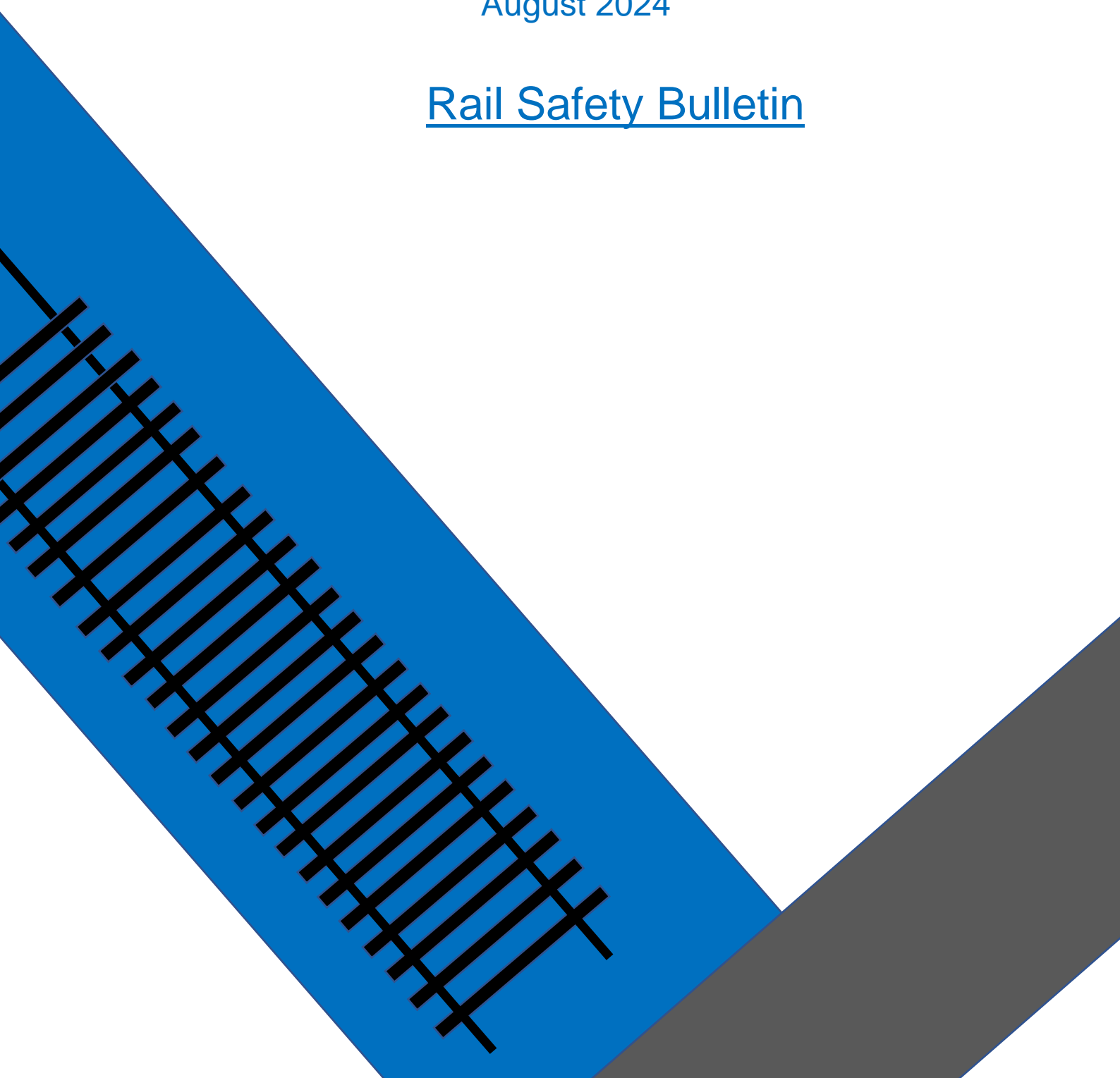


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August 2024

Rail Safety Bulletin



Contents

Konux Sensor Incident – NRB24-09.....	3
Ticks and Lyme Disease – NRH24-03	4
Welding Garments Information – NRL24-03.....	5
Mental Health First Aider Training.....	8
Rule Book Updates	9
QUIZ TIME	10

Konux Sensor Incident – NRB24-09

Overview

On 6 August 2024, during a site walkout near Preston Park in Sussex, a KONUX Connect sensor was found in a catastrophically failed state during a site visit with debris over 20m away.

