

SOLUTIONS

THE ESSENTIAL NEWSLETTER FROM SPILLARD SAFETY SYSTEMS



<http://www.spillard.com>

How it all began

In 1991, after a varied career spanning 30 years with companies such as RA Davies, Wilson Lovatt (Modern Plant Sales) and Aveling Barford, Vic Spillard decided it was time to branch out on his own and set up as Spillard Plant Consultants.

For the first two years he concentrated mainly on selling used construction equipment together with operator training/consultancy in the UAE.

In 1992, to provide a solution for a customer, he started to promote wear parts at which time his son Pete joined the company. Providing customer solutions has been the ethos of the company from its inception.

It was obvious from past experience and present day standards that safety for the operator and site personnel was a priority and it was the search for a number of customer safety solutions in 1993 that became the catalyst which helped shape Spillard into the company it is today. One particular customer's request to solve his visibility problem led to an agreement to become the UK distributors for Orlaco and Sony camera systems, who at the time provided cutting edge camera technology.

1994 saw the launch of the All Round Vision brand and to support the ever expanding service demand Andrew Bristow, now senior engineer and mobile plant assessor, joined Pete in the field.

All Round Vision convex mirrors were seen to be the solution in most cases to complete an all round visibility package supplied by Spillard and were introduced to the industry at Hillhead 1995... but that's another story.

Safety Forum Needs You!

Thank you for the positive feedback we received from the first issue of Solutions, I hope this second issue will be as well received.

In our first issue I was able to announce the on line availability of www.spillard.com. The number of your hits on the site was every encouraging, hopefully you found it interesting and informative.

The Forum element however has not yet found an audience; I've included on the back page some well known acronyms to get you started so surely there must be some safety-related issues that should be aired?



Peter Spillard

Since the last issue we held the second Spillard annual golf day, on the 21st of July.

There was an excellent turn out and the weather was glorious. The enthusiastic field was lead home by the winner Paul Proud of UK Automotive Products, closely followed by Andy Stone of S Norton and David Milne of Liebherr.

If you are a keen golfer and would like to attend the 2007 Spillard golf day please contact Craig Spillard.

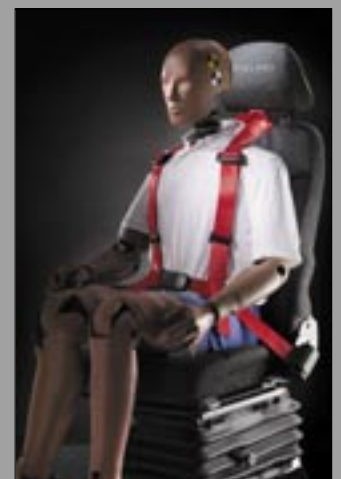
In this issue we are announcing the launch of the Spillard Roll Over Restraint Seat and Harness, it is a third generation solution which was inspired by the TRL report for the HSE called 'Seatbelt performance in quarry vehicle incidents'.

Thanks for reading Solutions, I would be interested in your feedback, good or bad, so please feel free to call.

Spillard 'ROR' into action!

Spillard have launched their third generation Roll Over Restraint seat and harness - on the face of it not earth shattering news, but when you realise that this is probably the first Roll Over Restraint that most operators would willingly wear, its Big News

(article continued at www.news.spillard.com)



Optronics Camera System meets ISO 13766

Earlier this year Spillard Safety Systems submitted our flat-screen colour camera system – part number OPT5600 - to the respected and internationally recognised Mira testing facility in an attempt to obtain certification for the ISO13766 (Earthmoving Machinery – EMC1999)

The reason for Spillard's attempting to obtain the ISO level is due to the safety aspect of today's modern construction equipment. As construction machinery becomes more advanced the reliance on electronic systems becomes greater. Electronic braking systems, engine management computers, built-in diagnostic and testing equipment, and remote engine monitoring equipment are fast becoming standard fitment to machinery.

Assigned the Mira Project Number 1011991, our camera system was to be tested for:

- Radiated Immunity
- Radiated Emissions
- Electrostatic Discharge
- Transient Immunity

(article continued at www.news.spillard.com)

Dropped run over and still working

The front lens glass is shattered and the mounting braked squashed as a result of being run over, but it still WORKS, testimony to the strength of the Optronics 600 series Camera



Visionary Service

Over the last decade, plant makers have commendably made great strides in providing the operators of their creations with ever better visibility. But there can still be blind spots beside and behind many machines and these could both result in potentially serious accidents on site.

