The Shied



THE PAPER FOR RAIL PEOPLE IN THE SOUTHERN REGION

ISSUE 02, SUMMER 2015



No shocks

Power in safe hands Current Affairs Page 4



"It's important we look for silly mistakes" BRIDGING THE GAP PAGE 7





Save a life and help a good cause - page 2



"I fundamentally believe that we all come to work to do a good job so that we can get paid and then spend time with our family and

> vone who intends to have an accident whilst at

work – so why do we still have accime to expect anyone else to not do dents? I am passionate that everyone gets home safe, every day and I believe that by working together we can make this happen. Admittedly, in every hour there will be moments when I am thinking about something else and not the task in hand; some call this going into 'alpha mode'. "Therefore, it would be wrong of

the same. But I would hope that when this happens, one of my team will be looking out for me and that I would do the same for them. So today, please think about who in your team is look ing out for you and who you are look ing out for? Together, we can ensure that everyone goes home safely

MORE THAN 1,000 people have now attended awareness roadshows hosted by BAM Nuttall Plant.

The roadshows, which highlight safety features of equipment and potential hazards of operating vehicles and plant on construction projects, have proved popular since their launch in late 2014. The most recent series of events were held at sites from Heathrow to Dawlish in Devon.

Steve Jarvis, General Manager of BAM Nuttall Plant, said: "Education is the key to awareness, which is the fundamental driving factor behind our plant awareness roadshows.

"We strive to make our plant as safe as possible, combined with our company vision of Beyond Zero, driving us to seek continuous improvements, reducing risk."

BAM Nuttall has made the installation of a collision avoidance system to dumpers mandatory on all its sites.

Steve added: "A lot of people are not aware of the systems available, so it was also an obvious choice for the road shows and an opportunity for everyone to gain an understanding of the potential reduced visibility and why exclusion zones exist and are established."



The Shield

This paper is produced for:













SIEMENS

VolkerFitzpatrick



Written and designed by:



www.beetroot.co.uk

COLLEAGUES MOVED BY HARD-HITTING MESSAGE

LESSONS learned from a serious accident formed part of a Southern Shield event attended by colleagues from across the region.

Former welder and construction firm boss James Gorry told the audience how he lost the use of his legs in an industrial accident in 2005 and about his subsequent campaign for safer workplaces.

Senior leaders from Network Rail and Southern Shield contractors also spoke at the event held at the Kia Oval

Here is what some colleagues made of the event:

"The guest speaker was brilliant – Network Rail should Simon Dunbar, Costain Works Manager

"Very good, nice to listen to. James Gorry was very Mark Watkins, VolkerFitzpatrick

"Very informative." **Trevor Wickens, BCM**

"It is good that we have been invited so that we have more of an understanding of what the management

A recent study commissioned by insurers

showed that the reaction time of drivers using

hands free and hand held phones slowed dramat-

ically compared with those not using a device.

states that hand held or hands-free mobile de-

It is why one of Network Rail's Lifesaving Rules

THE ROAD TO SAFER DRIVING

Liam Coleman, BCM

An abnormal weekend posses sion was also used to complete the main works within 52 hours

EARLY (**ARRIVAL AT**

VAUXHALL PLATFORM refurbishment work at Vauxhall railway station has been completed safely and a month ahead of schedule.

The work involved reducing the gap between platforms 7 and 8, two of the busiest commuter platforms in the country, allowing commuters easier and safer access whilst getting on and off trains. Previously the narrow island platform had one of the worst incident records on the route.

Contractors from Osborne worked closely with designers and supply chain partners to overcome some significant design challenges, particularly around reducing the stepping distance to make it safer for commuters.

ness training courses hosted recently by Network

tors, provided training for safe and efficient driv-

ing and hazard awareness, as well as guidance

The programme, run by AA Drive Tech instruc-

SAVE A LIFE, **HELP A GOOD CAUSE**

CALLING in a Close Call will now not only save colleagues from serious injury, it will raise money for good causes.

The Safety Leadership Team has pledged to donate £1 to a worthy cause for every Close Call recorded every period.

