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June 2023

Rail Safety Bulletin



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Escalator malfunction leads to passenger injuries – NRB23-06

Overview

On the 17th of May, a KONE escalator model E3X malfunctioned at Argyle Street Station in Glasgow.

The escalator failed unexpectedly, causing an uncontrolled reversal of direction.

Twelve people were on the escalator at the time and several of them suffered minor injuries.

Immediately following the incident and trying to help, a member of station staff boarded the escalator to aid passengers, however, this caused the escalator to start moving uncontrollably again.

This incident is now under investigation. While the investigation is underway Network Rail Route Services are conducting additional testing of all E3X machines over the next 4 weeks.



Discussion Points:

- How do you ensure your own safety when responding to accidents and incidents?
- Don't rush onto a failed escalator. Think about why you need to go on it. Think about how you can help get people to safety.
- Do you and your team have a plan for emergency events?
- What extra information might you need to help manage such incidents appropriately?

Minor foot injury exacerbated by incorrect footwear – NRL23-02

Overview

Whilst hand digging a trial hole, an operative came into contact with a buried sharp steel spike which penetrated the non-reinforced sole of their boot, causing a minor puncture wound to their right foot.

Had they been wearing the correct boots with midsole protection, this would most likely not have resulted in an injury.

The operative received first aid treatment and attended hospital where a precautionary tetanus shot was given.



Underlying Causes

The sponsor had allowed the operative to purchase their own PPE with insufficient guidance and did not carry out adequate PPE checks / assurance prior to them starting on site.



Incidentally, the same Principal Contractor (PC) had reported a similar incident four years ago. Although appropriate actions were implemented at the time, with memory fade and staff changes, the importance of continually re-emphasising lessons learnt is evident.

The poor protection offered by unsuitable boots was discussed with the individual and they were made aware of the importance and need for high standard, compliant footwear for the construction work they were undertaking.

PPE checks were immediately undertaken across all sites to ensure compliance with Network Rail's Standard and the content of future sub-contract orders is to be reviewed to include full PPE specification requirements.

Key Message:

- Check your boots. They should comply with Network Rail's Standard NR/L2/OHS/021 – Personal Protective Equipment (PPE). This standard "applies to all NRIL employees, and contractors / suppliers working on NRIL's behalf" and states that "All safety footwear provided shall comply as a minimum with the requirements of EN ISO 20345:2011" which, in turn, requires midsole protection (SBP, S1P, S3 or S5)
- For Network Rail employees, any footwear you request through Network Rail and the official NR iProc ordering system will be compliant.
- As a reminder to our Suppliers, Reg.4 of the PPE at Work Regulations 1992 (rev.2022) state that PPE must be provided by the employer.
- Suppliers / PC's – What assurance do you have in place for your supply chain to ensure safety standards are embedded?

Organisational learning from a near miss – NRL23-03

Overview

At 01:50 on 13th May 2022, a tamper operative arrived at a site access point. After being briefed and signing in with their COSS, the operative walked un-accompanied in the 4-foot of the line under possession towards the tamper that had already started work.

CCTV footage shows that as the operative neared the tamper, they stepped into the 6 foot and then moved as if to step into the 4 foot of the adjacent line.

The adjacent line was open to traffic at line speed and at that moment, a train passed the operative, causing them to step back.

Once the train had passed, the operative stepped back in to the 6 foot to continue approaching the tamper.

The incident was not reported in real time by any of the staff nearby nor the train driver, yet the event was clearly very close to being a fatality. The event was reported as a close call at the end of the shift.



Underlying Causes

- The COSS became distracted and did not accompany the operative to the worksite.
- The operative was a late substitute to make up a 3-person crew as contracted. However, this newer tamper could be, and was being operated safely with only 2 people.
- The operative was fatigued after being woken by their employer’s on-call, driving from Kent to North Essex.
- The employer’s on-call arrangement didn’t test whether the operative was fit to work.
- Although the operative was briefed at the access point, they were unfamiliar with the location.

Key Message:

- The COSS / person in charge makes sure any new person joining a group fully understands the limits of SSOW that will be in place, the operational site and task risks. If there is a distraction ‘Take 5’.
- Staff on-call to carry out a ‘dynamic’ Fatigue Assessment when called out to site. A Fatigue Management Plan should be in place for anyone on-call (Ref NR/L2/OHS/003 mod 5).
- When change occurs, like new equipment, review your risk assessments to check if you still need the same resources. In this case there was an opportunity to de-risk the activity by having fewer people on track.
- The COSS / person in charge can only supervise the safety of their work group if they are present. If a COSS / PIC moves away, the work group needs to be stood down to a position of safety until they return.

HW Machine Incident – NRB23-05

Overview

An S&T team were undertaking a full annual service to 2501B HW points at Ridham. The point winding handle was installed for manual operation and the technician began winding the points.

Once detection was lost the point machine motor then tried to drive back to normal. This spun the handle around at high speed with the technician's hand holding the handle.

The technician had managed to let go, however, felt a small amount of pain, but not enough to report it at the time.

Later that evening the IP felt some pain when they got home and went to hospital where they had an X-ray, which confirmed a small strain/hairline fracture to their metacarpal.

The incident is subject to an investigation which will establish the sequence of events that led up to the unsafe condition and any underlying causes.