By Nick Johnson - PHE

In recent years, the Health and Safety Executive (HSE) has expressed particular concern about the number of personal injury accidents caused by reversing plant. It has particularly highlighted problems associated with dumptrucks in quarries and telehandlers on construction sites. The use of CCTV has been officially adopted as the solution to the former situation whilst, increasingly, the fitment of extra mirrors has been seen as providing a suitable 'cure' in the latter case.

Given the raft of legislation and standards that now seem to affect machine visibility issues, it is not always as easy as it should be to work out what might need to be done to make improvements to specific machines. But one company has made a name for itself as a special provider of visibility assessments and the means to minimise any blind spots thereby identified. The company in question is Spillard Safety Systems Ltd of Gailey in Staffordshire whose somewhat accidental entry into this sector began back in the early 1990s. Founder Vic Spillard used his extensive plant knowledge to carry out consultancy work and a safety project with Wimpey Mining which led to trials of both reversing cameras and convex mirrors on large dumptrucks. Interest in reversing aids increased and, after Vic's son Pete joined the business, an official launch of Spillard's new AllRoundVision range took place at the Hillhead Quarry Plant Exhibition in 1995. Subsequently, increased HSE interest in the fitting of convex mirrors prompted Spillard's to review its product range. The product now sold by Spillard stems from a sighting

by Spillard of a convex mirror on a yellow school bus in New York during a visit in 1998. Spillard's move into fitting its AllRoundVision convex mirrors to telehandlers came through Wimpey Homes and, as other prominent telescopic handler users sought to minimise the risks of using these popular machines on congested sites.

Exhibition boost

The growth in extra mirrors being fitted onto telehandlers was fuelled by the HSE taking a specific interest in these machines following a survey it made of forklift accidents in the period 1997-2001. Subsequently, the HSE showed Spillard mirrors at an SED exhibition as an example of one way of improving all-round visibility and thereby reducing the risk of people being struck by the machines.

Spillard Safety Systems also used shows such as SED to promote not only the features of its mirrors but also its ability to carry out site assessments of specific machines. Pete Spillard and his team have utilised their in-depth practical knowledge to provide visibility risk assessments and to advise how additional mirrors might reduce any blind spots which might be discovered.

To see how this service works in practice, I travelled to a Fairclough Homes site near Bradford to witness a demonstration of a visibility assessment on a telehandler hired in from Flannery Fork trucks. Safety is a very important issue for both Fairclough Homes and its telehandler

supplier. They have clearly welcomed the ability of Spillard Safety Systems to conduct visibility risk assessments and advise on the fitting of additional visibility aids.



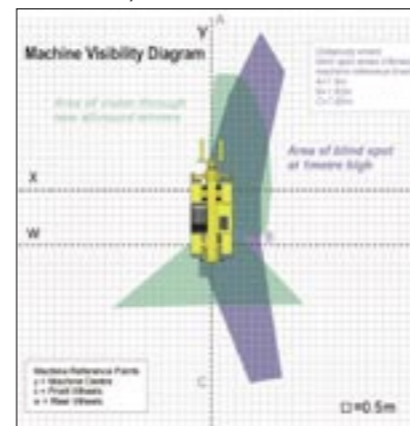
Top priorities

The safety department of Fairclough Homes has now worked with Spillard Safety systems for over three years and it calls in Pete Spillard to carry out a visibility risk assessment every time a new type of telehandler is hired in. Flannery Fork trucks is pleased to accept Spillard's recommendations as its brochure states that "reverse waning and rear vision are both top priorities."

General Manger Andrew Gaunt of Flannery Fork trucks says that all our telehandlers are fitted with high visibility chevrons, AllRoundVision mirrors and backup warning alarms. This combination of features is a major factor in reducing on-site accidents." The machine, which came under the scrutiny of Pete Spillard and his colleague Peter Welsh for my benefit, was a modern JCB 532-120. This side-engined, low boom design is typical of the machines used on many sites these days.

