An InFO contains valuable information for operators that should help them meet certain administrative, regulatory, or operational requirements with relatively low urgency or impact on safety.

Subject: Traffic Alert and Collision Avoidance System II (TCAS II) Spurious Resolution Advisories (RA)

Purpose: This InFO advises operators of TCAS II version 7.1 with Hybrid Surveillance of recent cases of spurious RAs in European airspace.

Background: A number of spurious RAs have been reported by Air Navigation Service Providers (ANSP) in European airspace. All instances have been with Airbus A318, A319, A320, A321 aircraft equipped with Honeywell TPA-100B TCAS II version 7.1 RTCA/DO300 Compliant Hybrid Surveillance units. The data obtained suggests that the spurious RA is generated only when the other aircraft is crossing between 5 to 7 nautical miles from behind. In all reported cases, there has been no reduction of horizontal separation or possible risk of collision between the two aircraft at the time of the spurious RA.

Note: Hybrid surveillance uses both active interrogations and passive surveillance with Mode S Extended Squitter (ADS-B). Passive surveillance is used by TCAS II to track aircraft which do not pose a near term collision threat. This leads to a reduction of the rate at which TCAS II equipment interrogates aircraft, which aids in mitigating frequency congestion on 1030/1090 MHz.

Discussion: Operators of TCAS II version 7.1 Compliant Hybrid Surveillance units regardless of equipment manufacturer or aircraft type may be impacted by spurious RAs. TCAS II equipment suppliers, Airbus, and European Aviation Safety Agency (EASA) are closely monitoring this issue. To date, there have been no reported cases in U.S. airspace.

Recommended Action: Flightcrews are reminded to follow existing approved procedures when any RA occurs to ensure safe operation of the aircraft. All incidents are to be reported via the guidelines stated in Advisory Circular (AC) 120-55C, Change 1, “Air Carrier Operational Approval and Use of TCAS II”, dated 3/18/13.

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