Innovations at First Hand - Commercial UAV Show 2017

This was the fourth year the UK Commercial UAV Show was held in the ExCeL Centre, London, UK, and for the first time, this year was moved from the month of October to 15-16 November 2017. This event has always been a very good opportunity for the UAV enthusiast, commercial UAV and related companies, and the public to get first-hand insight into this technology, the many platforms and sensors available, the breadth of applications, and all the associated technologies such as batteries and Apps for autonomous flight, as well as drone insurance, pilot training, and various other items of interest such as the growing array of specialist carrying cases now available for drones of all sizes.

The show is a mixture of a conference with speakers, an exhibition, posters, and a number of shorter live talks held within the exhibition area. For me, the exhibition has always been the place to be at this event, to see what's new, to see the range of applications and technologies on offer, and a great chance to network; this is a real opportunity to catch up with people and to talk to technologists, UAV pilots, software resellers, practitioners, trainers, speakers, and insurers, and even to see some controlled UAV flights. The small lecture theatres available in the exhibition area have also proven very popular over the years, providing a chance for people to hear about a wide range of subjects, ranging from safety and legislation to many interesting applications.

Whilst initially there were some very large drones on show and a number of early players promoting small affordable platforms, as well as a range of sensor companies, and peripherals on show, the exhibition has changed a little bit again this year to include many companies from previous years and, in addition, more small stands from academic institutions, researchers, and small applications companies. In part, this is a result of the speed at which UAV and related technologies have continued to evolve and their growing popularity in the last 5 years moving the UAV from a toy to a very serious airborne data acquisition platform for monitoring, mapping, modelling, and increasingly surveying.

There has been very rapid growth in ever more sophisticated drones – a few distinctly commercial and lower-cost platforms and some more specialist custom examples - and now a growing number of VTOL platforms (wing+rotor), and multispectral, Lidar, and thermal sensors. There are also more links emerging between UAV technology and Geographical Information Systems (GIS), remote sensing, and visualisation software and applications, particularly with the range of relatively low-cost remote sensing sensors now on offer, and soft-copy photogrammetric software providing almost plug-and-play Digital Terrain Models (DTMs) and Digital Surface Models (DSMs).

This really is exciting technology and well worth a visit to see how all these UAV technologies are growing in everyday use. All too often UAVs get bad press, but it really is important not to let these incidents cloud the vast potential of this aerial technology for the future. Huge strides have been made to dramatically improve the everyday safe and legal operation of platforms of all sizes. Even the smallest drones available these days are a huge step-up from the first UAVs available. UAVs are - I believe - here to stay and are serious contenders for many commercial applications. Make this a date in your diary for next year – even if you do not intend to buy or fly one – it is an important venue to find out more about this technology and above all to hear about it from those involved in the industry.

This article was published in GIS Professional December 2017