

UAV AERIAL SURVEYS



Reference: CS-40

GWP has been using data captured from Unmanned Aerial Vehicles (UAVs) since 2012 and has revolutionised the way we view and present our survey data.

The UAV is able to capture high resolution georeferenced orthomosaic imagery and the production of a dense point cloud model enables GWP to survey large areas quickly and safely.

The ability to survey 5km² in a single day with no interruption to ground based operations offers a unique surveying solution. This solution is providing a reduction in time, cost and complexity of the survey operation whilst increasing safety and accuracy.

Airframe

GWP operate both fixed wing and multi-rotor platforms, providing the capability and flexibility to undertake a full range of survey tasks. Both platforms have been specifically selected for their mapping capabilities, GWP can advise which platform is best suited to a particular survey task, providing the client with a cost effective solution and the ability to survey sites where access is limited and/or dangerous.

GWP have obtained permission from the Civil Aviation Authority to undertake commercial work and the team of pilots have gained over 200 hours flying experience undertaking UAV surveys nationally and overseas.



- Deformation monitoring and geotechnical analysis of unsafe/inaccessible quarry faces or landslides.
- Production of Digital Elevation Models (DEM) and Digital Terrain Model (DTM) with the removal of vegetated / built up information.
- Level information and photography on road or rail infrastructure without necessary access to the site or closure requirements.
- Catchment modelling and characterisation for hydrological studies

Related expertise

- Large scale topographic survey of quarries and earthworks, including point clouds and line features.
- Volumetrics and monitoring of large earth moving projects and stockpiles.
- Inaccessible quarry face mapping for the purposes of rock mass and rock fall assessments.
- Real estate planning using the high quality imagery for site identification purposes, boundary mapping, area calculations, planning applications and asset management
- Landscape and visual assessments, Zone of Theoretical Visibility (ZTV) studies, slope analysis, 3D visualisations.



Key contacts

For details and to discuss your requirements, please contact the following:

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