IATA Briefing

"GNSS RFI" – a growing problem for aviation

IATA GNSS Radio Frequency Interference Safety Risk Assessment (Sept. 2023)

Protocols for assessing, reporting, and addressing RFI risk

EASA Safety Information Bulletin No. 2022-02R2 (Nov. 2023)

Eurocontrol briefing on use of ADS-B for GNSS monitoring

GPSJAM.org

ITU World Radiocommunication Conference – Dubai (20 Nov.- 15 Dec. 2023)

Resolution urging states to encourage:

- collaboration between national spectrum regulators and RNSS stakeholders
- cooperation between aeronautical, maritime, and national security authorities to address
 interference risks to RNSS stemming from the activities of national security authorities.

DRAFT NEW RESOLUTION [EUR-A25-RNSS-INTERFERENCE-PREVENTION] (WRC-23)

Prevention and mitigation of harmful interference to the radionavigationsatellite service in the frequency bands [1 164-1 215 MHz,] 1 559-1 610 MHz [and 1 215-1 300 MHz]

The World Radiocommunication Conference (Dubai, 2023),

considering

a) that the radionavigation-satellite service (RNSS) in the frequency <u>band[s 1 164-1 215 MHz and] 1 559-1 610 MHz is used in several aeronautical communication, navigation and surveillance safety of life systems[, and, as described in Report ITU-R M.2458, in many other applications around the world and across all sectors of the global economy];
</u>

b) that the frequency <u>band(s 1 164-1 215 MHz]</u> and 1 559-1 610 MHz [is/are] allocated to aeronautical radionavigation service (ARNS) and[/or] <u>radionavigation-satellite service (RNSS)</u> (space-to-Earth and space-to-space) on a primary basis;

c) that harmful interference to RNSS has potential consequences to safety systems used by aeronautical and maritime applications, and to the regularity and efficiency of civil aviation operations;

 d) that the International Civil Aviation Organization (ICAO) has taken an action to reinforce resilience to interference of aeronautical positioning, navigation and timing (PNT) avatems;

 e) that ICAO has established a strategy to retain essential conventional PNT infrastructure for contingency support in case of RNSS outages, and developing mitigation techniques for loss of services (see ICAO Annex 10, Vol. I, Att. H); however, such infrastructure and mitigation techniques may not be available in some areas (for example, over the high seas),

f) that harmful interference to RNSS [can seriously degrade the service across application and user environments in ways that are] may be difficult to detect and trace to origin,

recognizing

 a) that disruption to RNSS has been identified globally by the aeronautical community and the International Maritime Organization (IMO), and on national or cross-border bases from services operating on a secondary basis to RNSS as well as from unauthorized and illegal transmitters];

b) that there are different types of activities, notably the use of illegal transmitters, which may cause the <u>disruption;</u>

c) that ICAO decided at its 40th Assembly in October 2019 to take measures to prevent and avoid interference to <u>RNSS</u>;

 d) that the Radiocommunication Bureau (BR) issued a Circular Letter CR/488 for the decisions of the Radio Regulations Board (RRB) on the issue and formulates recommendations to Member States concerning mitigation of harmful interference to the <u>RNSS</u>;