

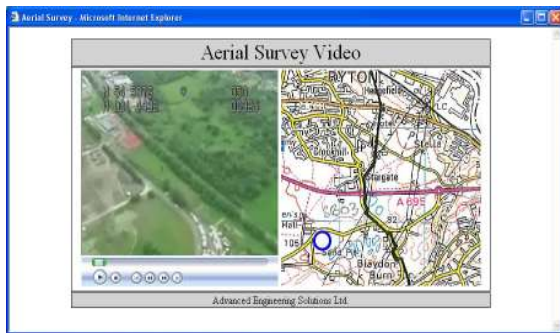
Gas Transmission Pipeline Surveys



The engineering standards governing the operation of high-pressure, gas transmission pipelines define required periodic technical surveys. Advanced Engineering Solutions Limited (AESL) provides 'Maximum Operating Pressure' (MOP) and Corrosion Protection (CP) survey services to meet these requirements.

Maximum Operating Pressure Surveys

To technically and financially optimise the survey process, field data collected from helicopter flights and local surveys is integrated with the office-based analysis, using AESL software. The approach provides high quality reports and accessibility to supporting documents and information, through a password controlled web site.



The maximum operating pressure of transmission pipelines must be determined at defined intervals. This requires the collection and validation of the pipeline construction and operation records and confirmation of building proximity distances. Since MOP confirmation is dependent on existing records, close customer liaison is required to ensure document availability. This liaison is managed by the provision of web site access during and after the MOP report development process. The survey process has been optimised using the following techniques.

- Developing a high quality computer based report format.
- Paralleling helicopter video and route map outputs on the computer to allow identification of proximity infringements.
- Scanning and indexing of all available documentation including strip maps, pressure test and materials records etc.
- Allowing password protected customer access to the AESL web site where ongoing

and completed MOP reports are available for reading or printing.

This structuring and storing of asset data will simplify future survey requirements.

Corrosion Protection (CP) System Surveys

Impressed current CP systems require monitoring at regular intervals to ensure their continued adequate performance. AESL have developed and apply a PDA and GPS based system to allow efficient CP monitoring. AESL developed software requests appropriate information during testing carried out on individual CP installations. The GPS output is used as the basis for storage and reporting of the CP audit information.



This survey process is optimised by the following systems.

- Using PDA technology and purpose-written software for field data collection.
- Automating field data transfer to the report format, via the mobile telephone system.
- Map-based recording of all CP installations with controlled customer access.

Collected data is available on the AESL password protected web site.

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