this, and even then it was very difficult to foresee every potential issue that could cause work to fall behind schedule, as VEC was working with an existing structure dating from 1886."

"To be able to remove the existing bridge deck, install a pre-fabricated replacement, and hand TasRail over a finished project 6.5 hours ahead of schedule, while following industry best practice still astounds me."

"VEC understood the importance of our Western Line and the consequences for TasRail if they didn't complete the job on time, and relished the opportunity to work on such a demanding project."

TasRail is proud to invest in high calibre Tasmanian companies, such as VEC Civil Engineering, as their project partners to undertake the extensive capital works underway to revitalise freight rail in Tasmania. 🏆

## CONCRETE SLEEPER UPDATE

The project will see life expired timber and steel sleepers removed from high-risk areas, such as tight curves and replaced with modern reinforced concrete sleepers.

To date 44,500 concrete sleepers have been installed, concrete sleeper installation is often exceeding 1000 sleepers per day.

In total the Australian Government has committed \$205 million to the Rail Recovery Plan to June 2014 for Below Rail capital upgrades, which also includes drainage and formation works.

In addition, re-railing has also been taking place in order to remove life expired (circa 1912) 80lb and 63lb rail, which is being replaced with second-hand 47kg rail from South Australia.

Our crews recently finished the installation of concrete sleepers south of the Rhyndaston Tunnel, which is a significant milestone for the Project.

Installation works will now move to north of the Rhyndaston Tunnel to complete the other South Packages in November with all South Line work to be completed in early December with the frontline moving to the West Line in late December.

West Line concrete sleeper installation will be undertaken in 2014 to harmonise with Little Penguin breeding and moulting cycles.

The Project will be completed by May 2014. 🏆



# GRANTON LEVEL CROSSING VIDEO CAMERA



TasRail has recently installed a closed circuit camera at our Granton level crossing as part of the company's continuing efforts to promote rail safety while simultaneously recording evidence of offenders with a view to prosecution.

The process behind the selection and installation of the camera was complicated due to several externalities such as the

refraction of light during wet weather, the amount of memory required to store the relevant footage along with issues relating to zoom, resolution and the relative speed of the vehicle.

The camera also needed to be able to operate 24 hours per day, seven days per week, along with the relevant TasRail staff providing a Statutory Declaration in order to aid in potential prosecutions.

Another complication was the camera is required to operate independently of the signalling circuitry while also providing for the rail equivalent of an 'orange traffic light' whereby motorists may have legitimate reasons for failing to stop.

The new camera also needed to provide TasRail video footage in order to give context to crossing breaches, with one offender recorded entering the crossing after the warning lights had already flashed 16 times.

Despite these issues TasRail's Signals and Communications teams, along with our sub-contractors, have prevailed and delivered TasRail with a potent new tool to combat motorists who chose to ignore active level crossings.

The team's efforts are now focussed on fine-tuning with a view to rolling out similar cameras at other crossings around Tasmania. 🚩



# TASRAIL JOINS DERWENT VALLEY RAILWAY'S INAUGURAL OPEN DAY

Last month our Corporate Relations Team went along to the Derwent Valley Railway's first ever 'Open Day,' with the Valley turning on typically beautiful weather.

TasRail had its own stall and we were inundated with questions as to when the 'twins,' otherwise known as the new locomotives, would be available for public viewing along with other assets, such as the 8 prototype wagons.

Our stall ended up running out of our show bags and activity books after handing out at least 200 to the local kids – and a few grown ups.

Other attractions included ABC radio conducting a live state-wide broadcast from the event with presenter Chris Wisby who interviewed a range of rail enthusiasts along with getting an update on what TasRail has been doing.

The day was a great success for DVR in both exposure and earnings. The "gold coin" donation at the gate brought in just over \$1,000 and \$2,000 more from food and beverages, with the attendance figure around 600. 🚩

# PENGUIN REHAB

TasRail recently completed a series of works along its rail corridor on the Western Line, near the town of Penguin, as part of continuing efforts to maintain and enhance habitat for the Little Penguin, more commonly known as the Fairy Penguin.

