

Airborne Ultrasound Case #1





Cracked insulator on high voltage application.

One example of the many ways that airborne ultrasound can be beneficial to a company is the ability to find bad insulators in a substation and weak points in wiring. These problems cannot be detected using an infrared camera unless the insulator has reached its failure mode.

Insulator break down can occur from lightening strikes or excessive tension on electrical wiring. After these events occur, the insulator can crack causing high amounts of corona, tracking or even arcing. This leads to insulator failure causing damage to other components and later on unscheduled down time.

For example a cracked insulator found to have numerous cracks present did not show up on infrared camera equipment however using airborne ultrasound test equipment, the technician heard a high amount of corona/ tracking. Further inspection of the framework revealed burning and other failing areas of the wooden substation structure. Immediate notifications were made and personnel mobilized for repair. This repair prevented further damage to any other components or unplanned downtime that might have occurred.



- Finding this bad insulator prevented unplanned downtime
- Prevented further damage of other electrical components
- Maintained a safe environment

"Many dollars can be saved from the bottom line by simple maintenance."



Electricity trying to go to ground burns cross arm .

Any questions feel free to contact Robert Evasic revasic@ma.rr.com