Money raised will be donated to a variety of causes from charities supporting terminally ill children, to organisations providing financial assistance, wellbeing advice and legal support to the construction

soon as they spot them

od. My personal safety commitment includes a promevery day.

If you've seen a hazard on railway infrastructure, or in a Network Rail building, notify your site supervisor or call the Network Rail Close Calls hotline on 01908 723 500.

community

A Close Call is an event or hazard which has the pot<mark>ential to cause injury to people or da</mark>mage to property. All colleagues are encouraged to report hazards as

Steve Walters, Network Rail Route Delivery Director, P Southern (Wessex), said: "It was great to see our Close Call reporting numbers hit a new high last periise to always act on information or actions that could prevent anyone going home safe – the reporting and resolution of Close Calls is a key way of achieving this. The more Close Calls we report and resolve, the closer we get to making sure everyone goes home safe

To find out more visit www.aadrivetech.com

Vehicle safety checks

Safe space

Winter driving

Tyre care/choice

Driving for optimum fuel economy

Continued from page 1>>

...to fully divert the flow to create a temporary dry work environment, contractor Osborne turned to the Little Mermaid – a bespoke, remote-controlled underwater digger, supplied by Suttle

Paul Fagan, Osborne Site Manager, said: "Using the Mermaid simplified a complex operation, significantly reducing the time divers had to spend in the water with the hazards and challenges that brings

At Staines the Little Mermaid was deployed on a floating pon-

toon to carry out the scour protection work. Its lower height of 0.8 metres rather than the standard height of around 2.7 metres meant it was able to work effectively under the bridge, safely activated via remote control by an operative a few metres away.

The machine scooped out the existing river bed. Divers then set out grout bags - which had to be hand-placed underwater and layered to the right levels. Finally, silt was laid over the top of the hardened grout bags. Scour protection is required to elongate the life of the structures and to stop further erosion of the

Paul added: "We are delighted with the outcome of this pro-

ject and always look to new technology and better ways to deliver results."

Dave Hooper, who heads up Infrastructure for Osborne, said: 'The Little Mermaid is just one of the innovations that prove excellence lies in collaborative working. It also has an important safety element. This is something the industry is focusing on – the imperative need is that we send our people home safe every day."

Joe Paine from Suttle added: "By collaborating with Osborne to use this equipment in the project, we were able to provide an efficient and cost-effective solution for what was historically a complicated and expensive task."



WORKING SAFELY? THINK AGAIN...



A CAMPAIGN encouraging colleagues to think differently about safety is helping reduce accidents and boost

STOP Think! was launched by Osborne in 2014 and has already seen more than 400 colleagues, customers and suppliers – from frontline workers to senior managers – take

part in a series of workshops. Rather than offer instructions on safety procedures, the sessions focus on the workings of the human mind and how colleagues at all levels make decisions which impact on safety and business efficiency.

"We recognise that business performance and safety performance go hand in hand, and the intended outcome is that we get people to think differently, make better decisions and ultimately change lives," said Carl Dolan, STOF Think! Programme Manager.

STOP Think! begins with a one-day session where colleagues learn how the brain works and what leads people to make certain decisions.

The next step is an optional two-day course where coleagues develop coaching skills to support others in makng better decisions.

Part three is a six-day business coaching workshop programme, which gives colleagues a more detailed understanding of how they can make better decisions at a business level as well as an individual level.

"Each takes away a project to help bring about a pos-itive change in the part of the business where they work. "Of those going through the business coaching, around

25 per cent are front line colleagues. That's a good mix because if it was all management, it wouldn't work." The campaign is already having an impact on the day

to day delivery of work.
"Site supervisors tell us they are doing briefings a little differently," said Carl. "Simple things like asking what teams have understood about risks, rather than just say 'this is right and this is wrong'.

"STOPThink! is becoming part of the language – and not just on site. We've had feedback that colleagues are using their new decision-making and communication skills at home.

"But perhaps the most important impact is that our AFR (Accident Frequency Rate) is down - that's a real plus.'



'While working earlier this year on renewals work in Bearsted vard in Kent. I heard the blast of a train horn and then noticed a member of the public walking down the

"My first thought was to get him away from dar

"I first quickly made my way to the station, where a train was stabled on the platform. The driver said that he had ported the incident and had the con rails isolated.