A spill of ballast during cleaning activities in early 2013 had resulted in some damage to penguin habitat, which TasRail was at pains to rectify.

Prior to the commencement of works TasRail consulted extensively with relevant interest groups along with the Central Coast Council and local community with the aim of ensuring that the local community was fully engaged with the remediation works.

The Council also provided crucial advice on vegetation management along with

representatives from DPIWE Wildlife Management, to ensure minimal impact on other endemic species.

As part of this process TasRail established dedicated pathways for the community to access information on the project, this included a hotline, door knocking, letter drops and regular e-mails, with the view of allowing for the regular flow of information along with minimising potential disruption to local residents.

A key aspect of the project was the placement of a number of specially designed 'penguin igloos,' to supplement existing habitat which were designed and built by Launceston based community group Studentworks in addition to a purpose built lifting jig.

The lifting jig was also recently recognised at the Tasmanian WorkSafe Awards.

TasRail plans to regularly monitor the site as part of its commitment to full remediation of the area where the ballast spill occurred. ➤



# FORTH BRIDGE SET FOR NEW LEASE ON LIFE

A life expired TasRail asset with significant heritage values now looks set for a new lease on life thanks to a dedicated group of locals and support from local and state government.

The Forth Railway bridge at Leith on the North-West Coast was built in 1890 and is the only remaining example with an opening central span left in Australia.

It is now being decommissioned as TasRail builds a new one alongside the Bass Highway as part of a wider series of upgrades for the region with the replacement bridge expected to be tied in at the end of the year.

Engineer Chris Martin is leading a group of locals trying to have the wrought-iron structure converted to a shared pathway before it falls into disrepair.

Details of the project are being finalised, with a submission for funding likely to go to the State Government in 2013/14.

While the rail bridge will not carry the heavy loads of the past century, proponents are confident it will support the community in a different way. ➤



# RAIL TRACK RIDERS EXTENDED LEASE

TasRail is pleased to announce it's working alongside the Maydena Railtrack Riders to allow the group to extend their present operations.

The group, established in 2009, allows users to hire a purpose built four wheel pedal motion buggy that travels along a 2.4km section of non-operational line between Maydena and the Florentine Valley taking in spectacular views of the local forest.

The buggies allow individuals or groups of up to four people to propel themselves along the rail corridor with the low gradient

allowing people from all walks of life and fitness levels to access the forest – at the time of writing the oldest recorded visitor was 92 – and they've promised to come back and do it again.

Under the proposed new agreement the Railtrack Riders will also be able to operate a service from their existing base at Maydena down to the old National Park station, a distance of around 5km and follows a recent meeting between the group and TasRail CEO Damien White.

The group has also secured the relevant national rail safety accreditation in order to

be able to maintain and upgrade the track themselves with TasRail providing in-kind support in form of some replacement track bolts, plates and sleepers.

The Maydena riders hope to follow in tracks of similar successful operations in the USA, Sweden and Germany with cycling tourism recently identified as a key area for the expansion of the Tasmanian tourism industry.

For more information visit:  
<http://www.railtrackriders.com.au>

# NEW CRASH GATE MAKES LAUNCESTON AIRPORT SAFER

On 13 November 2014, the Aviation Rescue & Firefighting Launceston division of Airservices Australia launched a project that was three years in the making.

Commander Paul McWilliams had identified an issue with the safety of large response vehicles using Evandale Road, which was designed for smaller units.

As the airport had grown in size and usage, the likelihood of an incident had increased, and so too the need for an access road that would allow large heavy vehicles to move quickly to the site of a crash.

The crash gate project was a collaboration between Launceston Airport, Airservices Australia, TasRail and farmer landowners the Hogarth brothers Stuart and Bevan.

TasRail paid for the road to be built which links the crash gates in a path across the railway lines saving crucial minutes for first responders. TasRail was pleased to not only be involved, but also to be recognised by Airservices Australia as a critical enabler of the project.

