

## AN UPDATE BY ALAN PLOM

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embers should be well aware that agriculture continues to create the highest rate of fatal incidents and hopefully you will have heard (and read) about this year's Farm Safety Week (FSW), eg through IAgrE's Tweets or in the farming media.

This year's FSW ran between 6 and 10 July under the pertinent slogan, 'Don't learn safety by accident'. It focussed on a different topic each day with case studies featuring individuals sharing their often horrific experiences and the terrible longterm consequences of serious incidents involving themselves or members of their family.

This was the third Farm Safety Week initiated by the Farm Safety Foundation (FSF), a charity set up by the NFU-Mutual. It was supported by all five of the national Farm Safety Partnerships (in England, Northern Ireland, Ireland, Scotland and Wales) as well as the national Regulators, ie the Health and Safety Executive (HSE) for England, Scotland and Wales, HSENI in Northern Ireland and the Health & Safety Authority (HSA) in Ireland.

This article provides an update and some ideas for future involvement and potential contributions by agricultural engineers to help reduce the terrible toll of deaths, injuries, suffering and ill health in this most dangerous of industries.

Topics covered during the Week included the most common killers, ie Falls, Machinery, Transport and Cattle, as well as Child Safety. Themed help and advice was

fed to the media and placed online each day by the Foundation.

Recent publicity from the Foundation [http://yellowwellies.org/about/] has been characterised by their distinct image of yellow wellies, and asking farmers the question 'Who will fill your boots?' (in the event of an accident or death).

The Foundation identified young persons as their primary target audience and have been working closely with Colleges and making effective use of social media (including the adapted rendition by the Wurzels of their 'Tve got a brand new combine harvester' ditty! Information on the Yellow Wellies campaign is available via Facebook [www.facebook.com/yellowwelliesuk] and Twitter [twitter.com/yellowwelliesuk].

Detailed articles providing further information on each of the Week's themes, including other relevant incidents, court cases and links to related guidance, were posted each day by myself on the IOSH Rural Industries Group News webpage [www.iosh.co.uk/en/Membership/Our-membership-network/Our-Groups/Rural-*Industries-group/Group-news.aspx*].

I also decided that as farming is a 24/7 industry, the campaign should be extended into the weekend, so additional information was posted on occupational health risks, including links to guidance issued by IOSH to support its 'No Time To Lose' campaign raising awareness of causes of occupational cancer. These include asbestos, diesel fumes and solar radiation all relevant to anyone involved in agricultural engineering too.

Finally, on the seventh day, useful guidance was issued on dealing with accidents and how to call the Emergency Services using SMS Texts - even when there is an inadequate signal for voice communications. This could be relevant to any of you, especially when working in a remote location - or find yourself needing emergency help at any time.

## IAgrE SUPPORT AND INVOLVEMENT

IAgrE is a member of the FSP (England) and many of our members have contributed to the work of the separate national Partnerships over the past couple of

For example convening the IAgrE Conference on Machinery Safety 'Agricultural Engineering and Compliance -Thorn in the side or competitive advantage?" at Harper Adams in March 2013, and participating in the FSP Workshops on Machinery Safety (October 2013) and Safe Handling of Cattle (October 2014).

## IAgrE'S HEALTH & SAFETY TECHNICAL GROUP (HSTG)

More information on these events (including some of the presentations) is available on IAgrE's new HSTG webpage [www.iagre.org/brgp/31].

This Group was set up to enable and encourage ideas and good practice to be shared throughout the wide profession of Agricultural Engineering. In particular, to identify topics and opportunities for IAgrE members to make a positive contribution -

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# Safety



individually or through their businesses or organisations.

This is something which we must all take seriously and take action - from students and those just starting out in their career, to the most experienced members. We can all use our influence in our own spheres to identify and prevent dangerous practices. It is not just about designing out hazards in machinery or installing safe plant and equipment.

Most of us can recall seeing dodgy methods of work when out on site, e.g. inadequately guarded machinery being used or undergoing maintenance with guards removed; working at height without adequate precautions to prevent persons falling through or from roofs, etc; or working near overhead power lines.

These all feature regularly in accidents - and lead to prosecutions. Apart from the terrible injuries and suffering of their families, new guidance to the Courts mean that potential fines and prison sentences will increase significantly for employers and others too. Some of the incidents and Court cases reported in the IOSH articles have involved Ag engineering companies.