"I approached the man - he appeared to have been drinking and spoke of wanting to end his life. I convinced him to come of the track and he came with me to the front of the station as spoke to him. When we reached a safe place I phoned the police and sat with the man until they arrived.

"You can't always stop this sort of thing but the incident made me realise how it's important to be alert and ready for the unexpected. And it is a reminder that we must always insure our own safety before reacting."

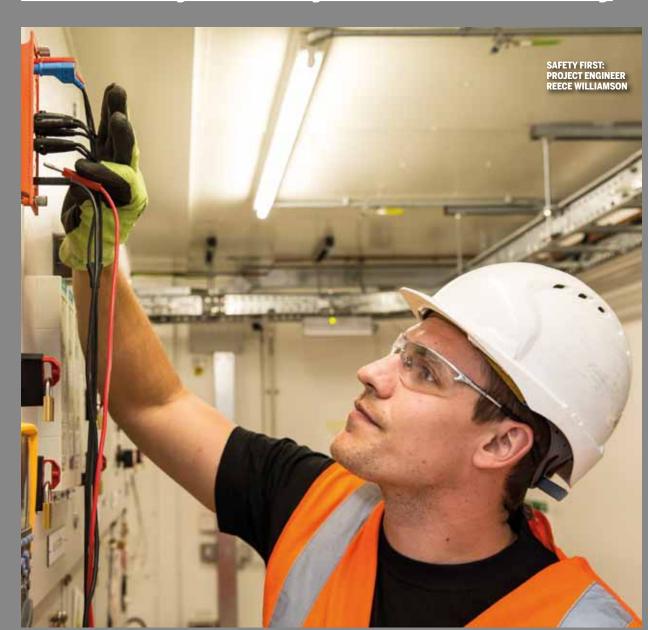
Dan is a Yardsman for McGarry Construction, a subcontrac tor for BCM

Rail IP Southern

DISTRACTIONS while driving reduce our lev- el of concentration and can cause accidents.vices are not to be used while driving. It was also a key area of focus for a series of AA Driver Aware-

CURRENT LIVE !-

The Shield called into a lineside substation to see how colleagues working with electricity ensure they are switched-on to safety







Bus ston

HVMS secured the services of Network Rail's Safety Bus during the Kings Worthy work. This mobile site office (above) provides a warm, dry environment in which site colleagues can learn more about a particular aspect of rail safety, get updates on the latest guidelines or find out about industry initiatives.

At Kings Worthy it was used to carry out a brief as part of the Mental Health Awareness week.

Owen Marsh, Head of Projects for HVMS, said: "The Safety Bus is a valued resource. It helps ensure that our safety culture is improved by direct engagement with site colleagues by reviewing key safety messages and sharing best practice."

AC/D

The substation at Kings Worthy, near Winchester, is one of many where power from the 33,000 volt AC distribution network is fed into rectifier transformers. These step down the voltage to the 750 DC supply which provides traction power on the railway.

The work being carried out by HVMS is part of a wider renewal of AC switchgear installations on the Wessex route, which will improve the power distribution required for longer trains and improved reliability and resilience of the railway.







BUS SECTION

ONE of the biggest dangers on the railway is one that nobody can see – high voltage electricity.

Yet every day across the rail network, colleagues work on (or close to) live rails, overhead lines and the vast network of cables supplying power to tracks, signals, stations and other assets.

It is one of the reasons specific Lifesaving Rules are in place and why attention to detail and commitment to the highest safety standards are required to keep everyone safe.

At Kings Worthy, near Winchester, contractor HVMS recently undertook work as part of a wider high voltage switchgear asset renewals programme, improving the resilience of the existing infrastructure in providing traction power.

INDUCTION

As with any safe site, the vigilance starts long before any work begins. "Before we go on any site, we determine if it's 'hot' or 'cold' – that is whether the rise of earth or shock potential is at a safe level," said Owen Marsh, Head of Projects for HVMS (pictured, right). "Where necessary we undertake works to make sites safe – this was the case here.

