

## **Plant Person Segregation Campaign Month Two August 2017 - Good Practice Sharing**



Month two of the plant person segregation campaign is all about how to implement controlled zones by sharing good practice that is being used on projects. There are several good practices already reported and available on the hub webpage these may help you with implementation e.g. BAM Nuttall plant awareness roadshow, if you have any good practices you

would like to share please email them through to [Philip.Farrar@highwaysengland.co.uk](mailto:Philip.Farrar@highwaysengland.co.uk) These good practices will be used in the update to raising the bar document B3 Plant person interface. The campaign resources are available here; <http://www.highwayssafetyhub.com/plant-person-segregation.html>

**Send your best practice, alerts and news to [philip.farrar@highwaysengland.co.uk](mailto:philip.farrar@highwaysengland.co.uk)**

### **Highways England Safety Alerts.**

Safety alerts released:

HEi 16 Stamp and Dash

HEi 17 Lifting Operations with HIAB

HEi 18 Falling TM Signs

HEi 19 Vehicle Recovery

HEi 20 Identifying Uncharted Services

HEi 21 Roadworker fatality in Scotland

These and previous alerts can be found here: <http://www.highwayssafetyhub.com/alerts.html>

## Passport Scheme

Highways England are looking to launch the passport scheme on the 1st October 2017 with an aim of all those who require access to the strategic road network to be registered on the scheme by the 1st April 2019.

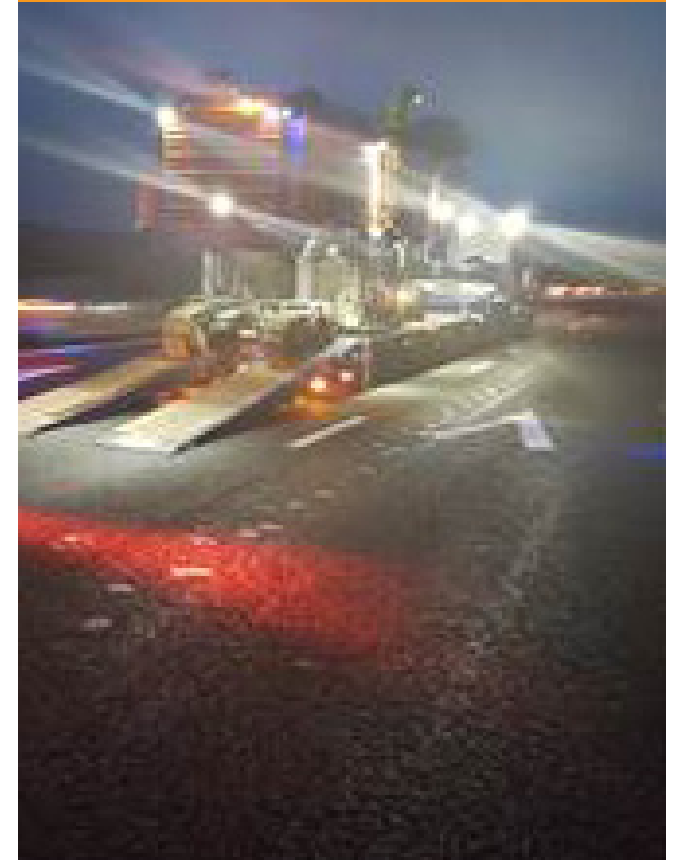


The Highways Safety Passport will be our access card to working on the Strategic Road Network and the service will:

- Reduce site registration times and combined with the forthcoming Highways England Common Induction will also reduce time spent at inductions;
- Verify that 100% of people accessing the Strategic Road Network have the correct credentials to do so;
- Provide a registry of the people and skills that are on site;
- Allow Highways England to understand its capacity which will help us programme the Road Investment Strategy in accordance with our capability;
- Improve our capability to manage risks associated with fatigue;

For more information and for details on how to enrol then please email the dedicated Highways England Inbox [healthandsafetypassport@highwaysengland.co.uk](mailto:healthandsafetypassport@highwaysengland.co.uk)

## Plant Person Segregation Campaign – Restricted Zone Example



On the Manchester Smart Motorways Project, Aggregate Industries have developed a novel way of highlighting the restricted zones around their plant. As much of their work is undertaken at night, to ensure the limits of the zone is easily identifiable, coloured lighting is used to create the zone limits. So far this has proven to be a great success and AI's are looking at introducing this on all their pavers and other large plant items.

# Microshocks

## Description and Phenomenon

After a recent experience on the M25 CPS contract where work was being undertaken safely in the vicinity of overhead power lines it was felt necessary to inform people of the 'Microshock' phenomenon.

Microshocks are small shocks, similar to the static shocks you may receive when touching a metallic object after being charged up by, for example a carpet during dry weather. However, Microshocks occur in areas of raised power frequency electric fields and, unlike static shocks, can be repeatable.

When placed in the vicinity of an overhead power line where there is an electric field created, a poorly grounded object can become charged. If a person touches the charged object a discharge spark may occur. The discharge spark is called a MICROSHOCK. More precisely, the microshock occurs immediately before contact is made, when a person is close enough for an arc to occur. Once contact is made the microshock stops.

Microshocks can also occur when a person, insulated from the ground by their footwear, becomes charged and touches a conductive object which is either grounded or charged at a different potential.

The significant difference between microshocks and static shocks is the repeatability of the microshocks. For a static shock the discharge occurs only once, being repeated only after the person has walked across the carpet again. With microshocks, the alternating electric fields enables the poorly grounded object to become re-charged as soon as the microshock is felt if a good connection to ground is not made. This enables the microshock to be repeated during slow or brushing contact between the grounded person and the charged object, resulting in additional discomfort.

