

JOURNAL

NOV 2010 ISSUE # 93

3

4

4

5

5

6

PUBLISHED BY FEDERATION OF RAIL ORGANISATIONS NZ INC : P O BOX 140, DUNEDIN 9054

PLEASE SEND CONTRIBUTIONS TO EDITOR BY E-MAIL : <u>secretary@fronz.org.nz</u>

	Karangahake Bridge Re-opens	1	Hazards of Working Up Poles
IN THIS	Pike River Coal Mine		Self Help Safety Tool
ISSUE	The Dillicar Diaries	2	Building Competitive Cities
	Fishplates Wanted	2	Welding Qualification Changes
	A Lesson From The UK	2	Volunteers
	Thomas McGavin Research Grant	3	Photo Parade

RAIL HERITAGE RE-OPENS IN TIME FOR SUMMER VISITORS

The difficult work of restoring the 100-year old Eastern Portal Bridge in Karangahake Gorge is now complete, and the historic railway structure has re-opened to walkers enjoying the magnificent Karangahake Gorge Historic Walkway. The area is host to over 60,000 visitors a year and is an iconic part of New Zealand's mining and industrial heritage. The Department of Conservation (DOC) is working to make this part of New Zealand the best place to learn about New Zealand's industrial heritage while enjoying the Kaimai Mamaku Forest Park.



Jeff Milham, DOC's Visitor Assets Programme Manager in Tauranga, says he is pleased to see the contract finished before the high season. "Corrosion of some of the steel work was the main problem with it. Contractors have been repairing, and then re-painting all the steel framing on the bridge. Our team is extremely happy that the work has been completed in time for the bulk of summer visitors, because this attraction helps make the Gorge a unique destination".

Work on the bridge began early Autumn this year, with careful scaffolding and cladding erected to protect the Ohinemuri River from pollution by lead-based paints and other construction materials during the work. Completion of the final paint job was complicated by wet weather and lower than expected air temperatures, which meant drying -time had to be extended.

The bridge restoration is the latest in a string of historic projects in the area, and comes hot on the heels of the recent unveiling of information signage and a new walking trail at the Victoria Battery Historic Reserve in Waikino. These developments are part of a much bigger effort to develop the Kaimai Heritage Trail which features historic mining and logging remains in the northern Kaimai area, including Karangahake, Waitawheta Valley (near Waihi), and Waiorongomai Valley (near Te Aroha).

Background to the Eastern Portal Bridge

The Karangahake Eastern Portal Bridge is known officially as Karangahake Railway Bridge # 4. It is a 36m trussed steel railway bridge that was constructed around 1905 to take the East Coast Main Trunk line from Auckland. Before it was built, coal used by the Waihi Gold Mining Company was conveyed as far as the double-decked bridge at Karangahake (the western portal bridge, Karangahake Rail Bridge # 3) and shovelled into wagons for transport to Waikino and other places. By November 1904 over 200 tons of coal was being transported every day to Karangahake for use at the Waihi, Talisman and Crown Mines.

For the next 70 years, the bridge served as the crucial link that both stimulated and serviced the growth of economic activity on both sides of the Kaimai range. Passenger train services on the East Coast Branch were terminated in 1959 with the cessation of the 'Taneatua Express', but a Bay of Plenty-Auckland service using Fiat railcars was maintained until 11th September 1967. The line closed to all traffic following the opening of the Kaimai tunnel in 1978 and the establishment of a more direct rail link between the Waikato and Bay of Plenty. Within a couple of years the rails had been lifted. The former Lands and Survey Dept acquired the rail corridor through the gorge and developed the Karangahake Historic Walkway.

PIKE RIVER COAL MINE DISASTER

The history of railways is inextricably linked to that of coal mining. Railways developed to carry coal to market and, in turn, coal fuelled the steam locomotive that powered railways for over 100 years. That link continues today with at least one of our rail heritage fraternity numbered among the 29 dead.

