



Eye in the Sky

While the drones market is clearly one that's going places, and will help in shaping actions and operations across myriad sectors going forward, it's remarkable that very little has existed in the way of recognised organisational certification, and particularly so in the private sector. Laurence Clarke points the way towards positive change

The world of commercial unmanned aircraft systems (UAS) – aka drones – is rapidly expanding. At the time of writing, there are just over 5,800 commercial operators of drones approved by the Civil Aviation Authority (CAA). Since May of last year, in fact, there has been an increase of almost 800 approved operators. That's a growth of 15% which is staggering when taking into consideration the ongoing disruptions across 2020.

Drone purposes and functions have burgeoned at a similar rate. From public safety through to law enforcement applications and on again from goods delivery to inspections and surveying tasks, drones appear to be the perfect solution for a vast array of business and, indeed, consumer-focused needs.

PricewaterhouseCoopers (PwC) has recently issued a report assessing the impact of drones on the UK's economy.

Entitled 'Skies Without Limits', PwC's document estimates that, by 2030, there will be over 76,000 drones populating the skies above the nation and, in tandem, some 628,000 jobs underpinning the dedicated drone-centric economy.

The lack of recognised organisational certification for drones, and particularly so in the private sector, has realised two linked consequences directly impacting providers and customers alike. There has been no guarantee that UAS organisations are operating to any standardised measure of compliance, be that in aspects linked to surveillance or those specific to the intended purpose of deployment. While one organisation might go above and beyond the requirements of a business committed to quality, another may take shortcuts on the basis of cost or even understanding.

There has been no obvious way for UAS organisations to distinguish

themselves on the basis of quality, nor is there a clear path to identify or redress those falling below expected industry standards. In short, customers intending to commission a UAS organisation on the basis of capability and compliance have had very little to go on by way of informing their choice. One drone company's website looks very much like another's. We've yet to encounter an organisation – in any industry – that lists operational shortcomings as part of its own marketing collateral.

Formal certification

Formal certification against recognised industry standards, delivered by an accredited body, provides an objective method of addressing these issues head on. Organisations operating in line with the latest standards receive a verifiable certification mark confirming this level of compliance. Those seeking to

conform to the latest standards and requirements have a quality benchmark against which they can conduct improvement actions, presumably in advance of their own subsequent certification process being realised.

In both instances, the organisations involved are provided with an approach to differentiate their own services from those of their competitors. The end customers' choices can then become truly informed. Seems obvious, doesn't it? The challenge we now face is that sector growth has far surpassed certification scheme development. As a result, certification bodies such as our own have a responsibility to catch up in order to help shape the direction of future growth in the UAS sector.

For its part, IQ Verify is extremely proud to be leading the charge with two key certification offerings that specifically seek to address the fundamentals of UAS operation in advance of more sector-specific nuances: certification against the Surveillance Camera Code of Practice 2013 and certification against the operational requirements of BS ISO 21384-3:2019 (UAS). For the purposes of this article, and for the benefit of Security Matters' readers, let's concentrate on the former.

The Office of the Surveillance Camera Commissioner was created under the Protection of Freedoms Act 2012 to regulate CCTV. The Surveillance Camera Code of Practice was issued by the Secretary of State under Section 30 of that Act of Parliament to ensure that the use of cameras in public places is effectively regulated and only enacted in pursuit of a specified purpose.

The Code of Practice sets out 12 Guiding Principles which strike a balance between protecting the public and upholding civil liberties. Those principles provide a coherent and comprehensive structure to enable good and transparent decision-making and reassure the public that surveillance cameras are used to protect and support communities rather than spy on them.

Working alongside the Home Office, the core role of the Surveillance Camera Commissioner is to encourage compliance with the Surveillance Camera Code of Practice and provide salient and considered advice to Government ministers on whether or not the Code needs amendment.

Relevant authorities

The Code of Practice applies to relevant authorities in England and Wales who are operating surveillance camera systems overtly in public places. Relevant authorities are principally local authorities and the police service. The Surveillance Camera Commissioner also encourages other non-related authorities who are presently operating surveillance camera systems to adopt the Code of Practice on a voluntary footing.

The eagle-eyed among you will likely be questioning the relevance of CCTV to the UAS market. Surveillance Camera Commissioner Tony Porter QPM LLB neatly summed up that relevance in his 2019 Annual Report by stating the following: "CCTV is in itself a misnomer. It's no longer a stand-alone closed-circuit system and hasn't been for some time. The understanding needs to widen considerably to reflect this change. In the near future, we will have mass streaming of video data from static, drone and body-worn video cameras and mobile phone sources to online cloud storage. It's a long way removed from the more conventional static digital video recorder."

The relevant section within the Code of Practice defines surveillance camera systems as "(b) any other systems for recording or viewing visual images for surveillance purposes (c) any systems for storing, receiving, transmitting,

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processing or checking the images or information". In essence, this means that UAS are very much applicable to the principles and requirements as identified within the Code of Practice.