Microshocks are considered harmless, although annoying at times. The microshock is often felt, and sometimes painfully, because it is concentrated on a small area of the skin.

The intensity of the microshock depends on the electric field that is charging the object, the perception of the person receiving it and the size of the object being charged. Generally, an increase in electric field will increase the chance of experiencing a microshock. Common occurrences of microshocks are from umbrellas, metallic fences, ladders and vehicles.

## Mitigation

The chances of perceiving a microshock can be reduced by a number of methods depending on the circumstances surrounding the shock. In general, metallic objects should be properly earthed to prevent them becoming charged.

- Microshocks from umbrellas can be avoided by using a fibreglass shafted umbrella rather than the traditional metal shafted umbrellas.
- A good connection to earth from a metallic ladder, podium, scaffold etc. should be established when being used near overhead lines.
- Metal clad buildings and metallic fences under and near overhead lines should be bonded to earth to prevent them becoming charged.

To avoid microshocks occurring due to a person becoming charged, it is advisable to avoid wearing insulating footwear while working in the vicinity of an overhead line. This will ensure a good contact between the person and earth, reducing the possibility of them becoming charged.

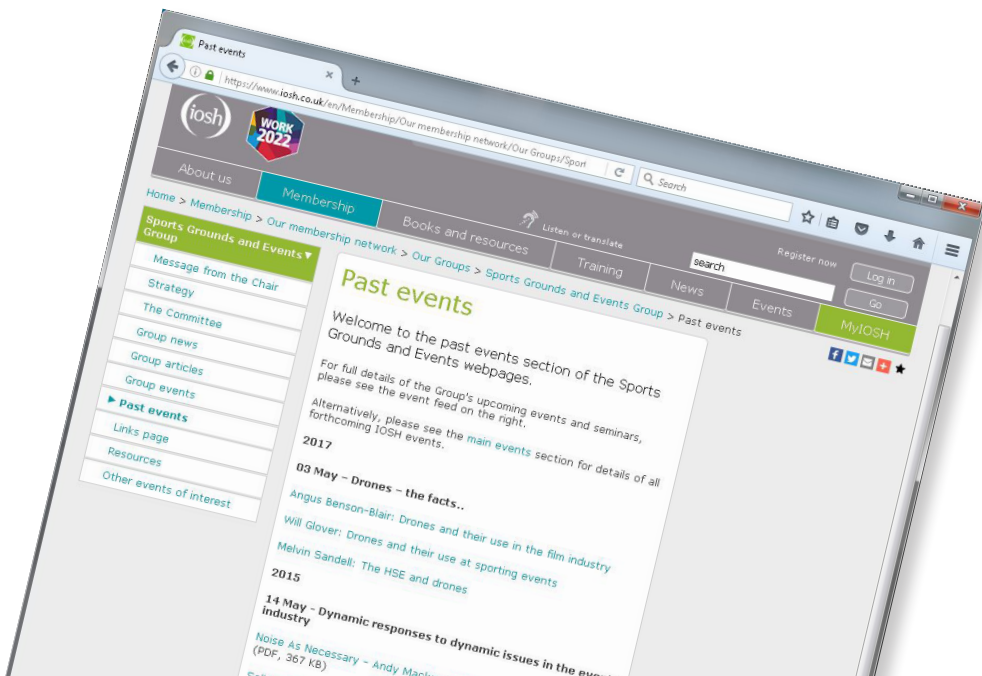
## Drones

The advance of technology is seeing many changes in how we do things, one such change is the introduction of drones for site surveys, inspections etc. Introducing drones into our work also brings about additional risks. To date dozens of near-misses with aircraft around airports have brought about fears over the safety of drone use. Under new rules, owners of drones weighing more than 25kg (heavier than many available on the high street) will have to register their details and demonstrate that they understand safety laws affecting their use.

IOSH's Sports Grounds and Events Group recently ran a successful one-day seminar on drone safety to share good practice, give advice and demonstrate the correct way to use drones.

For further information please go to:

<https://www.iosh.co.uk/en/Membership/Our%20membership%20network/Our%20Groups/Sports%20Grounds%20and%20Events%20Group/Past%20events>



## New Blood – Inspiring the next generation

Since the decision to withdraw from the European Union our attention has been drawn to the potential skills shortage across all industries. The construction industry is facing challenging times with an increased programme of spend and a potential need for an additional workforce of over 250,000.

Company's put a lot of effort into recruiting graduate engineers but fail to promote the onsite skills such as, plant operator, steel fixer, scaffolder, ground worker etc. How do we fill these gaps and attract young people into the industry?

The A14 has introduced a work experience scheme; the first cohort started on Monday 3rd July and consisted of 8 students from local schools and colleges in the Swavesey area. The potential candidates had to complete an assessment day before being accepted on to the 2 week work experience programme.





## European Health & Safety Week

This year's European health and safety campaign is planned for the week commencing 23rd October; the theme for this year is Healthy Workplaces for all ages. We all need to start thinking about the campaign and how you are going to get involved.

Europe's workforce is ageing; by 2030 workers aged 55-64 are expected to make up 30% or more of the total workforce in many countries. The official retirement age is increasing and, thus, these changes we are facing will result in various challenges for employees such as:

- Longer working lives may result in longer exposure to risks.
- A higher proportion of older workers mean, potentially, more people having chronic health problems which require specific needs.
- Older workers might be more vulnerable to certain hazards.
- Disability prevention, rehabilitation and return to work are of increased importance.
- At society level, age discrimination needs to be dealt with.

Supporting material is available on the following website:

<http://www.hse.gov.uk/campaigns/european-2016/get-involved.htm>



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