

Topcon Helps Murphy Surveys get UAVs off the Ground



Topcon GB & Ireland has helped leading land and engineering surveying company, Murphy Surveys, expand its offering with the introduction of a specialised aerial survey division - MurphyUAV. By introducing this technology, MurphyUAV is able to break into new markets and complete complex and often high-risk projects much more safely and easily.

"In difficult to access areas like bridges, tunnels, or large-scale structures, traditional methods of surveying can be time consuming and high risk. In comparison, UAVs can cover great distances quickly and easily with only one person on the ground, meaning it's possible to collect mass data in a matter of hours as opposed to days. Introducing this technology through our MurphyUAV division means we can bring together traditional and

new ways of working to produce even more accurate data for our clients. It also opens the doors to many new sectors - like shipping, oil and gas, mining and large-scale infrastructure - where traditional methods are often too dangerous." commented Julian Deeks, director of MurphyUAV.

MurphyUAV chose the Falcon 8 from Topcon to lead the way in its new enterprise. With a rotary-wing system, flight-planning software and adaptive flight control, the UAV reduces the time and effort spent on complex survey projects.

Julian continued: "We needed a UAV that was tried and tested in high risk environments, one that could measure up to the challenge of conducting surveys in some of the hardest to reach locations. I'd used the Falcon 8 previously and was confident it could give us this level of reliability as it's been designed for safety."

With three separate devices working simultaneously to measure data during its flight, the Falcon 8 can recognise any potential issues and make automatic adjustments to maintain stability and accuracy at all times. It also offers users a choice of HD imaging, thermal and RGB stills and real-time video, making it suitable for a range of applications.

It's not just the beginning of projects where UAV technology is proving instrumental for MurphyUAV. As the construction industry makes the shift to 3D through processes such as building information modelling (BIM), there's an increasing demand for accurate, real-world data like that acquired from a UAV.

"Aerial surveys are proving useful from beginning to end on so many projects," Julian said. "The rich-data makes it possible to assess existing conditions on a site, monitor the construction process, carry out structural assessments and record as-built conditions. Effectively, the UAV can be used from the start to the end of the construction cycle: whether it's helping to support engineers and the design team in the initial stages, or bring survey-grade data to inspections."