

# Press Information

January 2008

## PROVEN SAFETY SUCCESS FOR ASTUCIA

### **Astucia SolarLite “smart” road studs make significant contributions to night-time road safety.**

The added driver visibility offered by the “smart” Astucia road studs, has already made a significant contribution to road safety on Britain’s roads. In addition to marking the road for up to 900 metres ahead, the lower cost and easier installation of the latest Astucia SolarLite™ stud is set to act as a further incentive to an increase from the current number of approximately 120 installations across the UK.



The traditional reflective, passive “cats-eye” stud was invented over 70 years ago. It relies on light reflected from an approaching car’s headlamps and has a maximum range of 90 metres or less. The Astucia SolarLite stud uses ‘smart’ technology which stores solar energy during the day, then built-in Light Emitting Diodes automatically illuminate from dusk to dawn, providing drivers with ten times greater illumination of the road ahead.

“At 100 km/h (62 mph) a visible distance of 90 m for a newly installed good quality retro-reflective road stud only represents a reaction time of 3.2 seconds, which is not enough time to properly judge certain road hazards such as the radius of a bend” says Martin Rodgers, Sales and Marketing Director of the Clearview Traffic Group which produces Astucia studs. “With the increased visibility of the SolarLite smart road stud this reaction time is increased tenfold to over 30 seconds.”

According to the latest UK Department for Transport annual statistics, there are on average more than 8 fatal accidents every day, each one costing the country £1.69 million pounds. While only one third of all journeys occur at night, almost half of the serious or fatal accidents occur during the hours of darkness. An average of five people each night are killed or seriously injured on Britain’s roads. In some areas where Astucia SolarLite smart studs have been installed, Local Authorities have reported reductions in night time accidents of 70%.

A typical example was the installation of SolarLite studs as part of measures to improve road safety on the A4226 in the Vale of Glamorgan, Wales, locally known as “The Five Mile Lane”. It is a busy rural narrow and twisting commuter route which had a background of an unacceptably high accident record. In the three years since the initial installation of the Astucia SolarLite road studs, there has been a 72% reduction in accidents on compared with the previous three years.

On the twisting A143 at Haddiscoe in Norfolk, there were 22 recorded accidents in a three year period, two of which involved loss of life, along with 6 causing serious injury. Of these accidents 95% recorded were as a result of loss of control and 40% occurred in the dark. In the first two years since the SolarLite studs were introduced there was an immediate improvement in road safety, with only five recorded accidents all of which were slight. None occurred in the dark. The overall accident frequency has reduced from 7.3 per year to 2.3 whilst the severity ratio has reduced from 36% to zero.

Similar levels of improvement are being anticipated on the A4128, a busy arterial route into the town of High Wycombe in Buckinghamshire which is mixed rural and urban road. Newly installed Astucia solar powered road studs on the rural section of route are a key part of a scheme to enhance safety on a road which suffered 16 serious incidents resulting in 7 people killed or seriously injured in the three years to 30 April 2006, eleven of which took place during the hours of darkness.

Drivers using the A413 near Gerrards Cross in Buckinghamshire, a very busy commuter route from the Chilterns to London, also benefit from enhanced night time lane delineation following the installation of Astucia solar powered road studs. The A413 dual carriageway was built in 1968 and suffered from a nine serious night time accidents in three years on a section of road which has only localised areas of highway lighting. Over 600 SolarLite MkII road studs of white, amber and red, provide full enhanced lane delineation on this busy stretch of dual carriageway along with green studs across the access points of adjoining roads and lay-bys.

A future development of Astucia's Intelligent Road Stud technology is currently under trial on Scotland's busiest motorway, the M8 between Glasgow and Edinburgh. The “smart” studs have been fitted to a 3 kilometre stretch of Scotland's busiest motorway, linked with traffic speed collection data to provide feedback to road users of approaching hazards.

The chosen trial site chosen is on the approach to Junction 6 on the west-bound section of the M8, a busy and fog-prone section of motorway which each day is used by an average of 51,000 vehicles a day. In the event of a bad weather, an incident or queuing traffic, control units automatically relay instructions to the appropriate strings of Intelligent Road Studs. The activated studs then flash to provide hazard warning to approaching traffic. The System performs intelligent queue tracking so that only the strings of studs upstream of any slow moving or stationary traffic are activated.

“Astucia’s prime aim is to provide smart, safe and sustainable technology, to provide motorists with advance warning of a hazard” says Martin Rodgers. “In the M8 trial the increased brightness of the Astucia studs guide motorists safely through reduced visibility caused by fog or mist and by flashing, the studs alert drivers to a traffic jam or an accident further on, providing round-the-clock reassurance to drivers. But that is just one exciting project. In over 120 installations around the UK, we’re already proving our intelligent road studs lead to fewer accidents and therefore save lives.”

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### **Notes to editors**

Astucia is a leading global developer of accident reduction technologies. The core product technology is the Intelligent Road Stud containing LEDs (Light-Emitting Diodes) powered by solar cells and batteries to collect and conserve energy in each road stud. The LEDs are automatically activated during the dusk to dawn period; conventional reflectors are also contained in the stud housing to provide daytime road delineation. These Intelligent Road Studs extend the night-time 'view' of the road, when compared with the traditional reflective type, from around 90 metres to over 900 metres.

Other products have grown from that first idea including studs that warn of impending hazards such as fog, ice and surface water to form traffic management systems. Astucia also sells a range of portable studs which can be deployed by motorists and the emergency services around vehicles at road-side situations.

Astucia’s vision is to reduce casualties and fatalities on roads throughout the world and to reduce congestion by safely increasing the capacity and effectiveness of road networks.

Astucia’s global distribution network includes: Australia, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Holland, Ireland, Italy, Japan, Malaysia, Middle East, New Zealand, Mexico, Norway, Spain, Switzerland, United Kingdom and the USA.

Clearview Traffic Group is the guiding force behind three industry respected brands: Astucia, the market innovator for intelligent road studs; Golden River Traffic, a leader in the field of automated traffic counting and classifying; and Count On Us, the largest UK provider of transportation data collection and analysis services.

*Issued on behalf of Astucia Traffic Safety Systems by Kingpin Media Limited.  
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