These devices are used to monitor sleeper and bearer movements, this device was experiencing higher than normal vibration levels. This device was installed in February.

In April the device self-reported a condition issue and stopped working in May. The catastrophic failure occurred at some time between 29 July 2024, when an intact device was captured on train-borne video, and the day of discovery.



The cause of failure is yet to be determined. Devices have been recovered on previous occasions and have been subject to failure investigation to facilitate product improvement.

The supplier, KONUX, has highlighted several sensors, remaining on track, that have stopped communicating or are self-reporting condition issues; a number have not communicated consistently for a sustained period. They are in contact with route teams to prioritise the recovery of failed devices.

Most sensors, -95%, are fully functional, continue to monitor asset conditions and are not experiencing extreme conditions leading to a very low likelihood of catastrophic failure.

Whilst Konux continues to monitor devices' health and status, users should contact Konux when they note devices are not reporting and they are unaware of planned interventions.

Discussion Points

- How do you manage failed monitoring devices across your discipline portfolio?
- How do you see the benefit of gathering failure information?
- Do you understand how high levels of movement and vibration can impact our equipment and infrastructure?

Ticks and Lyme Disease – NRH24-03

Overview

Lyme disease is a bacterial infection that can be spread to humans by infected ticks. It is a relatively uncommon infection as not all ticks carry Lyme disease. It is estimated in England and Wales 4% of tick bites can lead to Lyme disease. However, it is more likely between April-July when ticks are most active in grassy or woody areas.

If an employee is bitten by a tick they should be aware of the symptoms of Lyme disease and take immediate action to seek medical care to treat the infection (e.g., GP or NHS 111). If detected early, treatment of Lyme disease responds well to general antibiotics.



Common symptoms include:

A circular or oval shape rash around a tick bite

- Flu-like symptoms a few days or weeks after they were bitten by an infected tick
- High temperature, feeling hot and shivery
- Tiredness and loss of energy

To reduce the risk of ticks attaching to the skin of employees who work around grassy or woody areas, and therefore lowering the risk of Lyme disease, employees should:

- Cover up exposed areas of skin by wearing appropriate PPE provided (consider higher boots and spraying your trousers.)
- Where short sleeves are worn, use insect repellent and regularly check skin and clothing to brush off any ticks which are spotted
- Limit the time spent in grassy or wooded areas to the requirements of the work being carried out
- During breaks and at the end of the work, check skin and clothing
- If a tick is found on the skin remove as quickly as possible using fine tipped tweezers ensuring the tick is not squashed on removal

Discussion Points

- Do you have the required and well-fitting PPE when working in grassy or woody areas?
- Do you always check clothes and skin after working in grassy or woody areas?
- Call 111 if you have been bitten by a tick and suspect you have symptoms of Lyme disease.
- If you were bitten by a tick whilst at work and Lyme disease is confirmed, inform your line manager as this is required to be reported as a RIDDOR
- Further information can be found on the [NHS website](#)

Welding Garments Information – NRL24-03

Overview / Underlying Causes

Following examination of some NR supplied welding and grinding PPE garments it was found they did not meet the approved specifications for NR staff conducting these activities.

Investigations found that some garments were marked ARC Flash PPE and being used for welding activities.

PPE Garments with ARC Flash Labels are for Distribution & Power Plant Staff and other staff who access traction and HV non-traction locations according to the task.

These Garments do not provide the full Levels of Protection for all those undertaking Welding & Grinding Activities.

The PPE Governance Panel has agreed some interim steps for short term supply of necessary Welders and Grinders garments.

The following are currently the PPE products that must be procured for use:



- NWR001W - Hi Vis Welding Protection Flame Retardant Waterproof Windproof breathable jacket.
- NWR002W - Hi Vis Welding Protection Flame Retardant Waterproof Windproof breathable trouser.
- NWR003W - Hi Viz WELDERS Flame Retardant COVERALL. NOTE: Limited immediate stock in all sizes is available to order through the punchout system.

