



# 'ello, 'ello, 'ello

## John Walsh, winner of the Geospatial Engineering Surveyor Award 2004

Ling Davies, ICES Marketing and PR Officer

### Ship building

In 2003, John's employer was selected by the Shipbuilders and Shiprepairers Association (SSA) to take part in a research programme. The idea was to show UK shipyards how to embrace modern technology, saving both time and money. John, as project manager, visited two UK shipyards taking with him an industrial photogrammetry system produced by AICON GmbH in Germany. This system is used extensively in the shipyards of the Far East, as well as both aircraft and motor manufacturing in Europe. The system is capable of producing accuracies better than 0.01mm, but was in fact too accurate for the tasks required in the UK, where the main emphasis is on plate cutting.

Another significant problem was that of finance, the industrial system cost in the region of £45,000. Following trials which John ran and reported on, he proposed trying a low priced system which he would put together himself. The components of this were EOS PhotoModeler software and a standard Canon digital camera. John then spent five days at a yard in Falmouth, training plate-makers and using the system to establish new cutting routines.

The trial was a complete success, providing accuracies of 1-2mm, a vast improvement on the current hand measured methodology. The system cost a little over £1,000, bringing the use of photogrammetry to a completely new audience and belying the myth that technology is always expensive.

### Points of view

I had the opportunity to meet John and obtain his points of view on the surveying industry. One of the first things I learnt was the inspiration behind John joining the survey industry. He had an early desire to work in mapping or "something to do with geography."

John was very surprised to receive the award as he never thought his work would attract any sort of recognition. I asked John to talk about his current work:

*"I am a project manager, responsible for seeing a job through from its inception to its completion. Besides the 'bread and butter' work of aerial*

*and building survey, I look at designing custom solutions for new measurement tasks. Recently, I've been developing the use of close-range, multi-image photogrammetry for police work and ship repair.*

*My police work has mainly concerned the development of suitable field photography methods for road traffic accidents and crime scenes. Many of these methods were derived from police practice on the continent and we are now training officers from the Northumbria Police Collision Investigation Unit.*

*In ship repair, we recently carried out a study for the SSA, which involved devising a method for capturing the outline of damaged areas on a ship's hull to enable a replacement plate to be made."*

Knowing that John is not a member of ICES, I asked his opinion on what bodies such as ICES, TSA and RICS bring to the industry. He believes that such organisations are beneficial in that they can lobby government, provide teaching resources and act as a forum for individuals and companies. And, he doesn't rule out the possibility of joining ICES, so watch this space...

On a personal note, John is a "lapsed walker and cyclist." He enjoys reading, mainly about travel, current affairs and history, not to mention a good novel. In his spare time he teaches himself programming. Finally, I asked John how he would recommend his job to someone else, he would tell them "don't do it for the money, do it for the love."

*While the Institution congratulates John, we would also like to thank all the candidates who participated in the award. The judging panel — the chairmen of the Geospatial Engineering Practices Committee and its three specialist panels — were impressed by the high quality of the nominations this year. All nominees had significant experience and made considerable contributions to the geospatial engineering profession.*

*Judging was based on set criteria for the award and acknowledged the high degree of innovation achieved.*

**A**t the Institution Dinner on 24 September 2004, the Geospatial Engineering Surveyor Award was presented by ICES President, John Wilding, to John Walsh. John holds a Bsc(Hons) in Cartography/Geography and is currently project manager at Photarc Surveys Ltd. John received the Richard Carter Prize that comprises a gold medal, certificate and £500 cheque.

### Forensic applications

For the last three years, John has been responsible for developing methods of data collection using photogrammetry for police forces in the UK. This has entailed developing a complete training package for officers — one that is now also being implemented by police in New Zealand.

The main aim of using photogrammetry for the recording of traffic accidents and scenes of crime is to reduce the time on site at these scenes and to ensure that vital evidence is collected accurately. This is particularly important at a traffic accident where the use of photography ensures a quick reopening of roads and reduces inconvenience to the general public. John has also developed methodology for recording scenes of crime and attended an international conference in conjunction with a UK police force.

As a direct result of his involvement, the Metropolitan Police have undertaken a thorough investigation of their current methods and believe that using photogrammetry could save them around 75% in time spent at traffic accident sites. John has shown the police officers he has been involved with how to take site photography and has demonstrated an amazing level of patience towards people with little or no technical skills.