



NTSB RECOMMENDS USE OF TOTAL LIGHTNING DETECTION TO FAA

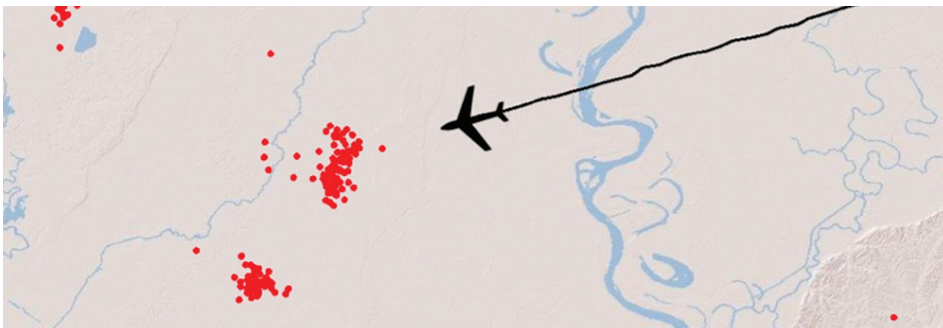
The Federal Aviation Administration (FAA) warns pilots should “never regard any thunderstorm lightly, even when radar shows light intensity. Avoiding thunderstorms is the best policy.” Lightning is a strong indicator of convective weather and poses many threats to airport operations from damage to communications and electronic navigational equipment to incapacitating pilots with temporary blindness and causing unnecessary flight diversions and delays.

In a recent safety memo to the FAA, the National Transportation Safety Bureau (NTSB) analyzed several mid-air incidents that could have been prevented with the use of our patented long-range lightning detection solution, Earth Networks Total Lightning Network® (ENTLN) and recommended the use of our total lightning detection technology within air traffic control (ATC) and airline weather monitoring systems.

PREVENT INJURIES: AMERICAN EAGLE 3224 FLIES INTO INVISIBLE THUNDERSTORM

Anyone who flies knows that turbulence is quite common. Although rare, turbulence-related injuries to passengers and crew can occur, especially when clear-air turbulence is present. That’s the scenario that American Eagle flight 3224 faced during its scheduled trip from Greensboro, NC to Dallas, TX on June 28, 2010, resulting in several injuries. Cruising at 38,000 feet over Pioneer, LA, the Embraer 145LR experienced severe turbulence 10 minutes before entering visible clouds. The severe weather appeared without warning and was not visible on the airplane’s weather radar display until about 20 seconds before the turbulence began. A review of ATC weather data and communications revealed that controllers handling the flight did not see any precipitation on their displays at the time of the incident.

An NTSB meteorologist reviewed archived lightning data from Earth Networks Total Lightning Network at the time of the incident and noted substantial lightning activity was recorded at the accident location.



American Eagle flight 3224 immediately before the accident. Red dots indicate total lightning detected by Earth Networks Total Lightning Network.

ENTLN: THE WORLD’S BEST LIGHTNING DETECTION NETWORK

OVERVIEW

The NTSB recommends the use of total lightning detection in airport operations. Earth Networks patented lightning detection technology was shown to prevent severe storm-related injuries and damage to planes.

CHALLENGES

Lightning and thunderstorms create dangerous unsafe conditions for airport workers and can cause injuries, damage to planes, loss of property and unplanned disruptions and delays.

SOLUTION

The use of Earth Networks Total Lightning Network provides a proven advantage over the use of traditional radar weather monitoring because it is proven to detect severe weather that can cause issues for airlines and companies operating in airline operations.

RESULTS

The NTSB agrees, air traffic control, airports and airlines can all benefit from the use of advanced total lightning detection to protect people, planes and property to make their operations more efficient.

TOTAL LIGHTNING DETECTION TRUSTED BY THE NTSB

PREVENT DISRUPTIONS: SURPRISE LIGHTNING STRIKES US AIRWAYS 1209

The FAA estimates that on average, lightning hits each airliner in US service once a year, which can cause flight diversions and damage to planes. On August 14, 2011, US Airways flight 1209, a Boeing 757 en route from Philadelphia, Pennsylvania, to St. Maarten, was struck by lightning at 16,000 feet resulting in smoke in the cockpit and an unscheduled landing at BWI. When the pilot first contacted air traffic control, the controller advised of moderate rain and turbulence (but no thunderstorms) along the airplane’s route. Three minutes later, the pilot reported that the airplane had been struck by lightning adding there was moderate to severe turbulence in the area, with multiple cloud-to-cloud lightning strokes.

An analysis of Earth Networks Total Lightning Network data clearly indicated in-cloud lightning strikes were present 15 minutes before the plane was struck by lightning.

TOTAL LIGHTNING DETECTION TRUSTED BY THE NTSB

If you had access to the world’s best lightning detection technology, wouldn’t you use it to keep your airport operations running free of disruption during severe weather? Earth Networks Total Lightning Network and our associated weather visualization, monitoring and collaboration products will help you protect assets, minimize financial risk and streamline your operations by keeping your staff and infrastructure protected from dangerous thunderstorms and lightning strikes. The NTSB recognizes the importance of incorporating total lightning detection into airport operations. You should too.



US Airways flight 1209 flightpath. Red dots indicate total lightning detected by Earth Networks Total Lightning Network 15 minutes before the incident.



The NTSB believes that in addition to the precipitation data provided by weather radars, real-time information provided by modern “total lightning” detection networks can further assist pilots and controllers in identifying specific areas where lightning exists, and, through observation of storm motion, may exist as aircraft proceed along their flightpaths.



National Transportation Safety Board

