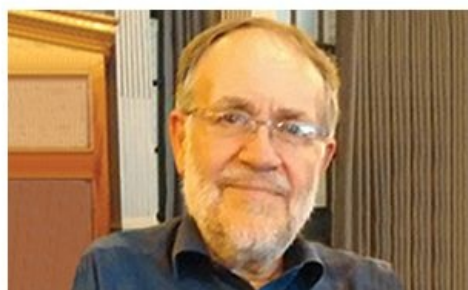


Autonomous Cars are on a Long Road. Farming and Beer Come First!



An interesting and diverse issue that covers Smart, the prospects for autonomous vehicles, the Intergeo; and how some eschew 3D imagery and want real-world scale models.

I have always believed that fully autonomous road vehicles are several decades away. Semiautonomous ones running on motorways and interstates will be the first to see driverless vehicles, indeed they are already upon us in the US. This is revealed by Wired, the USA-based online news site, which reports that Uber has managed to send a self-driving truck on a two-hour journey of 120 miles to deliver... wait for it... 50,000 cans of beer! The truck was a vast 18 wheeler in which the US specialises. It was controlled by a system developed by Uber owned startup Otto, whose founder Lior Ron foresees a future

where human drivers only take over near the final destination, rather like ships with river and harbour pilots.

Back in the UK, we report on a rather more prosaic application of autonomous driving – a driverless tractor. It's always seemed to me that agricultural land is a safer starting point for autonomous vehicles. There's open space, few people around and no other traffic. Already GNSS guidance in harvesting, seed sowing machinery and fertilizer application machinery has brought improved crop yields, so why not full automation of the machinery? The farm of the future might employ very few hands and with automation could work at night. Read more about this development involving Ordnance Survey GB and CASE IH Advanced Farming Systems (page 25).

The Challenge from Below and Above

The challenge of how we can better manage Britain's underground assets has attracted the interest of OS's Geovation initiative. An open competition to come up with an idea that will solve a real problem in this area is inviting proposals by the end of this month (November). The prize is expert support from OS plus software, geospatial data and £10k of support. Go for it! More on page 17.

We have two contributions in this issue around Smart and IoT, the so-called Internet of Things. Smart was a major topic at this years Intergeo (see page 24), while Prof Ian Dowman, who attended the Smart Cities Summit, observes that location data is taken for granted in the networked smart city (page 14). Being able to link activities like transport, health and utilities is important. Overarching though is surely security and public protection systems, for which the UK Government has recently announced a £1.9bn boost to stop hackers and spoofers. This initiative is very necessary when we think about IoT enabled devices. The IT journalist and academic John Naughton in his regular Observer newspaper column argues that networks are inherently insecure. He believes that the danger comes from "small domestic IoT devices sold at razorthin profit margins and usually built by Chinese and Taiwanese companies that don't possess the expertise (or the incentive) to make them secure". Let's hope some of that antihacking money will be aimed at helping domestic users.

We've become used to 3D imagery. The PlayStation generation has arrived. But somehow or other the majority of people still like to see physical objects, which they can touch and observe from any angle. Readers will be interested that the Environment Agency recently called for a large scale model to be prepared for a series of local meetings to explain their flood management strategy. Although the 3D data was all available from lidar and other sources, it still presented quite a challenge for the surveyors, as Richard Groom reports, in preparing it for a 3D printer (page 21).

Gword up for Debate

The Gword debate has reared its head again. Gordon Johnston reports in his Chair's column (page 11) on an inconclusive survey of RICS members about possibly renaming the Geomatics Group. I am glad no immediate name change is proposed. Not just for this journal, whose title is well established, but for the dozens of companies and organisations which include the word in their titles and departments. Consultations way beyond RICS members are surely needed.

Looking to 2017

With this issue, you should also receive a copy of the SCCS Year Planner for 2017. We hope you will find it useful to put up on the wall and mark off those important dates (not forgetting your nearest and dearest's birthday, as I too often forget!).

The next issue of GW will be the first of 2017 and we expect to be bringing readers a refreshed layout along with some interesting

applications of UAVs, a report on a recent RICS lecture on Rights to Light, several new technologies for mobile mapping and much more. In the meantime, we wish all readers a pleasant holiday break and a very successful new year.

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<https://www.gim-international.com/content/article/autonomous-cars-are-on-a-long-road-farming-and-beer-come-first>