"When we are on site, everyone attending signs in and receives a task briefing each day on the work being undertaken, and any associated risks.

"Anyone new to the site receives a full site induction, including high-

"Anyone new to the site receives a full site induction, including highlighting specific risks around the site, evacuation procedures, first aid procedures and a fit-for-work assessment."

Working with electricity brings its own set of checks to ensure compliance with Network Rail's Lifesaving Rules.

QUALIFICATION

Owen added: "We check that all required plans and permits are in place and that all equipment being worked on is under a High Voltage Isolation.
"All HVMS people on site are trained to exercise their specific duties.

"All HVMS people on site are trained to exercise their specific duties. On site today, for example, we have a mix of qualified electricians and test and commissioning engineers with Sentinel competencies ranging from level A to D.

"Supervisory staff also undertake IOSH (Institution of Occupational Safety and Health) safety management training."

ISOLATION

The Test Before Touch rule is paramount wherever electricity is involved. "We cannot carry out work on any equipment until it has been proven dead by a competent person with correctly calibrated equipment," said Owen.

"Where equipment is live, isolation warning signs are placed to alert personnel not to touch or operate. The signs are placed deliberately at an angle, as it draws attention to the sign more effectively.

"Live equipment is also padlocked to ensure that it cannot be operated or opened accidentally.

"Temporary HV cable routes are marked and labelled with a warning wrap and live cables are also protected by a non-smouldering, non-flammable self-extinguishing ducting."

As well as the regular PPE, yellow rubber 'dielec tric' boots are also available for certain specialist access situations.

PARTICIPATION

Of course, having the right equipment and expertise is only part of the story – staying safe also requires everyone to have the right attitude and mindset.

Owen added: "Like many of my colleagues in Southern Shield I have made a personal commitment to improve the safety culture of HVMS.

"I set safety targets that challenge our teams to deliver consistent improvement.

"It's important an 'I care' attitude is adopted by everyone so that we all ensure everyone goes home safely every day."

Safety in numbers

In period one 2015 (1 April to 29 April) there were:

10 accidents

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RIDDORs

That's still

people who did not "go home safe"

453

Close Calls recorded, of which

153

were about untidy sites

STOP PRESS

In period two there was not a single accident – zero specified RIDDORs, zero lost time accidents and zero minor injuries. This means 100 per cent of our people went home safe.



DO YOU know your numbers?

The numbers in question are your body mass index BMI (weight to height ratio), blood pressure and cholesterol levels. They can be a good measure of general health or sometimes an early warning of more serious problems

As part of a commitment to look after the health and wellbeing of people working on the railway colleagues across the Southern region are being offered the chance of a 15 minute 'Know Your Numbers' assessment by an occupational health nurse.

At the end they will be given their BMI score and blood pressure and cholesterol levels and a table to compare against recommended

Line managers will have more information on how this service can be arranged.

One Osborne colleague was certainly glad he took the test.

He said: "My blood pressure was a car crash waiting to happen. I was told I should visit my GP and I am now on medicine to sort out my blood pressure and understand bet ter what foods impact on my cholesterol. I will be a healthier husband and dad as a result."

Blood pressure factfile

The main symptoms include: High blood pressure isn't dangerous in itself but, if it's left untreated it can lead to very serious conditions, heart attacks and strokes

- Doctors record blood pressure readings in the form of two numbers. The first figure is the blood pressure measured during the moment when the heart is contracting and actively pushing blood out This is called the 'systolic'
- The second figure is the pressure during the time when the heart is filling up ready for the next beat - called the 'diastolic' pressure
- For a young person a typical resting reading would be 120
- Generally a blood pressure of 140/90 or more is considered



KIT IN CLOSE-UP done and a serious injury. In each issue we'll focus on one piece of PPE and reveal some of the science behind the safety STEAMED UP? **CALL IT IN** There have been reports of some safety glasses steaming up during strenuous activity or when an FFP3 dusk mask is worn, restricting the wearer's view. No one should be at risk in this way, so if you have experienced this problem, please report it as a close call.

EYES RIGHT

OUR eyesight is probably the most valuable - and vulnerable - of our senses.

