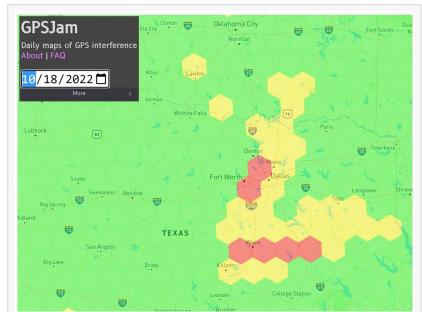


Study – 'GPS Disruptions in Aviation Show Importance of Backups. U.S. and Europe may be headed in the wrong direction'

To thwart increasing GPS jamming, backups are needed for flight AND ground operations.

ALEXANDRIA, VA, UNITED STATES, June 4, 2024 /EINPresswire.com/ -- In a recently released paper, the respected analytics firm London Economics determined that the presence of backup systems at the Denver and Dallas Fort Worth airports prevented any noticeable impacts to air travel despite each having experienced a disruption of GPS signals for 24 hours or more. By contrast, recent GPS interference at an airport without a backup system caused scheduled air service to be cancelled until a GPS alternative was established.



Interference near Dallas Ft Worth Airport, October 2022, from GPSJam.org

Also important to the lack of impact at Denver and Dallas was that the signals interfering with GPS, with a few minor exceptions, only impacted aircraft in the air.

GPS is essential for safe and efficient movement of aircraft and support vehicles on the ground at airports, transport of crews, passengers, supplies, and cargo to and from airports, communication systems, and numerous other services.

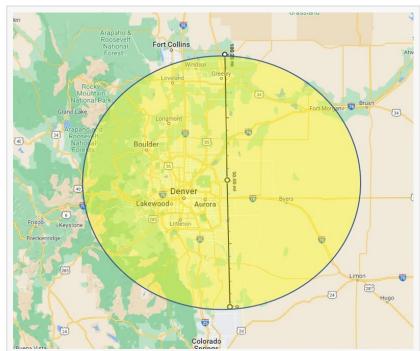
Previous work by London Economics has shown that disruption of GPS for these ground functions would likely cause numerous flight delays and cancellations. Delays in arrival of flight crews, passengers, and supplies, for example, would quickly upset flight schedules. If this happened at a major airport like Denver or Dallas Fort Worth, disruptions could ripple through the entire air transport system. Wide-spread delays, cancellations, and schedule adjustments would bog down air travel across the nation, if not the world.

Both the Denver and Dallas GPS disruptions occurred in 2022.

The incident in Denver was caused by an accidental transmission from a government installation on the 21st of January.

It impacted aircraft within approximately 50 nautical miles of the airport and lasted 33 hours before the source was identified and turned off.

The Dallas incident began on the 17th of October and affected aircraft within about 110 nautical miles. It continued for 24 hours before ending on its own. The source has never been identified.



Signals jamming GPS reception near Denver in January 2022 impacted aircraft within 50 miles of the airport.

In addition to recognizing the value of terrestrial navigation systems for <u>aviation</u>, the London Economics paper cautions about moves in the U.S. and Europe to "rationalize" these systems by reducing their number. In the event of longer or widespread GPS disruptions, the impact of an insufficient number of terrestrial systems could be significant.

The cancellation of air service to an airport in Estonia because of chronic GPS jamming is used in the paper as a cautionary tale.

Instead of reducing the number of old backup systems, London Economics suggests policy makers consider establishing more widely available sources of terrestrial "positioning, navigation, and timing" or <u>PNT</u>. Taking a fresh look might identify alternative PNT sources for aviation that could also be used by other critical infrastructures. Perhaps even in consumer applications as well.

U.S. government representatives were approached for consultation and comment for this paper and expressed their willingness to participate. Unfortunately, they were unable to obtain permission to do so.

London Economics' work on this effort was commissioned by the Resilient Navigation and Timing Foundation.

The paper "Aviation GPS Incidents Show Importance of Backup Systems. Policy Makers Take Note." can be accessed from the foundation's on-line library or directly at https://rntfnd.org/wp-

###

About the Resilient Navigation and Timing Foundation

The RNT Foundation is a public benefit, scientific and educational charity advocating for policies and systems to protect GPS and GNSS satellites, signals, and users. For more information, visit www.rntfnd.org.

Dana Goward
Resilient Navigation and Timing Foundation
+1 571-225-2580
email us here
Visit us on social media:
X
LinkedIn
YouTube

This press release can be viewed online at: https://www.einpresswire.com/article/717180187

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2024 Newsmatics Inc. All Right Reserved.