

## Fluvial Times Highlight What Geomatics Can Offer



With a focus on hydrographic topics and the at times apocalyptic wetter side of life, there is still space for tunnelling, calibrating laser scanners, cheaper GNSS solutions and BIM.

We don't often cover consumer events but Adam Spring's report in this issue (page 12) from the Las Vegas International Consumer Electronics show reveals what we've been missing. UAVs, digital imagery, location technology, robotics, and 3D printing are all technologies with relevance to our industry. In their beginning these technologies were the province of the military, then business and finally the consumer. But the innovation drive may have shifted to the consumer sector, which of course is where the big bucks are. Just take a look at the Panono for a fun product that could have serious geomatics applications, especially with GNSS aboard.

Readers working in construction will not be surprised at the tale of woe recounted on page 06 of the News regarding the penetration of a rail tunnel by a piling auger. Richard Groom has carefully read the Rail Accident Investigation Branch's report and precised it for us.

Malcolm Draper in Undercurrents recounts an older but similar incident, while Carl Calvert examines the legal implications. When will those designing and engineering schemes learn the value of a site surveyor?

As we go to press Britain is facing the worst flooding in most people's lifetime. While the Severn estuary has long been a manageable threat we thought we'd tamed the country's mightiest river. Not so, as Old Father Thames rolls not just on but to right and left as well. It is not for those in geomatics to play the blame game, although the fault lines seem increasingly to be between those who rely on evidence based on scientific enquiry and statistical records and those who put their trust in the press and a gut feeling that flooding just happens sometimes. For us there should be opportunities ahead as ever more accurate flood maps and terrain models are called for, not least by insurance companies and the Environment Agency.

So to mark these fluvial times this issue has a distinctive "wet" look (and that doesn't include Splashmaps, see page 32). Richard Groom has undertaken a detailed analysis of the papers presented at the recent Digital Hydrography on the Maritime Web event, while Fergal McGrath introduces INFOMAR, Ireland's detailed survey of its commercially valuable waters including some stunning mapping, which I hope we've done justice to. Meanwhile, Dr Mike Osborne and John Pepper of Oceanwise explain how they pioneered the re-engineering of the Admiralty Chart into digital data fit for GIS and Electronic Chart Display Systems. However, they question whether fundamental issues remain.

The sea played a more sinister role in what happened in The Philippines last November. While the typhoon claimed many lives, the aftermath has seen one of the best-coordinated rescue efforts with MapAction playing an essential role in providing the information teams need before venturing too far on the ground. Nigel Woof, who was awarded an OBE this year for his past efforts for the charity, provides a vivid account of MapAction's role.

For the technically inclined articles on two of geomatics' key technologies provide interesting reading. Joel Van Cranenbroeck was formerly with Leica and really knows his stuff when it comes to monitoring and using GNSS. He suggests a rather cheaper way of keeping track of several locations than installing a receiver at each one. Meanwhile, Leica's Hans-Herbert Tuexsen describes the painstaking procedures necessary to calibrate an HDS scanner.

Finally, Professor Ian Dowman reports from this year's RICSâ€\*BIM conference with question marks hanging over whether the industry is ready – especially the QSs and FM managers – for BIM level 3.

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