According to Pete Spillard, all have some visibility blind spots which can be reduced by the strategic use of extra convex mirrors. To carry out his tests, Pete Spillard assesses how easy it is for him to see a 1.0m high object moved around whilst he sits in the operator's seat (whilst wearing the seat belt). He is 1.85m high and he conducts all the visual sight tests himself so as to maintain consistency of testing. The use of a 1.0m high object stems from the 1.0m by 1.0m visibility recommendation increasingly being applied to construction equipment. The HSE appears to be endorsing this criterion in quarries for its Quarry Fact File dated June 2005 states, "Convex mirrors and CCTV should be fitted to all quarry earthmoving vehicles so that the driver can see 1.0m out and 1.0m up all around the vehicle." This recommendation has apparently been adopted by the HSE backed Quarries National Joint Advisory Committee (QNJAC).

The HSE also appears to be promoting the 1 m by 1 m rule of thumb for telehandlers used on construction sites. After I asked for telehandler visibility requirements on the HSE stand at the Saltex exhibition on the 6th September, I was told I would be sent the information as a matter of priority. What arrived on the 12th October form the Basingstoke office of the HSE was a paper dated 20th November 2003 which states that it "addresses the current position concerning driver visibility of earthmoving equipment lift trucks and describes HSE activity."



This HSE paper states that the appropriate safe management of site transport is deemed to be a key requirement to ensure a safe site. Published guidance is provided by HSG 144 'safe use of vehicles on construction sites.' As a rough 'rule of thumb', driver vision should be 1.0m by 1.0m around a machine where there is a risk from inadequate driver vision (i.e. the driver should be able to see points that are one metre from the vehicle and one metre above ground level, subject to the 'risk' caveat). So, with the machine's forks placed 500mm above the ground, Pete Welsh used a large 1.0m high yellow cone to map out the positions from which its top could be seen by Pete Spillard from the operator's seat. This data is used by Spillard Safety Systems to provide a computer generated plant view of the machine as a Machine Visibility Diagram with the area of blind spot highlighted in purple.

The Spillard team then proceeded to fit the telehandler with one of their oval elliptical mirrors on the existing bracket on the front offside of the machine and a quadra-spherical mirror on a bracket at the rear. Rather than being a full convex mirror, this quadra-spherical design has been produced specially to reduce glare from the sun and from the strobe type beacons increasingly being fitted to construction plant.

Once the mirrors were in place they were then adjusted using the yellow cone to minimise the blind spots. The improved area of vision can be seen from the resulting green coloured areas on the accompanying Machine Visibility Diagram. The green shading reveals a significant improvement and, as can be seen from the free database of other visibility assessments on the Spillard website (www.allroundvision.com) it is typical of what can be achieved with many other makers and models of telehandler. However, it should be noted that the

front offside mirror bracket on this particular telehandler was slightly bent so these are not the optimum results for this type of machine.

Free Metre Stick

To help mobile plant owners and users make their own initial visibility assessments, Spillard Safety Systems can provide a free Metre Stick together with best practice guidelines for assessing visibility. This stick can give an indication of the need for extra visibility aids and/or the effectiveness of existing mirrors.

Pete Spillard says these additional mirrors provide a cost effective way of reducing the blind spots associated with modern telehandlers of whatever make. He accepts that 'mirrors are not the be all and end all solution to enhanced driver visibility and he accepts that in some instances - on the rear of zero tail swing excavators for example, they are not needed.

He also accepts that vibration can serve to blur an image but because all site workers should be wearing high viz jackets it should be possible to spot them. "You don't need to recognise a guy to see he is there!"

The HSE has recently again highlighted the dangers of pedestrians on construction sites and waste handling areas being stuck and killed by telehandlers. Whilst still advocating the provision of additional visibility aids such as mirrors as one way to improve telehandler safety, the HSE is still calling for more research into their suitability. This work needs to be given high priority so that machine makers and users can be given unequivocal guidance in this live threatening matter. Meanwhile, Spillard Safety Systems continues to be proactive. It can now assume complete legal responsibility for a customer's machine visibility assessments by signing off the whole package.

A warm welcome to... Dave Beasley



Dave adds even more experience to the Spillard team, having worked in the construction industry for many years, with household names such as JCB, SLD, Heathfield Haulmatic and the LH group, during which time he has held many senior positions.