Working closely with our neighbours, and making the community safer is a strong metaphor for the values that underpin TasRail – although it is one project that we hope to never see used. 🙏



# CMT CELEBRATES FESTIVAL OF LIGHTS

TasRail bulk customer, Copper Mines Tasmania, hosted their annual Diwali celebration on the 26th of October at the Queenstown Memorial Hall.

Diwali or the “festival of lights,” is a five-day Hindu festival celebrated by Hindu communities around the world. For Hindus, Diwali is one of the most important festivals of the year.

Much like Christmas, Diwali is celebrated in families with feasting and gift giving and celebration. The name “Diwali” or “Divali” is a contraction of deepavali which translates into “row of lamps”.

Diwali involves the lighting of small clay lamps filled with oil to signify the triumph of good over evil. These lamps are kept on during the night to make the goddess Lakshmi feel welcome when she visits your house to bring abundance. Firecrackers are let off relentlessly leading up to Diwali because it is believed that it drives away evil spirits.

The Queenstown Memorial Hall was turned into a riot of festival colours and lights for the occasion. Copper Mines Tasmania and their Indian based parent company Vedanta filled the hall with customers, stakeholders, staff, contractors and family for an evening of Bollywood dance and Indian food and feasting.

At 9.30pm, despite the lingering rain, the guests and the rest of Queenstown were treated to a spectacular firework display to celebrate Diwali, then guests returned to the hall for more dancing and celebration.

Guests at the event reported that it was the hottest ticket in town and increasing numbers of guests were making the trip from interstate and overseas to the Copper Mines Tasmania Diwali experience.

A fantastic night was had by all, TasRail was very honoured to be invited to such an inclusive and unusual event.







## PR22L BRANCH LINE LOCOMOTIVE AND DERIVATIVES

The PR22L is the initial Branch line lower axle load locomotive being introduced to meet a demand to replace ageing rollingstock throughout Australia. It ticks all the boxes with regards to restricted outline gauge yet has very competitive tractive and dynamic effort characteristics and impeccable environmental credentials.

Tailored to meet the specific operating conditions on many of Australia's lighter axle load branch lines, these locomotives are manufactured by Downer Rail's technology partner Progress Rail Services (PRS) a subsidiary of CAT Pty Ltd.

The PR22L series of locomotives is a new product for the Downer brand and is a PRS design based on the GT26 EMD model locomotive upgraded with the well proven Caterpillar 3512CHD engine.

The locomotive contains many new features which are incorporated as standard in many of the CAT and PRS repower projects in North America.

The PR22L locomotive is initially designed to comply with very restrictive outside gauge to fit through tunnels in Tasmania and will comply with all key TasRail requirements, that will lay the foundation for an efficient and reliable branch line operation.

A unique requirement has been met by offering a single locomotive design configurable with two different axle loads i.e. 16TAL and 18TAL. These configurations allow the locomotive to operate on lines with various axle

load ratings with high levels of haulage performance. A fabricated bogie frame can be offered for axle loads lighter than 16TAL.

The design concept provides the optimum balance between overall cost, operational flexibility and locomotive availability with one locomotive type potentially capable of operating on many branch lines in Australia. A Standard Gauge bogie is also available.

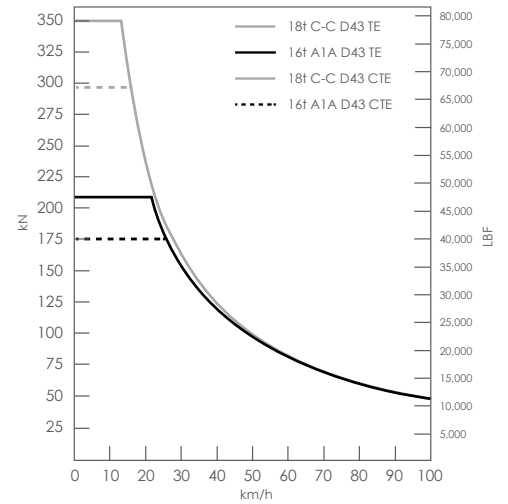
The CAT3512 engine and controls give exceptional power to weight ratio and fuel efficiency. Specific design of the cooling system will give the locomotive impeccable credentials to work in harsh Australian environments and difficult tunnel conditions. The design of the locomotive and its components includes positioning air intakes as low as possible and providing increased engine cooling capacity to ensure full continuous tractive effort in hot environments.