The Pike River disaster shows once again the price that New Zealanders have paid throughout our history to extract coal from our mountains. The FRONZ Executive extends our heartfelt sympathy to those who have lost family and friends in this, the latest tragedy to befall the industry.

THE DILLICAR DIARIES

Recent reports say that Paul is still receiving home therapy and is making progress. Physically his movements are improving and he and James recently took the train from Onehunga to Newmarket. His speech is showing some slow improvement and communication is getting easier.

He is now spending some time at the keyboard so we look forward to receiving some epistles in the near future.

FISHPLATES WANTED

Waitakere Tramline Society is looking for fishplates for their tramline extension. Robert Graham writes:-

We are looking for 140 fishplates for rail height 75mm x foot 75 mm x rail head size 38mm and 200 fishplates for rail height 60 mm x foot 62 mm x rail head size of 34mm.

If anybody can help us could they please contact us on Ph 09 818 4946 or at PO Box 60080, Titirangi, Waitakere 0642 or email to <u>info@waitakeretramline.org.nz</u>.

A LESSON FROM THE UK

The UK Rail Accident Investigation Branch (RAIB) recently released their report into a collision on the Great Orme Tramway on 15 September 2009 which may have lessons for NZ operators.

The tramway is an unusual operation, consisting of two funiculars (upper and lower) with each funicular having two tramcars operating on a single track with a passing loop in the centre. The loop points are controlled by over centre weighted levers (tumblers) with each tram, as it leaves the loop, pushing the blades across to the correct position for its return journey.

In this instance, when one of the trams entered the loop, the leading bogie took the correct path, but as it struck the heel of the blades the toe of the blades moved sufficiently to overcome the weight of the tumbler and reset the points.

Consequently the trailing bogie took the wrong path and, although the brakes operated on the winch and both trams, there was a low speed collision which damaged both trams and caused one minor injury. The upper section of the tramway was closed for the remaining 6 weeks of the season.



The primary cause of the accident was wear and geometric changes (gauge, top, etc) because the tramway had no system in place for measuring the condition of the points and tumbler.

An underlying factor was the lack of a comprehensive risk assessment of the points. The tramway had not carried out an analysis of the design of the points on its system and the potential modes of failure and their effects. In particular the potential for the points to malfunction due to the gradual wear and degradation of the points did not feature in the risk assessment.

Full report of the RAIB can be found at <u>http://www.raib.gov.uk/publications/investigation_reports/reports_2010/</u> report132010.cfm

The RAIB have also just released their report into the fire on a freight shuttle train in the channel tunnel on the 11 September 2008. The report can be found at http://www.raib.gov.uk/publications/investigation reports 2010/

2

THOMAS MCGAVIN RESEARCH GRANT

The New Zealand Railway and Locomotive Society held its Annual General Meeting in Auckland on Saturday 23 October, at which Graeme Carter, the Society's President, announced the establishment of the Thomas McGavin Research Grant.

Tom passed away in February of this year and the Society's Board felt that a lasting memorial to his lifetime's work was appropriate.

Tom founded the Society in 1944 and was active in the Society all his life, holding most executive positions throughout the 66 years. He edited the Society's journal, The New Zealand Railway Observer, for 54 years, only retiring at age 78 in 1998.

The Thomas McGavin Research Grant is to be available annually, in one or more individual grants, up to the value of \$2,000. The grant is open to anyone for research in the chosen field of New Zealand rail transport. The research work is expected to be finished within 12 months of the grant being awarded and the completed project lodged with the Society within 24 months. The Society has the discretion to publish the work as a book, an article in The Observer, or retaining it in the Society's archive for future reference.

Graeme Carter told the meeting that, in creating the grant, the Society is known for publishing quality books about railways in New Zealand. This grant is a means of encouraging people to research topics that they might otherwise find not possible, and also to boost the Society's range of published works. The Society looks forward to making the first grant, being the first of its kind available in New Zealand, setting new standards of research that can be shared by all with interests in rail transport.