So, please don't just turn a blind eye and walk past anyone at risk of injury - or someone might actually end up with a blind eye - or worse. It is not easy to live with that on your conscience.

## SO WHAT CAN WE (YOU!) DO?

Remember this is not just about machinery, but HSE recently pointed out that 200 people were killed in machinery-related incidents between 2004 and 2014 - nearly 50% of all fatalities in agriculture. HSE's analysis revealed that:

- 124 people were killed during workplace transport (*nb*. HSE's statistics do not include incidents on the road).
- Contact with machinery resulted in 35

- deaths although many more injuries occur (and many remain unreported, including serious injuries).
- 29 of these 35 deaths occurred during maintenance either planned, during a breakdown or while clearing blockages (ie under power).
- Almost every type of common agricultural machine was involved in a fatal accident the most common being round balers (6), chainsaws (5), feed mixers (3), potato harvesters (2) and combines (2). (Several of these have been involved in further deaths since).
- A further 25 people were killed by being struck by machinery or something falling from a vehicle or machine - including 5 struck by trailer tail gates, 5 by loader arms and 4 by loader buckets.
- 8 people were killed as a result of machinery contacting overhead power lines (OHPLs). (nb. There are also tens of thousands of damage-only contacts and near misses often cutting off the electricity supply to thousands of homes and business premises in the area, causing substantial economic losses, in addition to the cost of repairs).
- Of the 124 workplace transport deaths tractors, ATVs and telehandlers accounted for 88%.
- 64 people were run over, 37 by their own vehicle! This is often due to the driver leaving the vehicle whilst it was in motion, starting the vehicle from an unsafe position, or working near a vehicle without applying the brake (or the brake was defective).
- 55 were killed in overturns 25 tractors, 24 ATVs, 3 ride-on mowers, 2 4x4s and 1 telehandler wearing the seat belt (when fitted, e.g. in a cab) at all times is vital.
- Road Traffic Accidents involving tractors or other farm vehicles are also a signifi-

cant cause of deaths and injuries - often to other road users, e.g. when farm vehicles are exiting or entering tracks or fields. (*nb*. These are investigated by the Police, not HSE, but it is apparent that these incidents could often equally have happened on the farm due to defects in the equipment (eg brakes, wheels and tyres, broken drawbars, etc.)).

## HSE's conclusions and recommendations to improve Machinery Safety:

- We should (all) continue to promote Safe Stop.
- Machinery maintenance is a key problem area, where Safe Stop is particularly relevant.
- Persons using machinery are often using it in ways not foreseen by manufacturers and we need to consider the extent to which manufacturers should address these issues.
- Contact with OHPLs is the biggest cause of electrical fatalities and we need to promote good practice.
- Falls, i.e. when using machinery as an unsafe means of access, or falls from machines - also needs to be considered.

#### SAFE STOP

Details of incidents involving many of these machines or activities are described in the IOSH articles.

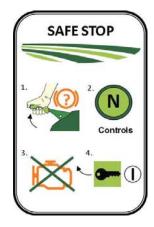
Many of these reports highlight the need to promote and follow the simple 4-step procedure described in the FSP's *Safe Stop* campaign

[www.nfuonline.com/business/farm-safety/farm-safety-

partnership/campaigns/safe-stop/].

Self-adhesive Safe Stop stickers are now available in the form of a Handover Sheet. These include background information explaining

why the Safe Stop procedure should be followed, as well as describing the procedure itself. They are intended to be used as part of training or in Tool Box Talks, for example. [nb. The FSP want to make these more widely avail-



able so if you are interested in obtaining copies or (preferably) sponsoring or arranging printing, please contact the FSP Secretariat, using the online form [www.nfuonline.com/business/farm-safety-partnership/contact-us/],

However, it is apparent that we need to find new ways to tackle this problem, par-

ticularly to protect operators whilst machinery is being cleaned or maintained under power. Although manufacturers usually comply with guarding and other requirements specified in the Machinery Safety Directives and relevant EN standards, and provide clear instructions in manuals and signs saying 'Don't do it', many operators still fail to follow the Safe Stop procedure at all times.