The Zeit (CAT Company) microprocessor control of the traction system and auxiliary devices includes fault handling and diagnostics, AESS functions, GPS tracking and remote telemetry, AAR style customer programmable alerter and vigilance.

<b>Model</b>	PR22L
<b>Power</b>	1,700kW (2280hp) gross 1,492kW (2000hp) traction
<b>Tractive effort</b>	272kN
<b>Rail gauge</b>	1067mm or 1435mm
<b>Mass</b>	102 or 108 or 120 tonnes
<b>Axleload</b>	17 or 18 or 20 tonnes
<b>Wheel arrangement</b>	A1A or Co-Co
<b>Maximum speed</b>	80 or 100 or 110 kph (subject to TM's, gear ratio and a xle configuration)
<b>Power per driving axle</b>	283kW
<b>Gear ratio</b>	2 x 25kW
<b>Wheel diameter</b>	Total Capacity 172
<b>Fuel capacity</b>	1,600km
<b>Dimensions</b>	
Length over couplers	18,140mm
Height over rail level	3,840mm
Width over walkways	2,900mm
Bogie wheelbase	1,816mm
<b>Engine</b>	Caterpillar 3512C HD 12cyl
<b>Main generator</b>	KATO AC 1.6MW
<b>Traction motors</b>	D31 or D43BTR or D77
<b>Air compressor</b>	Atlas Copco GAR37 Electrical Drive
<b>Brakes – air</b>	Wabtec FastBrake
<b>Brakes – dynamic</b>	180kN
<b>Cooling system</b>	Dual AC powered fans
<b>Drivers' controls</b>	Single, Right Hand
<b>Cab Single</b>	Single, air conditioned
<b>Special features</b>	
<ul style="list-style-type: none"> <li>• Certified USEPA Tier3</li> <li>• EMD GHC Cast Bogies</li> <li>• Progress Rail Zeit Control Screen Based Instrument Displays</li> <li>• Electronic fuel injection</li> <li>• Split cooling system</li> <li>• Cab equipped with fridge, microwave oven and kettle</li> </ul>	<ul style="list-style-type: none"> <li>• Buff load 2900kN</li> <li>• Optional, Remote Control</li> <li>• Optional, Auto Engine Start Stop</li> <li>• Optional, GPS Tracking and remote telemetry</li> <li>• Optional, Wireless Download of Data Logger</li> <li>• Locomotive Digital Video Recorder (LDVR)</li> </ul>