Applications for the Thomas McGavin Research Grant close on 31 March each year, and full details can be obtained at www.railsoc..org.nz

THE HAZARDS OF WORKING UP POLES

Do you have telephone poles, signal mast or traction poles on your railway? Are your members trained in how to inspect them before climbing? If not read on......

Dept of Labour 27 October 2010

A Christchurch company has been sentenced after one of its workers was seriously injured when the telephone pole he was working on broke due to below ground rot.

At the Christchurch District court today Independent Line Services Limited was fined \$30,000 for its role in the accident in Governors Bay on 7 April 2009.

The case highlights the dangers of working at heights and the importance of checking for defects in these types of poles says the Department of Labour.

The pole broke as the employee was climbing down. He jumped approximately five metres to avoid the falling pole and ladder, fracturing his pelvis and injuring his left ankle.

The employee was seriously injured and was extremely lucky to survive a fall from such a height says Department of Labour Christchurch Service Manager, Margaret Radford.

"Our investigation revealed that while procedures were in place, they weren't followed, and the employee was not properly supervised. If Electricity Industry Standards were followed, the accident would probably not have happened," Ms Radford says.

"The pole broke below the ground. Proper testing would have revealed the existence of rot in the pole. Following the earthquake and the continuing aftershocks, it's even more important that companies properly test these poles above and below ground.

"Working at heights is a hazardous activity and the risks need to be carefully managed."

"The introduction of so powerful an agent as steam to a carriage on wheels will make a great change in the situation of man." — Thomas Jefferson, 1743 - 1826

SELF-HELP TOOL DEVELOPED TO IMPROVE SAFETY CULTURE

Department of Labour 8 November 2010

A new tool to help businesses assess and improve their safety culture has been released by the Department of Labour. Safety culture is about how everyone thinks and acts on safety in the workplace.

Research shows that a positive safety culture means fewer workplace injuries and reduced staff turnover. It can also enhance a firm's reputation and lead to higher productivity.

The new Safety Culture Snapshot tool aims to help businesses interested in creating a better safety culture. It is practical self-help tool with a step by step process and supporting resources.

The tool was developed and tested directly with large and small workplaces and the help of safety culture expert Dr Hillary Bennett.

"One of the best ways to improve a safety culture is to start measuring it. This tool gives businesses the guidance they need to understand what's working well and where there is room for improvement," says the Department's Workplace Services Group Manager Maarten Quivooy.

"It can be used by any industry or business that is motivated to improve its health and safety performance. Ultimately it will help a business make a start diagnosing its culture and, most importantly, planning for change. Building a better safety culture builds a better business."

The Safety Culture Snapshot contributes to the Workplace Health and Safety Strategy's vision of healthy people in safe and productive workplaces.

For further information and to access the Safety Culture Snapshot visit our website at: www.dol.govt.nz/safetyculture

BUILDING COMPETITIVE CITIES Reform of the urban and infrastructure planning system

The Government has released a discussion document that could affect the Resource Management, Land Transport Management, and Public Works Acts

The press release states:-

"The Government wants New Zealand's cities, towns and rural communities to better support the way we live, work and play.

This discussion document presents options for improving New Zealand's resource management regulations and processes. In particular, the options focus on improving the planning system for our urban areas and infrastructure. The discussion document seeks to:

- improve our knowledge and understanding of the issues facing planning, urban design and infrastructure development in New Zealand
- ensure that the options that have been identified address the right issues
- seek input and views on the options for reform and their likely impacts and effectiveness compared to the status quo."

If you want to have your say, submissions close on 17 December 2010. More information at

http://www.mfe.govt.nz/publications/rma/building-competitive-cities-discussion-document/index.html

CHANGE TO WELDING QUALIFICATION STANDARDS

The August issue of the NZTA's "Rail Safety Update" has the following note on new welding standards. (This issue has yet to appear on the NZTA web site at <u>http://www.nzta.govt.nz/resources/rail-safety-news/index.html</u> but I am assured that it will happen "real soon now".)

