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

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FROM THE PRESIDENT'S DESK

KiwiRail is in the process of setting up random drug and alcohol testing for its staff after consultation. This new policy will be only a KiwiRail company policy and will be restricted to its staff but for the mainline operators in many cases you refer in your safety case to the ONTRACK drug and alcohol policy so consideration needs to be made on if you as a mainline operator wish to follow this new policy and include random testing for your staff and volunteers or change your safety case to refer to your own drug and alcohol policy which if you decide does not have to have random drug and alcohol testing. I will advise when this new policy will come into effect so you have plenty of time to change to your own policy or follow KiwiRails policy. I will have a look at the current ONTRACK Drug and Alcohol Policy and talk to NZTA and if possible we may be able to have a generic FRONZ policy that FRONZ members can use in their safety Cases.

Also for the mainline operators the Heritage Operating Manual is due for review (it has been now operating for 6 years) and if you have any ideas on changes you would like to make to it please contact the Secretary Heritage Operating Committee David Webb (david.webb@kiwirail.co.nz) as soon as possible.

Grant Craig



2013 marks 150 years of Rail Transportation in New Zealand. A major celebration of rail is planned for October 2013 in Christchurch - the home of rail - with Railways around the country joining in on the occasion!

Canterbury societies have been planning for this event for some time (also involving main line operators) but this is still in preliminary stages. The committee is planning a web site but this cannot be released until the programme is firmer.

In the meantime they have created a Facebook page to provide updates. This can be found at <http://www.facebook.com/NZ.Rail.150>

Of course celebration of this historic milestone need not be confined to Christchurch or Labour Weekend. Societies throughout NZ should consider taking advantage of the publicity that will be generated and plan their own events to attract attention (and hopefully income) to their own operation.

CONFERENCE PROGRAMME

The executive is in the planning stages of the 2012 conference in Rotorua and we have lined up a number of speakers but we would like your feedback on what you would like to hear and if you have any suggestions for speakers, or would like to be a speaker, please contact our secretary at secretary@fronz.org.nz.

CHANGES TO LOTTERY CLOSING DATES

There has been some changes to Lottery Committees closing dates for 2012/13.

The dates can be found at <http://www.communitymatters.govt.nz/Funding-and-grants---Closing-and-meeting-dates>

EIGHT SCALDED ON FRENCH FOOTPLATE

EIGHT people have suffered burns, two seriously, after an escape of steam while they were riding on the footplate of ex-SNCF loco No. 241P No. 17.

The incident occurred on August 29, during a slow-speed turning manoeuvre at Savoy, between Chambéry and Montmelian, and will almost certainly result in a call for stricter control of public access to steam loco footplates. There were 10 people in the cab at the time!

The two most seriously injured are the driver and an SNCF technician. The loco was later confined to Chambéry depot as the investigation got underway, but the possible cause is focusing on a fractured pipe.

The Railway Magazine, October 2011

TAIC ANNUAL REPORT

The Transport Accident Investigation Commission has released its annual report to 30 June 2011 and it is available at <http://www.taic.org.nz/LinkClick.aspx?fileticket=sGpBNZ%2b8D18%3d&tabid=36&language=en-US>

Of interest in the Chief Commissioner's foreword:-

"Rail-related work was a significant focus for the investigation team and Commissioners. A backlog of historical inquiries was cleared and many recommendations from earlier inquiries were closed following acceptable responses. We would like to thank rail industry participants for their constructive input, particularly for assisting our inquiries into a series of platform overruns by push-pull trains in the Auckland commuter service and for helping us to close a number of open recommendations.

Rail was also the focus of a second annual historical impact review, a continuing effort to establish the extent to which the Commission's work results in improvements in transport safety. This review, which looked at trends in derailments due to wagon failures, found, among other things, that derailments in 2010 were at their lowest in a decade following the adoption of Commission recommendations. We will be augmenting these reviews with stakeholder research and refining our overall performance measurement tools and targets. "

NEW ZEALAND GUIDELINES FOR THE MANAGEMENT AND REMOVAL OF ASBESTOS

These guidelines are produced by the New Zealand Demolition and Asbestos Association (NZDAA). They contain the industry's current best practice standards and procedures for the safe and efficient removal, transportation and disposal of asbestos-contaminated material.

As well as input from NZDAA members, the guidelines include relevant information from the Australian Code of Practice for the Safe Removal of Asbestos (NOSHC:2002 (2005)). Relevant legislation and standards relating to asbestos are also featured.

The guidelines can be purchased for \$95.00 from the NZDAA at <http://www.demolition-asbestos.co.nz/wawcs0139833/Asbestos-Guidelines.html> or viewed (for free) on-line at the Dept of Labour at <http://www.osh.govt.nz/publications/booklets/asbestos-management-removal/guidelines.asp>

The DoL webpage also includes a list of certified asbestos removers.

