

Drones – a Flawed Revolution?



In his latest column for 'GIM International', David Rhind, ret. Vice-Chancellor of the UK's City University, reflects on the unmanned aerial vehicle (UAV) 'revolution' as we now enter the era of drone regulation.

I recently came out of my house to find the crumpled remains of a small drone outside my kitchen window. It had struck the crest of my roof before tumbling to Earth some 10m below. I had to pay 325 euros to have the 17 broken tiles fixed. Nowhere on the drone was there any indication of the owner's identity to help me exact retribution. A few days later I observed a drone skimming just a couple of metres over the heads of the 2,000 or so people at our local village fete. The dangers of such thoughtless or inept operations are obvious. Such dangers are, however, miniscule compared with the many near-misses

between commercial aircraft and drones in the vicinity of airports.

(By David Rhind, ret. Vice-Chancellor, The City University, UK)

On the plus side, unmanned aerial vehicles (UAVs) of various sizes and specifications have already transformed the collection of much data, with users ranging from hobbyists to professional land surveyors and many others. At the extreme, large-scale UAVs controlled by military staff have been used to 'eliminate' terrorist suspects. There is considerable interest in new applications, including the possible delivery of goods; in fact, there have been a number of cases of drugs and mobile phones being 'delivered' to prisoners in jails.

All of this is typical of the impact of any revolutionary new technology: not all the applications are beneficial or anticipated. In many cases, the industry is well aware of what needs to be done to enhance safer and wider drone use. Thus even some relatively low-cost drones can now return to base autonomously when they go beyond the line of sight.

But understandably we are entering the era of drone regulation. There is much talk about UAV traffic management systems, user certification and the preservation of privacy (however unlikely that seems). What we actually need is a universal, effective and low-bureaucracy approach to regulation. Given that, we should welcome the opening on 12 May 2017 of the European Aviation Safety Agency (EASA) consultation on unmanned aircraft system regulation which seeks comments on the proposed regulations by 15 September 2017 (extended from August 15; [see here](#)).

The draft EU regulations make no distinction between commercial and non-commercial operations; the inherent risk involved is the key factor. Low risk (open operation category) does not require prior authorisation by the competent authority. Drones in this category need to be under 25kg in weight and must fly no higher than 120m. Specific (medium risk category) requires authorisation before operation which will take account of the mitigation measures in an operational risk assessment. And Certified (high risk category of operations) requires certification of the UAV, a licensed remote pilot and an operator approved by the competent authority.

There is flexibility for individual nations on how they implement some of the regulations, e.g. geofencing. This seems helpful, not least because existing national general liability laws could be used to deal with some serious incidents.

This is important. If any aspect of the EASA proposal seems to you to be misguided, now is the time to respond to the consultation. One last parochial point: irrespective of whether the UK has left the EU by the time the regulations are transposed into national law, it would be wise to adopt the final European scheme.