How lightning impacts airport safety

No matter where or what size they are, every airport carries some level of risk from thunderstorms.

Lightning is powerful and hot: it’s hotter than the surface of the sun, carrying thousands of times more electricity than household electricity.

Here are the top three ways lightning can impact safety—on the ground and in the airport environment—plus tips on mitigating risk at your airport.

Safety risks

### Unprotected Buildings
When lightning strikes an unprotected building (e.g., doesn’t have lightning rods or surge protection), powerful electricity surges through the infrastructure that can blow out the electricity and trigger fires or cause other damage.

### Ground Crew and Passengers
Human safety is critical. Lightning strikes can cause death or permanent physical or brain damage. The highest risk occurs when crews do not have enough time to get to a safe place when lightning is in the area, or resume outdoor operations too soon.

### 3 ways to mitigate lightning safety risks

#### Develop and follow the plan
A lightning safety plan is essential. The plan should be kept up to date, and staff should be familiar with it. Proper response and timing makes all the difference when lightning approaches the airport.

#### Use a complete lightning detection network
Data from an accurate, reliable lightning detection network provides the situational awareness that helps decision makers or automated systems determine safe levels of operation. The amount, proximity, and type of lightning is critical information.

#### Get timely and clear warning notifications
Ensure that high-quality audio and visual alerts are located close to outside working areas, so that they can be clearly seen and heard.

Vaisala is the trusted leader in providing reference grade lightning detection data, software and systems to enable safe and efficient airport operations. Learn more about how to keep your airport moving.

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