Many rail organisations at various times use certified welders for different jobs. This may be done in-house or by contracting in a suitably qualified welder. For those who don't already know, please be aware that changes were made earlier this year to the standards used in this area, including to the process for certifying bodies under a new standard. (Continued from page 4)

On 1 April 2010 NZS 4711:1984 Qualification tests for metal-arc welders and NZS 4703:1985 Welder qualification tests for stainless steel pipe for the dairy industry were replaced by Standards New Zealand with AS/NZS 2980:2007 Qualification of welders for fusion welding of steels.

The old standards were replaced to ensure international best practice for welder qualifications is being followed. Existing welding qualifications issued under the old standards remain valid until expiry if the certificate was issued to the holder prior to 1 April 2010.

More detailed information is available from Standards New Zealand at <u>http://www.standards.co.nz/touchstone/</u> <u>Issue+16/Engineering/default.htm#2</u>

All organisations must ensure that certified welders undertaking work are certified under the correct standard. Safety assessors, if reviewing documents relating to certified welding work, should be looking for evidence from the organisation being assessed that the welding was done in compliance with the applicable standard as described above.

VOLUNTEERS

Also from the August issue of the NZTA's "Rail Safety Update"

Organisations that have no employees have a general duty of care under the Health and Safety in Employment Act 1992 to ensure the health and safety of their volunteers. Some heritage railway operators would be in this category.

The duty of care requires organisations to consider the hazards that their volunteers might encounter when doing any work activity and to put in place safety arrangements appropriate to the tasks to be performed. This should be done when planning the work activity before it starts.

If a Health and Safety Inspector from the Department of Labour becomes aware of a significant hazard relating to work being done by volunteers, then the Inspector must contact the person in charge of the work to discuss means of eliminating, isolating or minimizing the hazard.

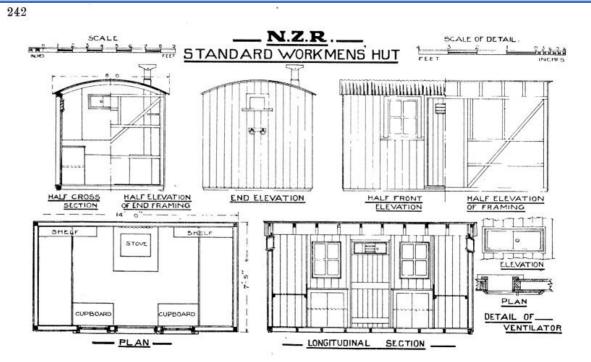
Further information can be found on the Department of Labour website using these links:

http://www.osh.dol.govt.nz/order/catalogue/pdf/volunteer.pdf

http://www.osh.dol.govt.nz/order/catalogue/pdfs/volunteers.pdf

None of this takes away any responsibilities to take all practicable steps to ensure the safety of all rail personnel and the public under the Railways Act 2005 which treats employees and volunteers the same.

In addition there is a range of legislation that may also apply to rail organisations. Examples of these would be the Electricity (Safety) Regulations 2010, Hazardous Substances and New Organisms (HASNO) Act 1996 and many more. All organisations must comply with relevant legislation.





Above

Driver/Fireman Doug Armstrong, Guard Michael Ross, Driver/Fireman Stefan van Vliet, Trainee fireman Bryce Chisnall. Photo—David Oakley Plains Railway 6/7 Nov

> **Right**—Mirthful Max Ferrymead Railway, Labour weekend 2010 Photo—Flugel





Left

It's real on steel: The new Mayor of Wellington, Celia Wade-Brown, with a stack of old tram rails, retrieved from city streets, at the Wellington Tramway Museum (of which she is the patron), 6/11/10. Photo—TRANS-ACTION Bulletin 104

FRONZ 'JOURNAL # 93 WAS PUBLISHED ON 28 NOVEMBER 2010 CONTENTS MAY BE REPUBLISHED WITH ACKNOWLEDGEMENT

6