

Unintended Consequences and Part-time Surveyors



This issue highlights some significant issues and technologies. But we ignore the consequences – possibly to our peril – especially if they reach the hands of those who are unaware of the underlying principles.

It seems incredible that there are now only two months left of 2014. By the time you read this, plans for the holiday season and New Year will be looming for many of us. So, what sort of a year has it been? We seem to have been constantly reminded of the unintended consequences of technology like the trolls of social media. Some of those consequences are benign even if they don't rank as time-saving examples of what technology should be for. I was talking to a colleague recently who proudly told me her daughters (all now over 30) don't wear watches; they rely on their mobile phones. Err? It cannot take any watch

wearer more than 2 seconds to glance at a wristwatch. To reach into your pocket or handbag for a phone, switch it on, maybe enter a code... well I rest my case.

But it's not only mobile phones and social media that throw up unpredictable behaviours, as one of our articles in this issue demonstrates. Electric cars hold out much promise but users are aware that their range is limited, and re-charging takes time and planning (page 14). While vehicles will give some indication of the amount of charge left, whether it is enough for a specific journey will depend on more than a crude calculation based on time and distance. If the route chosen is hilly it could mean you run out of juice before your destination. A flatter route might be a better option, even if it is longer in distance and time. It all gives rise to a new human syndrome: "range anxiety". As satnavs don't have terrain models, a team from the University of Vienna has developed a series of equations that can be used in conjunction with a street map and a digital surface model to deliver route elevation profiles, helping drivers choose the most appropriate route to alleviate their anxiety.

We also have an education and professional development focus. Ruth Badley has spoken to three women working in surveying to find out how they've fared in a mainly male world (page 18). Technology changes have made it a little easier for women. There is more desk work and less time spent on site these days. But it can still be tough especially for families.

Richard Groom has undertaken what is a thoughtful and insightful study of how we educate, train and promote (or rather don't) the surveying profession (page 32). He raises a hitherto unmentioned problem: that of the part-time surveyor. We're not talking here about someone returning to work after illness or following childbirth. It is the technicians or professionals from other disciplines who do some surveying. While this may be harmless in the case of simple asset data collection it can become more serious where someone drawn from another profession undertakes survey work based on a simple understanding of what the equipment can do rather than knowledge of the underlying principles of surveying.

The problem needs serious attention and the recent publication (see page 13) of the 3rd edition of the RICS Measured Surveys of land, buildings and utilities would seem an ideal opportunity for the profession to reach out to colleagues in construction and development to explain to them just what it is that makes being a professional surveyor so important and distinctive from other professions. We need to show them how, at a tiny proportion of the overall project cost, we can make a difference.

To round off this issue we have reports on the Berlin InterGEO (page 20) where UAV's were again much in evidence. Nearer home, London hosted the first UAV show in late October. I went thinking it might be consumer-oriented, given the media attention given to idiots flying small UAVs to disrupt football matches. I was instead surprised to find over 80 exhibitors with a range of technologies and applications all aimed at the business sector. There was even a bit part for the much lamented Wankel rotary engine! We will report on that event in the next issue.

Finally, I hope you will join me in congratulating Leica Geosystems on achieving their 50th anniversary of trading in the UK (page 28). I was honoured that they chose me to write and publish their history. I could not have done it without the close assistance of Hugh Anderson and Nigel Bayford together with the enthusiastic support of Mark Concannon. The finished book of over 100 pages has some 350 photos and includes sections on survey technologies as well as the early history of Wild Heerbrugg and Kern of Aarau. I hope you're able to secure a copy.

As this is the last issue of the year I wish all readers a peaceful and pleasurable holiday period. We shall return in January 2015.

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