Lightning Dissipation Spur

A Lightning Dissipation System, with the economy of a lightning rod

Lightning is the leading cause of weather related damage to broadcast equipment. With average lightning currents of 20 to 30 kiloamps and heat energy in excess of 20,000°C, the need for improved lightning protection is evident.

Purpose

- Shields structure by reducing the electric potential of the tower or structure.
- Divert the electrostatic energy away from critical equipment and toward a safe path to earth.

Features

- Exceptional electrical dissipation characteristics
- No antenna and beacon interference
- 180 mph survival wind speed
- Low cost, replaceable dissipating tips

The Lightning Spur is a very efficient hybrid lightning dissipator. When operating as a shield it reduces the potential between the tower and storm cell by transferring electrical charge to the adjacent ionizing air molecules. This transference represents dissipation or the controlled leakage of the charge, thus reducing the probability of a lightning strike.

If the electric charge accumulation rate far exceeds the dissipation rate the Lightning Spur will divert a lightning strike away from the protected equipment and toward a safe, predetermined path to earth.

Lightning strikes can cause various types of damage. Large peak voltages damage transmission lines and voltage sensitive devices. Lightning's electrical currents often result in an energy transfer and heat. The heat energy can literally melt electrically conductive components including transmitting antennas.

Sudden increase in temperature of non-conductive materials can result in significant structural damage. Lightning damage to the guy wire insulator or to the concrete guy wire anchor could result in tower failure.

The addition of an A-I Lightning Spur offers increased protection for critical path, lower level antennas.