Because wearing protective eyewear at all times whilst undertaking tasks on the railway is a must, it's important that the glasses are strong. clear and comfortable. And a lot of science goes into making sure that's the case.

The Network Rail approved SILI-UM+ eyewear made by Bollé Safety for example is made of ultra-lightweight polycarbonate designed to cope with alternate exposure to bright and low light, as well extreme hot and cold environments.

Costain colleagues working on

Crossrail have been issued 3M 0386 Maxim Ballistic Clear spectacles. Designed to wear in combination with a helmet and ear protectors, they are the same as those used by British soldiers in Iraq, and meet military test standards for high velocity impact (that's MIL-STD 662, impact at 198m/s for those who are interested in these things)



EVEN during isolations, it is not always obvious whether 'floaters - those pieces of third rail that are not obviously connected to other parts of the electrified line

– are İive or safe. Last year, at Guildford, two op eratives were fortunate not to be lled or injured when a metal 'road pin' that they were about to place as part of a fencing task was ropped onto a live conductor rai causing a flashover.

The incident was compounded by a series of separate posses ion irregularities that did not take nto account of the presence of

Floaters should be considered as especially dangerous and they should ALWAYS be treated as live until tested.

Remember, always test before ouch - it could save your life.

ON SITE

RYAN CHANDLER, APPRENTICE

"I've been working on the wiring system, making sure the lights in the new blocks are wired up correctly and that the new blocks receive power.

"Before we start, we erect barriers to keep members of the public away and usually have someone standing guard to guide them away as well.

"Working with electrics can be quite dangerous, even for professionals, so it's vital we keep them as far away as possible, as any injury that does occur carries a risk of being extremely serious.

Most important piece of safety kit: "I'd say my hard hat, as a bump on the head could seriously affect my ability to do my job in the future."

If I could change one thing: "Sometimes it could be communicated quicker if we are doing something wrong."

If you could represent your country at anything, what would it be?: "As a huge Chelsea fan, it would have to be football



BARRY FORSTER, GROUND WORKER

'There's been a lot of digging and drilling involved in the project, so I have been busy CAT scanning areas so that we avoid hitting any existing cables.

"I have to fill in a CAT scan ticket when these are completed and also inform the diggers of what's below them so that they can proceed with caution

"This is important as if someone were to hit a cable, not only would it be very expensive to sort out, it could also potentially cause them a huge amount of harm as well.

Most important piece of safety kit: "Probably my boots – you've got to look after your feet!

If I could change one thing: "The amount of PPE we have to wear in the summer, as it can get quite uncomfortable in the

If you could represent your country at anything, what would it be?: "I'm a huge football fan. so it would have to that.



CLIVE BENNETT, SUPERVISOR

"As a supervisor, it's my job to make sure the guys have been doing the job while working in a safety-conscious fashion.

"Fortunately, everyone working on the project is quite experienced. That being said, it's important we continue to look for silly mistakes, anything from trip hazards we may not have noticed or miss-

"I've got to say, I think the work the team has done here is fantastic and a true credit to everyone involved. It will also greatly benefit the public and station employees when it's completed too."

Most important piece of safety kit: "My glasses, as there is a lot of dust and debris when digging or drilling."

If I could change one thing: "Our gloves. They make your hands so cold it's hard to feel a thing sometimes."

If you could represent your country at anything, what would it be?: "I've been riding motorbikes all my life, so proba bly motorcycle racing.



DANE CAFFYN, ELECTRICIAN

"With a completely new wiring system needed, it's my job to complete the work efficiently and safely.

"It may seem obvious, but the first thing I check is that the person doing the job is fit to do it. Secondly, it's to make sure any wiring that is being worked on has been properly tested.

"The general rule is that if you have tested properly, and are also holding one end of the cable in your hand, then you are able to work safely.

Most important piece of safety kit: "As I work with electricity, it's got to be my

If I could change one thing: "Access has been difficult at times, so it would be great if that was improved."

If you could represent your country at anything, what would it be?: "It's definitely got to be football."



GLASS ACTS

over a pair of Bollé safety glasses to colleagues who have made an outstanding contribution to safety where they work.