Stocks are being checked and delivery times will be notified asap.

Investigations identified that incorrect PPE for welding/grinding had been mistakenly ordered through the Punchout system and staff had received ARC Flash Protective Garments not welding specific.

Arc Flash garments must be worn by staff accessing traction and HV non-traction locations in line with the requirements of NR/L3/MTC/RCS0216/DP01.

These activities are not the same as arc welding and the clothing does not provide protection from welding such as molten splashes and hot works.

Investigations also found non-compliant PPE have been purchased outside of the Company Governance process i.e. local PPE supplier, potentially due to the short-term delays / difficulties in receiving garments through the PPE ordering system.

However, this is not the correct procurement process and had resulted in substandard PPE garments being provided.

Further work is being done by our supplier to produce Circa 500 Coveralls to the required specifications which should be ready for distribution in 6 to 10 weeks we will keep you and the Area H&S Safety Representatives informed of progress.

Staff attending Welding discipline training must wear the correct levels of PPE which includes having Coveralls.

The Garment Labelling can be confusing. A copy of the guidance is provided below, please ensure that you or your line manager understands the specification required and that the correct garments are ordered.

Guidance for the Selection of the Class of Welders' Clothes		
Selection Criteria Relating to the Process		Selection Criteria Relating to the Environmental Conditions
CLASS 1 TIG / MIG	Manual welding techniques, light formation of spatters and drops e.g.:	Operation of machines, e.g. of:
	<ul style="list-style-type: none"> Gas Welding Tig Welding MMA Welding (with rutile-covered electrode) Micro Plasma Welding Brazing Spot Welding Mig Welding 	<ul style="list-style-type: none"> Oxygen cutting machines Plasma cutting machines Resistance welding machines Machines for thermal spraying Bench welding
	Manual welding techniques, heavy formation of spatters and drops, e.g.:	Operation of machines e.g. of:
CLASS 2 MAG CO ²	<ul style="list-style-type: none"> MMA welding (with basic or cellulose covered electrode) Mag welding (CO² or mixed gases) MIG welding (with high current) Self-shielding flux cored arc welding (FCAW) Plasma cutting Gouging Oxygen cutting Thermal spraying 	<ul style="list-style-type: none"> In confined spaces At overhead welding/cutting or in comparable constrained positions

<p>See the classification table for ISO11611 for welding activities.</p> <p><u>PERFORMANCE LEVELS</u></p> <p>According to the performance requirements, EN ISO 11611 distinguishes between 2 classes of protection.</p> <p>Class 1 – Protection against low risks</p> <p>Specifies requirements for welding techniques and situations that cause the least amount of metal splash and low radiant heat.</p> <p>Class 2 – Protection against higher risks</p> <p>Specifies the requirements for welding techniques and situations causing more metal splash and higher radiant heat.</p>	<p>ISO11611 requirements have the classifications to meet heat resistance</p> <p><u>PERFORMANCE LEVELS</u></p> <p>The performance of garments meeting the EN 11612 standard is given by 6 indices.</p> <p>A: Flame-spread behaviour – A1 (on face) and/or A2 (on edge)</p> <p>B: Resistance to conceive heat – B1 to B3</p> <p>C: Resistance to radiant heat- C1 to C4</p> <p>D: Resistance to molten aluminium splash -- D1 to D3</p> <p>E: Resistance to molten metal splash – E1 to E3</p> <p>F: Contact heat resistance – F1 to F3</p>
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Key Message
<ul style="list-style-type: none"> • All Staff in the Welding and Grinding community must order and purchase garments that are approved for use for NR Staff by the PPE Governance Panel. Use the C&P Punchout system when ordering. • Only approved PPE obtained through the NR Procurement System will conform to all the specifications, and sub-categories, required for the different types of Welding carried out within Network Rail. • PPE that has not been approved by the PPE Governance panel may not meet all the specifications required and could cause harm to the wearer

Mental Health First Aider Training

Following on from a very successful course this month, we are now offering an ONLINE Mental Health First Aid England Course on the 16th & 17th October 2024 and have attached the link to register if you would like to attend.



