

Corona due to a loose tie wire that disturbed radio communication of the control tower of an airport, was immediately located by the DayCor camera.



*“...It took 20 minutes for the line crews to arrive and 30 minutes to replace the defective hardware replacement causing the radio interference, saving time, money and a quick resolution of the radio interference problem...” D.S.*

Line crew replaced **only** the hardware that was found to be defective using the DayCor II Corona Camera.



Real Life  
Case Study

# RADIO INTERFERENCE



Real Life  
Case Study



## The Defect that was found:



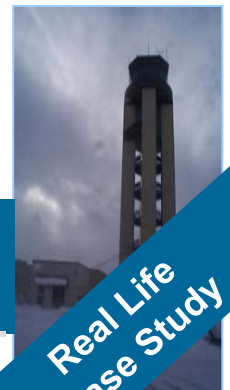
Flat spots on the aluminum tie wrap were found on on the 12.47 kV pin insulator .



The rubber-covering on the 12.47kV wire: erosion of the rubber was caused by arcing on the 12.47kV wire that was attached to the pin insulator.

**ROI:**

with the camera it was straight forward to locate the defected element



Real Life  
Case Study

## RADIO INTERFERENCE

Noise from overhead lines is produced by corona discharge. Although conductors are designed to minimize corona discharge, sharp surfaces caused by damage, raindrops, improper installation or contamination may locally enhance the electric field strength sufficiently for corona discharges to occur. This may be audible in certain conditions as a crackling sound, occasionally accompanied by a low frequency hum. Most modern overhead lines and substations are designed to reduce the magnitude of the electric field surrounding the line conductors below the air breakdown value. Occasionally small sharp points can be found on a line or on nearby hardware that will result in a corona discharge. Such discharges are more active during high humidity conditions.

