

Game-changer: How UASs Have Revolutionised the Construction Industry

Aerial surveying specialist Ben Gorham discusses how UASs (unmanned aerial systems) have transitioned from a novelty to a necessity for the construction sector.

Hundreds of articles have been written on the uses of UASs or drones in the construction industry over the past few years, covering everything from site surveys and structural inspections to safety monitoring and progress reporting. Yet most of these articles are still presenting this technology as a novelty – something new and quirky that the industry is toying with. The evidence we are seeing suggests that this is simply no longer the case.

UASs are quickly becoming a vital tool for the industry due to their efficiency, cost effectiveness and the wide range of applications they are suited to. Not only are they able to capture high resolution images and video of construction sites and tall structures, but they can also be combined with various sensors and mapping programs to provide huge amounts of data about the site or building including terrain, climate conditions and more.

UASs can also be used to provide aerial views of construction sites to allow overseers to monitor progress and manage the site more effectively. The data captured can be used to create 3D maps of construction progress and impose overlays onto plans to ensure the project stays on track. This information is useful for project managers as it helps them to monitor progress more accurately and share this data with clients as needed. UASs are also contributing to onsite safety by giving safety officers an overview of the site, allowing them to spot potential hazards that may not be visible from the ground and monitor ongoing work to ensure that safety protocols are being followed.

As well as new projects, UASs are also proving useful for monitoring and maintaining existing structures. Drones can be used to inspect various structures to check for signs of wear like rust or corrosion. Traditionally, this type of inspection would require the use of a scaffold or scissor lift and would take a significant amount of time to carry out. Thanks to their compact size and aerial agility, UASs allow inspectors to see any part of the structure from a variety of angles, meaning they are able to carry out a visual inspection quickly and efficiently without ever leaving the ground. This also saves money on cages and harnesses and reduces safety risks associated with working at height.

With all this at a fraction of the cost of hiring a helicopter, plane, scaffold or cherry picker, the companies who are already utilising this technology will quickly outstrip their competitors. Some of the biggest names in the sector, including [Bouygues, Balfour Beatty and Webcor](#), have now invested in UASs and started using this technology to map construction sites. It's also been reported that chartered building surveying companies, such as [LC Building Consultants](#), are now training their staff to operate UAVs (unmanned aerial vehicles). This suggests that the key players in the sector are beginning to see

UASs as a viable solution for aerial surveying, which should serve as an indicator to the rest of the industry that now is the time to start seriously considering this technology or risk being left behind.

[Sky Revolutions](#) is receiving more enquiries than ever for our aerial surveying services from companies ranging from small, independent contractors to multinational developers. The type of enquiry also appears to have altered from tentative requests for a test flight to full-blown contracts for ongoing surveying work. The increased interest in these services suggests that the construction sector no longer sees UASs as a fad. Instead they are beginning to see the necessity of using this technology to make essential aerial work safer, more efficient and more cost effective.

For more information about UAS services for the construction industry please visit www.skyrevolutions.co.uk.

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