Tractive Effort PR22L narrow gauge

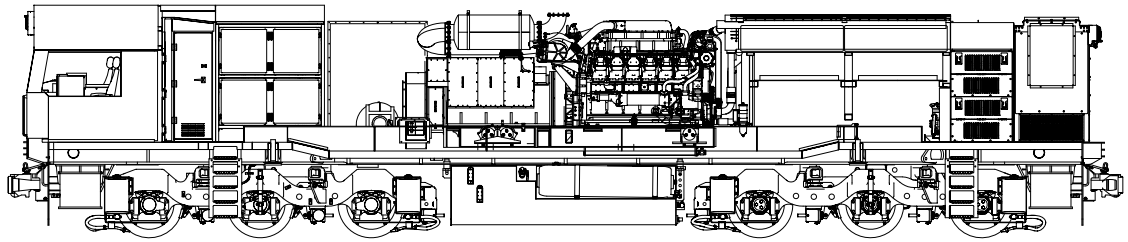
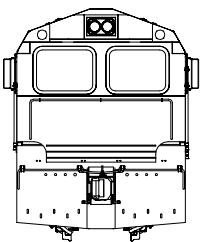
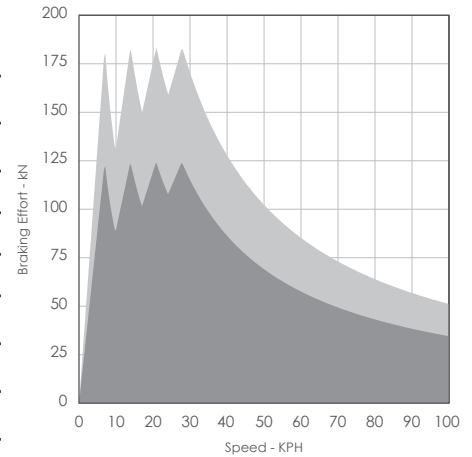
D43 motors, 3512C engine @ 1490TKW  
108t C-C D43 CTE 296kN @ 16km/h  
98t A1A D43 CTE 175kN @ 25km/h



Assumes AAR conditions / dry rail / new wheels  
D43 motors / 73:16 gearing / 40in wheels

Braking Effort vs. Speed

TasRail PR22L



# SHEDDING LIGHT ON A DARK SUBJECT - RAIL SUICIDE

Rail suicide accounts for two thirds of all rail fatalities; hence it is one of the rail industry's biggest issues. The impact suicide attempts have on operations, the public who witness incidents, and train drivers and other rail employees is profound and lasting. The problem represented an opportunity for Australasian not-for-profit TrackSAFE to work with Australian and New Zealand rail operators to try to come up with solutions which can reduce incidents and seek ways of discussing an issue that has historically been silent in level crossing and platform safety campaigns.

In Australia and overseas, little is known about how to prevent rail suicide. Preventing access to the means is the only proven method of stopping attempts, but with 44,000km of open track and 23,500 level crossings, fencing is simply not an option. Tasmania alone has 625 km of rail network. There is a unique rail environment in Australia and due to the nature of our network, large scale infrastructure changes such as fencing are not possible which means as an industry we need alternative ways to prevent rail suicide.

Most measures that Lifeline, Beyond Blue and other suicide prevention experts have

suggested may help have been exhausted or trialled. There are emerging technologies around the world but nothing that is ready and tested and can be immediately implemented across Australia to eradicate the problem. From the little evidence we have around rail suicide it would seem that the cause of the issue is that suicide rates overall in Australia and globally are not trending downwards and rail suicide is representative of that. Factors that influence the choice of rail include; location (the person lives near the network), it is free (you do not need to purchase a firearm or drugs, etc.), there is a sense of it being by 'another hand' ie the train is the instrument of death. There is also a strong link to mental illness. Not enough is known around the cause, which is why it is difficult to prevent it.

This is why for three days in August, seventeen people from across the rail industry in Australia and New Zealand including TasRail, came together to find solutions for how to eliminate rail suicide attempts. The team were facilitated by Aurizon through a creative problem solving process to look for novel and innovative approaches to how to cut through a difficult and intractable issue. The workshops

started in the realms of absurdity and speculation and utilised developmental thinking techniques to create nine concepts that spanned education, behaviour and technology. From this, the concepts were grouped, sorted and prioritised to a suite of five that were presented to a refinement panel for further build out. By drawing from individuals with diverse experiences in rail: operators, drivers, safety, stats, SPADs, executives and comms, a wide range of opinion and creativity fuelled the discussion and refinement process.

One of the clear sentiments to come from the workshop is that silence on the topic (mainly due to fear of copycat behaviour) is not working, and moving suicide on rail from taboo to more broadly discussed and understood was a strong future direction. TasRail has a commensurately small amount of suicide on track incidents, however from the perspective of the duty of care to our drivers, inspectors and first responders, one is too many. Our engagement with the national discussion through TrackSafe will enable future strategic directions to be implemented as part of our safety and community awareness campaigns. ♣

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