While adoption of the Code is voluntary, organisations achieving certification against it evidence a recognised commitment to quality in terms of the appropriate and effective use of surveillance camera systems. This point is particularly important for local authorities as they have a legal requirement to pay due regard to the Code, while in other sectors certification has benefits for those companies actively seeking to achieve a commercial edge over their closest competitors.

We are one of only three certification bodies presently qualified to audit against the Surveillance Camera Code of Practice and the only one working directly with private sector UAS.

On Monday 5 October, having first discussed the proposal with representatives from the Surveillance Camera Commissioner's Office, IQ Verify delivered the first Surveillance Camera Code of Practice audit for a private sector drone organisation.

Mobile perspective

While it might sound rather obvious, one of the biggest differences between a traditional Code of Practice audit and one tailored to the requirements of the UAS sector is that the surveillance systems and Control Rooms used for UAS are all mobile. Vans replace back offices. Drone mountings replace wall mountings and so on. In practical terms this means that, while the guiding principles of the Code of Practice are to be maintained, for the audit to be a success their application has to be considered in a non-static context.

Anyone familiar with the principles or experience of being audited will tell you that a 'flexible audit' is a somewhat



oxymoronic term. Fortunately for all of us, the Surveillance Camera Code of Practice has been written to promote inclusivity and accessibility across the full surveillance spectrum.

Belfast-based Crowded Space Drones was the willing participant for the aforementioned 'industry first'. Something of a bold decision driven by the company's organisational commitment to bettering standards within the private sector industry.

On completion of the audit, Andrew McQuillan (director of Crowded Space Drones) observed: "Given that we don't fit the traditional scope of having a fixed surveillance system in a confined geographic area, this was our main concern ahead of going into the audit. We were particularly pleased that the assigned IQ Verify auditor understood this point right from the outset."

On Tuesday 13 October, a little over a week following the date of the IQ Verify audit (and as reported at the time on the Security Matters website), the Surveillance Camera Commissioner formally awarded Crowded Space Drones the first-ever private sector Certificate of Compliance in relation to surveillance camera systems and the Protection of Freedoms Act 2012 for the use of UAS in surveillance.

"When conducting any form of surveillance for public authorities, transparency of compliance is crucial to both the authority and the public," urged

McQuillan. "We're exceptionally proud to be the only private sector organisation to have obtained this certification to date as it not only affords our clients confidence that we comply with all of the relevant legislation in this area, but also enables public trust in our work."

Tangible value

In order to satisfy the original objectives of the project – and also address the issues caused by a lack of available certification frameworks – it stands to reason that any certification must lead to some real world value, be that at an organisational level or one more closely aligned with commercial success.

That being so, what's Andrew's take on the value of the certification that his company has just received, both at an industry and an organisational level? Also, what does he believe to be the next step for those drone solution providers looking to stand out from the competition within the industry?

"Adherence to standards and the attainment of formal certification are crucial for maintaining safety and Best Practice," stated McQuillan. "They demonstrate a recognised level of compliance, both internally and externally, offering a transparent overview of business operations and showing a defined and determined commitment to quality. It's for these reasons that we wanted to put our head about the parapet and be a driving force

behind the certification changes we firmly believe the sector needs."

He continued: "The Surveillance Camera Code of Practice audit has already driven positive change for our business. This includes the deployment of over ten improvement actions, primarily aimed at helping both our own team members and the general public at large to understand precisely how standards relate to their interaction with our work. We also fully anticipate a growing commercial value with regards to future tendering success."

Further, McQuillan said: "Owing to reduced work during the pandemic, procurement is currently overloaded with the number of tender submissions being received. In our recent experience, tenders that used to entice four or five bidders now peak the interest of between 40 and 60 solution providers. Competition is good, of course, but most of these operators are not experienced in niche areas of drone use and they overwhelm procurement, delaying it and, on occasion, cancelling the procurement exercise entirely. Formal certification against recognised standards provides a method for streamlining this process, allowing UAS organisations to quickly differentiate themselves from the competition."

For McQuillan, the next step is very clearly the segregation of quality service provision among the 5,832 CAA-approved organisations in the UK using drones. "Parallels can be made with the security industry following the introduction of the Security Industry Authority (SIA) in 2003," highlighted McQuillan. "Once the SIA had achieved a high level of personal licensing compliance, the focus moved towards organisations becoming Approved Contractors which then set a benchmark of quality in line with ISO 9001 and the various British Standards."

The CAA isn't like the SIA in the sense of recognising the business need for quality scoring in procurement as the aviation sector rarely has to deal with such issues. "This is where we hope the recently published International Standard for drone operations, specifically ISO 21384-3:2019, will play a pivotal role," concluded McQuillan.

On that note, IQ Verify will soon be introducing a UAS Operations Gold Scheme which, in our view, is going to become the Approved Contractor Scheme of the drones industry.

Laurence Clarke is Director of IQ Verify (www.iqverify.org.uk)

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