This is an extremely rare failure mode, however, until it is fully understood, the following discussion points are recommended:



Discussion Points:

- S&T Discipline - Are you and your team clear on:
 - SMS/PartC/PC05 3.1 Examine the crank handle cut out contact. Check that when the crank handle is inserted the contact breaks
 - SMS/PartC/PC05 6.1 Isolate the machine by inserting the crank handle and confirming the crank handle contact breaks
- When undertaking maintenance remain vigilant and report any defects to your line manager.

MOM / Track / Other Point Operators:

Until further notice it is recommended that once a point machine is believed to be isolated (crank handle inserted), stand well clear and request the signaller to swing the points. The points should not move. If they do, or any doubt please contact your local S&T section for advice.

Testing and calibration of Live Line Indicators for use on 25 kV OLE – NRA23-01

Overview

The lifesaving rules ‘Always test before applying earths or straps’ and ‘never assume equipment is isolated – always test before touch’ can only be complied with if the Live Line Indicators used are maintained correctly.

We have received reports which highlight that Live Line Indicators aren’t being tested and calibrated in accordance with the overhead line work instructions (NR/L3/ELP/27237).



All approved capacitive and resistive Live Line Indicators follow the same inspection and verification process with tests being completed both weekly and annually.

Weekly tests - as a minimum each Live Line Indicator must prove correct functionality; this will be verified on known live 25 kV OLE once a week and proof of the test must be documented. Annual inspection – as well as performing weekly tests on all Live Line Indicators they should also undergo annual calibration inspection.

They should be calibrated and tested by an approved accreditor. It is recommended that the calibration is carried out by the manufacturer.

Both the weekly and annual inspections must take place. A self-check functional test must also be carried out prior to use.

If you come across a Live Line Indicator that is outside of it's calibration date, place the item in quarantine, mark it ‘Not for Use’, and raise a close call.

Immediate Action Required:

- All Live Line Indicators must be calibrated and tested in accordance with the overhead line work instructions standard (NR/L3/ELP/27237).
- Only Live Line Indicators with a valid calibration certificate must be available for use.
- When selecting the Live Line Indicator, you must check a successful weekly test has been completed or complete a test on a known live 25 kV conductor prior to use.

Trackworker Near Miss – NRB23-02

Overview

On the 14 February 2023 at Teignmouth Boat Yard, near Dawlish, at approximately 01.18am a Controller of Site Safety (COSS) went to place worksite marker boards after being asked to assist the Engineering Supervisor (ES) in taking a worksite.

Believing they had been told to place the marker boards, the COSS accessed the track and walked to the required position and placed the marker board on the Down line, whilst placing the marker board they heard a train coming and moved quickly onto the open Up line as the train hit the marker board.



Permission to place the marker boards had not been given by the ES and both lines were still open to traffic. The forward-facing CCTV footage from the train shows the COSS moving clear from the down line 4 foot into the open Up line with less than 3 seconds to spare before the train hit the markerboard.

The train came to a stand with the driver and driver trainer believing they had struck the operative.

RAIB attended site and will be producing a safety digest in the near future.

Discussion Points:

- How you make sure plans and resources are adequate to undertake the task?
- How do you assess the impact of changes to the possession / worksite plan and availability of resources, and you assure yourself those changes are correctly communicated and understood?
- What can you do to make others feel able to challenge any communication if something is not clear or accurate and how do you make sure people clearly understand the actions you want them to take?
- Are you using communication protocols such as, repeating back critical information, using the phonetic alphabet, confirming next actions, locations, lines, mileages and times?
- What can you do to make others feel able to challenge any communication if something is not clear or accurate? How do you make sure people clearly understand the actions you want them to take?

Network Rail Standards Portal Moving from IHS

Network Rail making changes to the way they provide free access to their standards. By 31 August 2023, they will transfer free access to their standards and controls to a new interim website. Until then, please continue to use the existing free Network Rail Standards Portal provided by Accuris: <https://global.ihs.com?csf=NR>.

From 1 June 2023, those suppliers who access the Network Rail Standards Collection via the Accuris Engineering Workbench platform will have the opportunity to continue this access for a subscription fee.

Details of how to access the new interim website will be made available shortly.

This change to access Network Rail standards is part of a wider programme and Network Rail will invite suppliers to help shape the new standards portal over the coming months.

For Accuris website queries: support@accuris.co

For our interim website queries: STSupplierSupport@networkrail.co.uk

Simon Morgan, head of corporate safety. Network Rail.

QUIZ TIME

There were quite a few correct entries to the Quiz that was set in May Rail Safety Bulletin.

The Question

In 1839 I was outside the wall, by 1841 I was within the wall, and then in 1877 I was moved back out.
What am I, and Where am I?

York Station

The first correct entry out of the stationmaster's hat was Duncan Ferreira OF Smart Trax Rail Ltd
Congratulations Duncan!

So, we have another opportunity to create a winner!

There is a £25 M&S Voucher up for grabs in this, the June 2023 Rail Safety Bulletin

To be a winner this month, just answer the simple question below;



The Question

Here's one for our Scottish readers – but anyone can have a go.

Inter7City trains call at Scotland's seven cities. Can you name them all?

Answers by email please to info@prb-consulting.co.uk to be in with a chance of winning the £25.00 M&S voucher.

Closing Date: 31st August 2023