Dave has also gained first hand knowledge of many industries such as Waste re-cycling, Aggregates extraction, Plant Hire and Open Cast Coal to name but a few. The challenge now put to Dave is to offer technical assistance and build brand awareness for the Flight Systems Diesel Control Range which Spillard Safety Systems has been European distributor for since taking over FSE in 1998. When Dave does get some spare time his passion is Pickup truck racing! **for more information visit www.flightsystems.com**

A warm welcome to... Steve Millard



Steve started his career as a motor vehicle maintenance apprentice and spent many successful years in the commercial vehicle industry working as an engineer for Ford, Renault and Volvo before spending the last 8 years working in the materials handling industry for Toyota. Looking for a fresh challenge he joined our company in June bringing his skills to our team of experienced in-house engineers.

Prior to the recent birth of his son he used to help out with a rally team. Now in his spare time he leisurely participates in mountain biking, snowboarding and Para bugging.

Contact us

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Web Acronyms

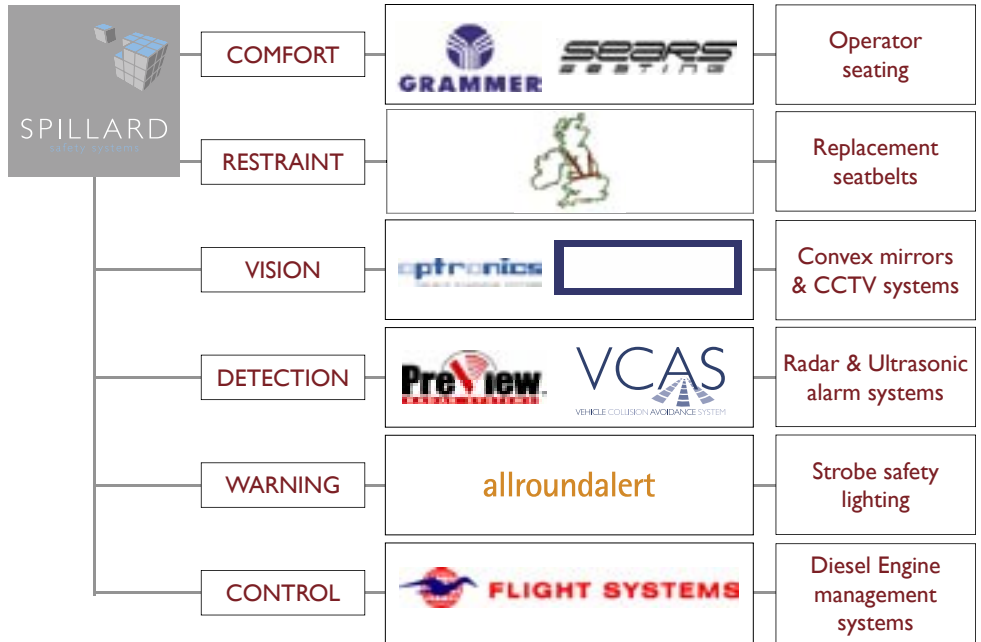
- AFAIK – As Far As I Know
- AKA – Also Known As
- ASAP – As Soon As Possible
- B4 – Before
- BIN – Buy It Now
- BTW – By The Way
- CUL8R – See You Later
- FFS – For Freak Sake (polite version)
- FWIW – For what it's worth
- FYI – For Your Information
- IIRC – If I Recall Correctly
- IMHO – In My Humble Opinion
- IMO – In My Opinion
- L8R – Later
- LMAO – Laughing My Ass Off
- LOL – Laughs Out Loud
- M8 – Mate
- NARU – Not A Registered User
- NP – No Problem
- OMG – Oh My Gosh
- OP – Original Poster
- OT – Off Topic
- PLS – Please
- POV – Point of View
- ROTFL – Roll on the floor laughing
- TIC – Tongue In Cheek
- TTFN – Ta Ta For Now
- VFM – Value For Money
- VHFT – Very Hard To Find
- WTF – What the Freak (polite version)
- WTG – Way To Go!
- WYS – Whatever You Say
- WYSIWYG – What You See Is What You Get

Link to <http://www.acronymfinder.com/>

Our services

- Customised solutions for your safety issues.
- Nationwide installation service by our experienced team of in-house engineers.
- Machine visibility assessments.
- Mobile plant safety systems audits.
- Operator seat vibration measurement.

Our product range



Our team

Lee
Warehousing

Craig
Director

Vic
Director

Carla
Sales & Admin

Richard
Office Sales Manager

Jean
Accounts

Pete Spillard
Managing Director

Ned Edwards
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Dave
Service