



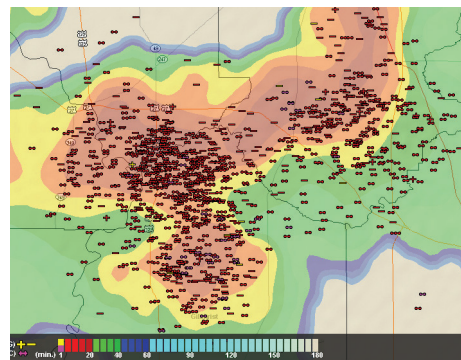
ORLANDO INTERNATIONAL AIRPORT DEPLOYS ADVANCED WEATHER MONITORING AND ALERTING SOLUTIONS FROM EARTH NETWORKS

Located in central Florida, Orlando International Airport is an extremely busy travel hub located near many of the nation's biggest, most popular vacation destinations and attractions. Every day, the airport welcomes more than 100,000 passengers and facilitates hundreds of arrivals and departures for 41 different airlines.

MITIGATE SEVERE WEATHER RISK AND OPTIMIZE OPERATIONS

Airports are typically at risk from lightning strikes due to their open landscape and the presence of towers and antennae. Having accurate and timely weather and lightning information is crucial to ensure optimal operations and keep ground crews as safe as possible. Airports must be equipped with

technology that provides lightning detection and severe weather alerting. Airport officials and airline staff require detailed weather information on a 24/7 basis to make critical safety and operational decisions quickly. Due to Orlando's location and climate, the potential for lightning formation and severe weather caused concern. The airport had long utilized a lightning sensor and devices for detecting and informing of lightning. However, management sought to integrate newer and more comprehensive weather monitoring and alerting solutions within airport operations.



TOTAL WEATHER MONITORING FOR EFFICIENT AIRPORT OPERATIONS

OVERVIEW

Orlando International Airport is an extremely busy travel hub that utilizes Earth Networks comprehensive severe weather monitoring solution to keep operations running smoothly

CHALLENGES

Airports are typically at risk from lightning strikes due to their open landscape and the presence of towers and antennae.

SOLUTION

A comprehensive suite of weather monitoring sensors and tools that include lightning sensor, weather station, web-based weather visualization tool and outdoor alerting.

RESULTS

Improved on-time performance, streamlined operations, safety on the tarmac, in the towers and throughout the airport.

A COMPREHENSIVE AUTOMATED SOLUTION

Orlando International Airport implemented a state-of-the-art, all-weather monitoring and alerting system from Earth Networks that included,

- **Total lightning sensor** that is one of hundreds worldwide within the Earth Networks Total Lightning Network®, the largest and most advanced network for precisely detecting both in-cloud (IC) and cloud-to-ground (CG) lightning. Detecting in-cloud lightning is major factor in the prediction of severe weather, such as tornadoes, heavy rainfall, downburst winds, wind shear and cloud-to-ground lightning strikes.
- **On-site weather station** that measures local conditions including temperature, wind speed and direction, precipitation, humidity and more, updated every two seconds. These professional-grade weather sensors are used by airports, government, emergency management and recreational facilities for monitoring local real-time weather conditions and obtaining pinpoint forecasts.

- **A web-based weather visualization and alerting application** for monitoring storm cells, lightning and changing conditions that combines real-time data from the airport's weather station with local weather information from the Earth Networks network of more than 35,000 locations – including 10,000 stations that are exclusive to Earth Networks.
- **Lightning alerting devices** that inform staff and officials located indoors when lightning is detected. Within the airport, these devices activate when lightning approaches within a predetermined distance – providing advanced warning of impending severe weather conditions.

WHY IT MATTERS

Earth Networks comprehensive solution enables airport operations staff to continually monitor and react to lightning, storms, and other severe weather moving through the region.

By providing insight into approaching weather, airport staff and personnel at 20 different airlines make more informed operational decisions, which in turn minimizes false alarms and helps improve on-time performance. In addition, the staff receives notifications from indoor alert devices when lightning occurs within a given distance.



Accessing updated, local weather conditions; watching weather as it happens in real time; and receiving prompt alerts on a web-based system during weather events is significant, it enables us to respond more efficiently in providing information and making decisions that keep safety our number-one priority.



Cyrus Callum, of the Operations Department for the Greater Orlando Aviation Authority