COMMUNITY GROUPS' EMERGENCY PROCEDURES

The Department of Labour and the Environmental Protection Authority (EPA) have designed a set of forms to help community organisations identify and plan for emergencies in the event of a disaster. There are also emergency procedure templates for general workplaces covering natural disasters, fire, chemical spills, LPG gas leaks, CPR, and first aid.

The Health and Safety in Employment Act 1992 requires all employers to plan for an emergency situation and make sure employees know about them. The plans will help with accessing information about staff, volunteers, beneficiaries to make sure they are ok, and also get hold of supplies and assets. Keeping electronic and hardcopy backup files of essential information is just one vital part of the plan, including where you will keep relevant information, and where emergency equipment is stored.

The Emergency Response charts are at <http://www.epa.govt.nz/Publications/ERMA-Flip-Chart.pdf>

Source: Rural Women NZ; Bulletin Aotearoa

RISK ANALYSIS - ARE WE DOING IT RIGHT?

Are the risk analysis tools used by rail operators adequate?

The usual risk matrix calculates inherent risk of an incident etc by assessing its consequence (catastrophic down to legible) and the likelihood of occurrence to arrive at an overall rating. However this may result in a risk of serious injury or death being deemed to be acceptable because the likelihood of occurrence is low.

Is the death of someone acceptable even if it may occur only once every 50 years? Can an organisation tolerate some risks but not others?

The Health and Safety in Employment Act requires that any significant hazard (defined as a hazard that is an actual or potential cause of serious harm) be eliminated, isolated or minimised, regardless how likely, or unlikely, it is to occur. This is at variance with the methods outlined in risk management standards such as NRSS 4 and AS/NZS ISO 31000:2009.

The article below is reprinted from Track and Signal magazine of Spring 2011 and has some thought provoking ideas on this subject.

Weighing up the risk factors

By LEN NEIST; CEO of the NSW Independent Transport Safety Regulator

It is common practice for rail transport operators to use a risk matrix to assess the risks associated with their operations.

Assessing separate risks and then plotting these risks on a matrix - as low, medium or high - is an acceptable practice but, alone, it is not sufficient.

The matrix as a tool has limitations and over-reliance on this method could result in an operator not looking closely enough at risk tolerability.

A more mature approach to risk management is to consider the matrix rating along with a risk tolerability framework.

The risk tolerability framework requires a rail operator to know explicitly what the organisation considers to be its limits of tolerability.

The limits of "unacceptable risk" and "acceptable risk" are an organisation's guideposts. Without an understanding of these limits, an operator is unable to demonstrate the tolerability of its risks.

When the risk has the potential to impact on more than a single individual, the risk must be evaluated in the context of what society agrees is tolerable.

Rail operators should be able to prove to themselves, their workforce, the travelling public and the rail regulator that the level of risk that has been accepted by the operator cannot reasonably be expected to be reduced any further.

Operators are expected to manage these risks to as close to, or within, the acceptable range for the risk to be considered tolerable. If an operator's accepted level of risk is too close to the unacceptable limit, the operator should be reconsidering if they have done everything to eliminate or reduce the risk so far as is reasonably practicable (SFAIRP).

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When risk is viewed simply on a hazard-by-hazard basis rather than at a system level, the ranking may be low. However, when considering the hazards and risk at a system level and in view of its impact on an individual or what society may tolerate, it may in fact be much higher.

Take track worker safety as an example. Over the past four financial years, four track workers have died from being hit by trains in NSW. An average of one fatality per year is low when compared to more than 400 people who die each

year in NSW in road accidents. But when you look at the population of track workers the risk of being struck by trains per individual becomes comparable and even higher than the risks of fatal accidents when driving on the road per individual. Looking at risks in different ways may put their tolerability in a different light and hence make them less acceptable.

All reasonable, available safety measures must be implemented to eliminate or reduce risk unless it is grossly disproportionate to the safety benefit achieved to do so.

So how disproportionate should the costs of fixing the risk be, when compared to the safety benefit provided, before it is considered unreasonable?

The higher the risk, the greater the resources that should be put toward managing the risk. When risks are closer to the acceptable range, what's considered disproportionate is usually a factor of one, so the cost should be similar to the value of risk reduction -the safety benefit.

If a risk is closer to the unacceptable range, a factor of 10 is considered appropriate. That is, the cost should be at least 10 times the cost of the value of risk reduction - the safety benefit -before it is considered unreasonable for that action not to be taken.

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What an individual at risk might consider tolerable may

be significantly different to the level of risk society may accept. Hence the level of disproportionality may vary. Also, as society perceives their world to be safer, society's tolerance for risk will also change.

Some risks are well understood and the reasonable practicality of possible risk reducing measures can be determined by judgment and by reference to good practice. If a measure is good practice - that is, it is widely employed by others - then it is clearly reasonable and practical to implement.

