Rising GPS Interference Poses Flight Safety Hazard, Aviation Bodies Warn

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The European Union Aviation Safety Agency (EASA) and the International Air Transport Association (IATA) are raising alarms over an escalating flight safety issue: GPS interference. This growing concern, stemming from instances of GPS jamming and spoofing, is prompting a collaborative effort to safeguard air travel.

EASA and IATA recently conducted a workshop to address the significant challenge posed by the deliberate disruption of satellite navigation systems. They emphasized the urgent need for short, medium, and long-term strategies to mitigate these risks, including enhanced information sharing among industry stakeholders.

To combat this threat, Europe will leverage the European Occurrence Reporting scheme and EASA's Data4Safety program for efficient incident reporting and solution dissemination. However, recognizing the global scale of GPS interference, the agencies acknowledge the necessity for a wider, internationally coordinated response in the future.

Key to maintaining flight safety, EASA and IATA advocate for the preservation of traditional navigation aids as a fail-safe against GNSS navigation disruptions. Additionally, they seek to guide airlines and aircraft operators with best practices for managing jamming and spoofing incidents, ensuring preparedness across the aviation sector.

Interference with global navigation satellite systems can manifest as jamming, which overwhelms GPS signals with stronger radio transmissions, or spoofing, where false signals mislead GPS receivers. These disruptions have increasingly compromised location services, particularly in Eastern Europe and the Middle East, with suspicions often directed at Russia.

Reports of GPS signal jamming have surfaced in regions from the Black Sea to the Baltic, implicating Russian efforts to undermine Ukrainian military capabilities. Furthermore, GPS spoofing incidents have been reported in the Middle East, hinting at complex challenges to aviation safety beyond traditional conflict zones.

EASA's acting executive director, Luc Tytgat, stresses the immediate need for robust measures to ensure air crew awareness and response capabilities to GPS interference. Future plans include revising certification requirements for navigation and landing systems and influencing the design of next-generation satellite navigation systems to counteract these threats.

IATA underscores the importance of collective action, including the sharing of safety data and the commitment

to maintain conventional navigation systems as backups. Highlighting the airline industry's frontline role in addressing this risk, IATA's Willie Walsh calls for focused efforts to protect flight operations.

Amid these challenges, advancements in RF technology and spectrum monitoring offer potential solutions for detecting jammers and distinguishing authentic GPS signals, ensuring the continuity of location and timing services during interference incidents.

Sources: AirGuide Business airguide.info, bing.com, theregister.com

