

Condition Monitoring: Helicopter Surveys



Commercial Engineering Services

National Grid's Helicopter Unit has over 40 years of experience in delivering condition monitoring services to the power industry.

Our current crews have amassed a cumulative total of 80 years flying experience surveying Overhead Lines (OHL) and Substations and have a broad range of experience in modern High Definition Condition Assessment (HDCA) and Thermal Survey techniques.

Combined with our experience, we are able to offer a competitive, unrivalled service to our customers through the use of state of the art helicopters and on-board equipment.

Condition Monitoring: Helicopter Surveys

- We fly the most modern variant of Airbus Helicopters' Twin Squirrel (AS355NP) and the ultra-modern Bell 429, possessing excellent engine power safety margins, reliability and operation in most weathers.
- Our helicopters are fitted with Wescam's highly-acclaimed MX10 high-definition, electro optic and infra-red sensor package, mounted in a gyro-stabilised turret that can detect the most minor asset imperfections and provide essential detailed video evidence to analysts.
- A digital SLR camera is carried on board and is used to take high-definition images of steelwork, fittings and other specific components if required.

High Voltage Engineering Specialists

A unique combination of experience and expertise

Asset Monitoring



We provide a fast and economical way to survey assets, providing business intelligence to Asset Integrity/Monitoring teams for repair and refurbishment scheduling. The two key ways we do this are:

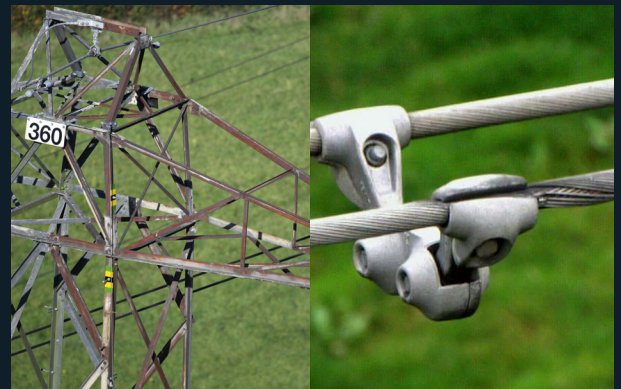
Thermal Surveys

- Identify thermal contrast in similar components which can often be the precursor to equipment failure.
- Identify high resistance joints before joint failure.
- Identify conductor problems, hot tower footings and earth wire continuity issues.
- Highlight transformer, switch gear and bus bar problems where components show dissimilar hotspots (or cold spots where equipment has failed).



High Definition Condition Assessments (HDCA)

- Provide detailed condition assessment of towers, fittings and ancillary equipment including all spacers, line, insulator cracking, joints, repairs, bonds, shoes, hangers, bolts, washers, split pins and earth wire fittings.
- HD photography of steelwork that can inform tower painting / steelwork requirements.
- HD condition assessment of overhead gantries and substation equipment.



The results of both types of survey are made available through imagery and summary reports in a choice of formats. These reports can be modified depending on individual customer requirements.

For more details or to arrange a survey of your assets please contact us via the enquiry form on our website www.nationalgridces.com or call us on 0800 783 9228.

Commercial Engineering Services National Grid

Tel: +44 (0)800 783 9228
Email: ces@nationalgrid.com
Website: www.nationalgridces.com

Commercial Engineering Services, National Grid,
National Grid House, Warwick Technology Park,
Gallows Hill, Warwick, CV34 6DA, United Kingdom



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