This is the new MHFA England 2-day course, which is accompanied by 3 years of support and guidance via the MHFA App and Hub of Hope App. This course also enables you to register and obtain the Level 3 award in Mental Health First Aid.

The course is dated Wednesday the 16th and Thursday the 17th October and is appropriate for anybody wishing to gain an understanding of the types of Mental Health issues that you may encounter both in the workplace and in a personal capacity.

Once you become an MHFAider and become confident in your role, you will have the ability to go on and take the examination for the Royal Society for Public Health (RSPH) Level 3 Award in MHFA. The cost of the course is £250 (RRP £325) + Vat + cost of Course materials.

Please feel free to call and discuss further if you are interested or can think of anyone who may benefit from taking the course.

Bonita (Bonny) Raisbeck

Mobile: 07584 125665

Email: bonita@bnshe.co.uk

[Course booking form](#)

mhfaengland.org



Rule Book Updates

In December this year we will see a range of updates to the Rulebook (GERT8000)

The following handbooks and modules will all be updated:

Number	Title	New Issue No'
HB1	General Duties and Track safety for Track Workers	8
HB6	General Duties of Individual Working Alone	8
HB7	General Duties of a Controller of Site Safety	9
HB8	IWA, COSS, or PC Blocking a Line	10
HB11	Duties of the person in Charge of the Possession (PICOP)	11
HB12	Duties of the Engineering Supervisor (ES) in a Possession	10
HB15	Duties of the Machine Controller (MC)and the On Track Plant Operator	7

Hard copies of these new Handbooks can be ordered from Wilsons Printers

The order form can be downloaded by clicking [HERE](#) or by calling the Willsons Rail Help Desk on 01636 702334

PRB Consulting will provide detailed analyses and review of the changes made in these newly issued Handbooks nearer the time of their release.

QUIZ TIME

There were quite a few correct entries to the Quiz that was set in June 2024 Rail Safety Bulletin

The Question

At what time did the Train hit the Road Rail Access Panel?

Answer:

Shortly after 5:06am.

The first name out of the stationmaster's hat was... Adam Hyde from H&H Examinations

Congratulations Adam, the M&S Voucher is on it's way!!



So, this month we have another opportunity to create a winner!

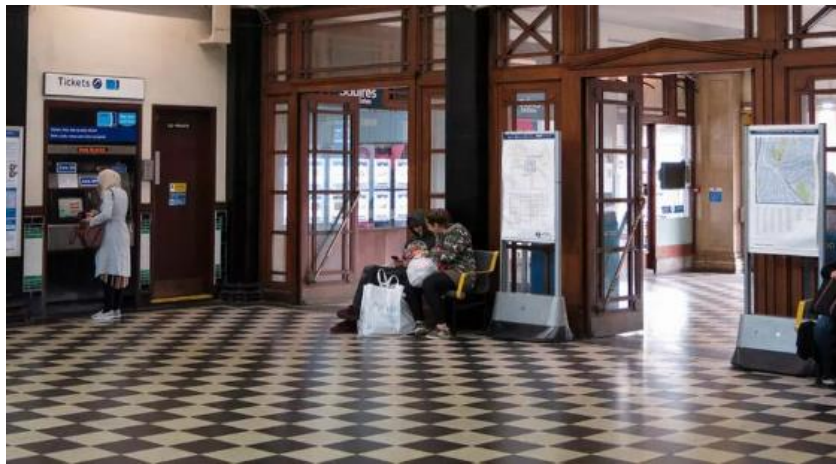
There is a £25 M&S Voucher up for grabs in this, the September Rail Safety Bulletin.

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

The Question

Where am I?

This is the only London Underground station where you could play Chess on the entrance hall floor



Answers by email please to info@prb-consulting.co.uk to be in with a chance of winning the £25.00 M&S voucher – Put QUIZSEPT24 in the subject.

Closing Date: 30th September 2024

RAIL SAFETY BULLETIN AUGUST 2024

Briefed By:		Briefers Role:	
Briefing Date:		Briefers Signature:	
Sentinel Coordinator:		Sentinel Coordinator Signature:	

By signing below, I confirm that I have received and understood the briefing material contained within this bulletin.

NAME	SENTINEL NUMBER	SIGNATURE	DATE