For example, machinery is often left under power during cleaning or clearing blockages. This might be simply for convenience and to save time, but it is recognised that some machines or devices must be kept under power, e.g. to maintain pressure in control systems. Such operations are foreseeable and the many incidents which continue to occur indicate that we need to find new ways (e.g. remote or automatic methods) to clean or unblock machinery without exposing operators to the danger of entrapment.

Consider the other hazards highlighted above. For example simple precautions could prevent many transport-related incidents. The risk of a collision is even greater with large and long vehicles such as telehandlers reducing visibility. Planning safer traffic routes or developing new approaches for warning signs could make this operation - repeated countless times each day much safer.

One simple suggestion is for automatic electronic signs to warn road users (like 'slow down' signs near schools) advising that a farm vehicle is approaching an exit onto the road?

Perhaps the above discussion or incidents described in the articles published on the IOSH Rural Industries Group news pages highlighting other non-mechanical hazards, e.g. related to handling livestock or storage of slurry, working at height, etc, might inspire you to come up with an idea worthy of entering in one of the IAgrE Safety Competitions?

Simple guidance and articles on the priorities for the industry is available on the Farm Safety Partnership's website . The priority issues identified by the FSP's Machinery Safety Group and outlined in its Workplan posted on the IAgrE's HSTG webpage

[www.iagre.org/sites/iagre.org/files/groups/FSP MachinerySafetyGroupUpdateActionPlan112 014.pdf | might stimulate other ideas.

All of the national regulators' websites regularly highlight relevant incidents and provide useful guidance, eg HSENI's SAFE [Slurry, Animals, Falls and Equipment] campaign pages at http://farmsafe.hseni.gov.uk/ and the HSA's website, as well as HSE's [www.hse.gov.uk/index.htm].

## **IAgrE SAFETY AWARDS**

IAgrE has for some years run The Student Safety Award which was established to encourage students to think about ways to improve health and safety in the workplace. However, the number of entries has been disappointing.

Hopefully, College Tutors will use the information highlighted in this article to set design challenges for their students, or students will identify their own potential topics which could make a significant change in the industry.

We also need designers and manufacturers to pick up on some of the ideas proposed, to help turn them into commercial

SSAB, the Nordic-based manufacturers of Advanced High Strength Steel, recognised that safety in agricultural engineering has not progressed as fast as in the automotive industry and to promote innovation in the landbased sector, it joined with IAgrE and Farmers Guardian to launch a new annual award for "an innovation, product or practice which promotes best practice in promoting safety and can demonstrate clear benefits".

## We need designers and manufacturers to pick up on some of the ideas proposed to help turn them into commercial reality

A prize of £300 and a statuette will be awarded to the winner, together with a visit to SSAB's factory in Sweden. The PDF at www.iagre.org/sites/iagre.org/files/docs/IAgrE SSABSafety\_Award2015.pdf explains all the details and how to enter. Details and criteria for all our awards are available on the IAgrE Website [www.iagre.org].

#### OTHER OPPORTUNITIES?

The journal Practical Farm Ideas recently ran a competition based on answering the question, in fewer than 100 words: "I think farming could be made safer if . . . "

Examples suggested by the journal included how tractors and other machines are controlled; the training and regulation of farm work; footpaths and the public; the way HSE operates, the dangers to children ... or anything else.

A recent issue included nine safety related ideas, including a tote bag handler which keeps bags open for easy loading; a hand-cranked PTO turner for a baler; a protective cover for trailer lights; a beacon for ATVs (one of their most popular safety ideas), and a baler unblocker using a simple corkscrew device.

Hundreds of similar simple ideas which make jobs easier, quicker, and hopefully safer have featured in the journal over the years. Most have been developed and built in farm workshops, by people carrying out the tasks themselves. We need to get better at sharing and adopting those ideas worthy of making them more widely available.

Some of you may also be involved with running or judging at County Shows or other organisations or Society events, which offer prizes for innovative designs. It would be helpful if you could influence organisers to consider specific awards for ideas which reduce the risk to health or safety.

### ACT NOW . . .

If this article has stimulated you to support our efforts, or even if it has only 'raised your ire' sufficient to make you want to respond, please send any comments to IAgrE CEO Alastair Taylor at ceo@iagre.org.