Scaffolders working on the Millsden Lane Bridge project in Winchester were oraised for their "skill and attitude to safety" during the works.

Handing over pairs of safety specs to Mark Finch. Joe Wildes and Freddie Godwin, Senior Construction Manager Phil Mellish described the trio as

'very valuable members of the team". Care for the safety of wildlife, rather than people, earned praise and a Manager Rob Burr and his colleague Rob and Steve created a "bug hotel"

while closing out works at Polhill Sub Station in Kent providing a safe haven for beetles, insects and other small animals important to the local

Has your colleague made an outstanding contribution to safety? If so get in touch.. shield@networkrail.co.uk









RAIL LIVES



IT'S ALWAYS good to have someone watching your back at work, but even better to have two.

That's the reality for Works Manager Alex Wason and sons Alex junior and Bradley, who have all pursued a career in the railways.

Alex senior spends his time managing projects and ensuring they stay safe while his sons both work as Site Operatives, supervising work and making sure it runs to schedule – all for contractor VolkerFitzpatrick.

"They have always been aware of where I was working and what I was doing, so I can imagine it did influence them a bit," said Alex.

"My eldest, Alex junior, did come in that way, whereas Bradley began his career constructing golf courses in France.

"Alex junior has worked with me in the past and Bradley is currently working with me on a project in Felixstowe. Of course, I trust my colleagues to look after my sons at work but it does put my mind at ease when they are working under my instruction.

"You are always going to have that worry as a parent but I am also confident in their ability and I know they can look after themselves."

While all three have a wealth of experience, that doesn't stop them thinking about their

family members' safety.

"I've worked with both my dad and my brother before," said Bradley. "I think perhaps when I first started there was a bit of worry in the back of my mind, but that feeling goes away reasonably quickly.

"There's definitely a reassuring feeling to know you have family in the same career and we certainly all watch out for each other when we're together on the lines."

Alex junior said he did get a tad nervous when younger brother Bradley joined the com-

"I do still worry about the pair of them, but

definitely not as much as I used to," said Alex. "When my brother first started especially, I did worry about him working near the lines when the electricity was still on.

"There is always going to be an element of danger, but my concern alleviated somewhat after the first year."

And, according to Alex senior, it's not just a career on the railways that the three have in common: "One of my biggest passions is motorcycles – something I share with both my sons. My grandson, Bradley's son, has his own trail bike too, so it's turned into a hobby shared between three generations!"



A SUPERCAR DRIVING EXPERIENCE

WWW.EXPERIENCEMEGASTORE.COM

Fancy yourself as the next Lewis Hamilton? Enter our competition and you and a guest could put your race track skills to the test.

Two winners and two guests will enjoy a supercar driving day from Experience Megastore where they will be able to get behind the wheel of three amazing supercars from a range including Lamborghinis, Ferraris, Porsche 911s, Audi R8s and more. The winners can chose their location from circuits in Essex, Lincolnshire or Vale of Glamorgan, where they will get three laps in each car, plus guidance from professional instructors.

How to enter

Send your answers to the questions below to **shield@networkrail.co.uk**, including your name, job title and company and a daytime contact number. You can also post your entry to: Marsha Gray, Infrastructure Projects Southern, Waterloo General Offices, Waterloo Station, London, SE1 8SW. The winner will be drawn from correct entries. Closing date 19 July 2015.

Q1: What is the nickname of Suttle Projects' submersible digger?

Q2: How many Close Calls were recorded in period one 2015?

Q3: Which London station is undergoing work ahead of the Rugby World Cup?



Well done Chris

Congratulations to Chris Lines who won our competition in the first issue of The Shield. Chris, an Electrician for JRS industrial services, contracted to HVMS, won a two-night stay at the Wolfscastle Country Hotel in Pembrokeshire.

"I don't often enter these things," said Chris. "But it was the first edition so I thought I'd try my luck!"

T&Cs

Winner will be chosen from entrants via The Shield. Prize is for two winners, each with one guest – participant must be 12 years or older. Editors' decision is final with no cash alternative. The prize must be redeemed within six months of the winner being notified.