In more novel cases, such as when organisations are bringing in complex technical change, experience can't offer guidance and making decisions becomes much more difficult.⁴ Here there is a need to model the system to try and learn in advance what the risks are. Detailed numerical analysis is often needed to provide the right sort of information to make decisions about the potential risk and its tolerability.

The key point here is for decision makers to ask themselves: is our detail of risk analysis proportional to the risk and uncertainties, or do we need to do more?

Risk management is not a static process. Monitoring and continuous improvement are essential for an effective risk management approach.

Operators should continually reassess the hazards and the controls that have been put in place, asking the questions: what is in place to monitor the deployment of controls in the risk register and how effective are these controls? Do they need modification and adjustment? What can be done to make the controls more effective or the systems safer?

An occasional review or audit is not sufficient. Organisational monitoring and review processes should encompass all aspects of the risk management process. There should be regular checking, surveillance (periodic, ad hoc or both) with the results of that monitoring and review recorded and responsibilities clearly defined.

Every control should have a control owner - and that person must be competent to deploy those controls. It's not just about assigning a person to a control - they are responsible and should be actively deploying and monitoring and reassessing so that they are familiar with the control's effectiveness as well as its shortfalls or gaps.

It is also important that rail operators are not implementing controls which are too basic for the magnitude of the consequence when in fact they should be doing much more to manage the risk.

Some controls are more effective than others. The hierarchy of controls ranges from elimination to engineered controls to the least effective controls of procedures and personal

protective equipment. If controls are all procedural then they are less effective than if they are replaced with an engineered control.

As lawyer Michael Tooma has been quoted as saying: "A system that relies on following correct procedure is not a system at all. If your system is vulnerable to people making mistakes, then it is vulnerable to incidents..."

Another issue, and one which is not unique to the rail industry, is when certain practices become tolerated. Are these practices unacceptable? In most cases it would be fair to say that these practices result in risks which have not been reduced SFAIRP.

An example of a risk that could be better controlled is signals passed at danger (SPADs). While the level of SPADs was reducing for a period, it has now plateaued in most states but are we at an acceptable level for SPADs?

ITSR examined this issue in further detail and has identified the multi-SPAD locations in NSW. This information was captured in an information paper, which is supported by a series of investigation tools for gathering further data, with rail operators encouraged to interrogate further. The paper and the tools are available on the ITSR website www.transportregulator.nsw.gov.au.

Greater consideration needs to be given to pre-cursor events such as SPADs if we are to have a robust and mature safety risk management approach in the rail industry.

In addition, our experience suggests that a large proportion of operators do not conduct a sufficiently robust causal analysis and focus too much on the final result of an incident when considering controls to reduce risks.

Rail operators should seek a broader understanding of the causes and how to more effectively eliminate or control exposure to them.

Rail operations is a hazardous industry and workers can be exposed to significant levels of risk but it is not until a person experiences a near miss or an actual incident that they perceive or experience the consequence of risk -and the risk becomes real to them.

By understanding risk in detail and determining how tolerable the risks are that have been accepted by an operator, the rail industry will be better prepared to improve safety SFAIRP.

We encourage operators to ensure they are meeting their legislative obligations, know the level of risk that is being tolerated, have a hierarchy of controls in place with competent people to deploy those controls and strive for continuous improvement in safety through review and reassessment of their risk management approach. ●

NEWS FROM OUR MEMBERS

Bush Tramway Club

Climax 1650, owned by Bob Mann, was last used by Ellis and Bernard in the 1960's.

These photos record progress since a decision was made to restore it to working order.

An ultrasonic test shows the boiler to be in "amazingly good condition".
Photos: BTC magazine



MORE NEWS FROM OUR MEMBERS

Western Springs Railway
F180 in steam for the time since 1966. Note the ingenious temporary water tanks, securely attached to the loco.

Apparently the loco has been reclassified as FWB (wheelie bin).

Photo: Graham Anderson, 9/11/2011.



Left
NRR&LS
With Wellington & Manawatu carriage #48 now mobile, work has started on its sister, #52

This photo shows the state of the interior on 16 Nov.

Photo: Graeme Bennett

Below
Ferrymead 2FT Railway Society
George Wealleans (En Camera) recently captured work in progress on the Society's new crossing loop.



MORE NEWS FROM OUR MEMBERS



Tramway Historical Society
The shell of the new tram barn is nearing completion.

Photo: George Wealleans; 27 Nov 2011

Pleasant Point Railway
As part of a refurbishment of the Model T railcar the wood work is masked up prior to painting.

Photo: Brian Blanchard; 29 Nov 2011

Below

Gisborne City Vintage Railway

The Society's latest vehicle, rebuilt from FM9 as a 32 seat carriage plus sales counter.

Photo: supplied by Society



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