



1ST LINE DEFENCE

Unexploded Ordnance (UXO) Non-intrusive Drone Survey



What is a Drone UXO Survey?

Non-intrusive magnetometer surveys are one of the most effective, safe and efficient means of detecting shallow-buried UXO on areas of relatively 'clean' greenfield land.

Depending on factors such as the size of the site, topography, ease of access, nature of the identified risk and likely depth of targets, 1st Line Defence can deploy a range of non-intrusive techniques from manual 'walkover', vehicle-towed to Drone / UAV surveys.

We have invested in the latest commercially available technology and have combined it with a specially designed magnetometer system from one of the world's leading providers of magnetic and electromagnetic survey systems.

What are the benefits of using this technology?

Specifically designed to be mounted on a Drone / UAV, the system consists of an ultra-lightweight carbon fibre sensor tube with two built-in 3-axis fluxgates, data logger and integrated D-RTK GPS with local base station.

The advanced sensor has a 200Hz sampling rate, and can distinguish between motor noise, net frequencies, temporary interferences and ground signal. This means it can be deployed directly beneath the drone without effecting the efficacy of the equipment.

We're able to maximise the depths to which detection of discreet anomalies is possible. This is particularly useful when trying to detect very small items of UXO or larger items which might be buried deeper.

The height that a Drone / UAV has to fly at does effect the sensitivity of the system however, with the addition of new laser terrain following technology we are able to achieve both autonomous flying – and the highest possible resolution data available.

