



Royal Institute of Chartered Surveyors – Modus

How Sky Revolutions' UASs surveying can benefit RICS members

Thanks to ongoing advances in UAS (unmanned aerial system) technology, more and more surveyors are choosing to use these systems to help make surveying quicker and more cost effective. Aerial surveying and photography provider, Sky Revolutions, offer a range of UAS services for various applications.

One of our key services is providing aerial footage for visual inspections of existing buildings, structures and roofs. Thanks to their size and manoeuvrability, our UASs are able to fly close enough to the structure to be able to capture detailed images and video, which can then be assessed by an inspector or structural engineer - ideal for carrying out damage assessments and monitoring for signs of wear like rust or corrosion. This means the survey can be carried out without the use of scaffolding or scissor lifts, reducing the health and safety risks associated with working at height.

Our UASs also offer a quick and easy means of assessing potential development land, giving the inspector a high quality, bird's eye view of the site. The UAS produces a much higher resolution image than a satellite image and allows for more flexibility as the surveyor can specify what angle images should be taken from and at what height. It is also much more cost effective than using a plane or helicopter.

Sky Revolution's UASs can also be combined with a range of sensors and mapping programs to provide specific data about the site. For example, we can fit a UAS with a Lidar (Light Detection and Ranging) sensor which allows it to fire rapid pulses of light at the ground in order to calculate the distance between itself and the objects below. The data collected can then be used to build a Digital Elevation Model (DEM) or surface model of the terrain. The prohibitive cost of hiring a lidar-equipped aircraft, pilots and lidar-trained engineers to operate the equipment has always limited the use of lidar systems in the past. Using a UAS makes this far more achievable.

Mapping systems like this also allow the UAS to capture data for other specialist tasks such as agricultural, geological and environmental surveys and surveying pylon and cable routes for utilities. UASs are particularly useful for environmental conservation where they can be used to analyse rivers, lakes, coastal region, forests, coral reefs and more. The technology can also be used in agriculture to measure sun exposure and crop yields, in archaeology for sites surveys and planning digs, in meteorology to measure cloud formations and wind speeds, in solar energy to analyse sites for photovoltaic panels and a whole host of other applications.

These are just a few of the many UAS aerial surveying services that Sky Revolutions can provide and we are happy to work with our customers to provide a service that is perfectly tailored to suit your requirements.

For more information, please call 01778 560929 or visit www.skyrevolutions.co.uk.



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