Safety Information Bulletin

Operations – ATM/ANS – Aerodromes

SIB No.: 2015-20

Issued: 07 October 2015

Subject: Possible Disruption of Instrument Landing System Signal

Ref. Publications:

- Commission Regulation (EU) No 139/2014 on the requirements and administrative procedures related to aerodromes of 12 February 2014.
- EASA ED Decision 2015/001/R amending Certification Specifications and Guidance Material for Aerodrome Design, Annex CS ADR-DSN, Issue 2.
- ICAO Annex 10, Aeronautical Telecommunications, Volume I, Radio Navigation Aids.
- ICAO Annex 14, Aerodromes, Volume I, Aerodrome Design and Operations.

Applicability:

National Aviation Authorities (NAAs), aerodrome operators and Air Navigation Services (ANS) providers.

Description:

The intent of this SIB is to raise awareness at NAAs, aerodrome operators and ANS providers on possible safety concerns at locations where runway-holding positions are established within Instrument Landing System (ILS) critical areas, in order to minimise the risk of aircraft operations.

The Agency has reviewed an investigation report of an occurrence where the Glide Path (GP) signal of an ILS was disrupted, while an aeroplane was conducting an ILS CAT I approach. This disruption triggered the flight crew of the approaching aeroplane to initiate a missed approach. The GP signal was disrupted by another aeroplane, which was instructed by Air Traffic Control to stop at the CAT I runway-holding position. This runway-holding position is located within the critical area of the GP.

Although the existing air traffic service's procedures applicable for ILS approaches at the particular aerodrome require that the GP critical area must be kept clear during approach, an ILS approach clearance was given to the pilot, while another aeroplane, at the same time, was situated at the runway-holding position.

It appears likely that similar situations, where a runway-holding position is located within the critical areas of the ILS signals, may also exist at other aerodromes.

The purpose of the critical areas that have to be established for ILS signals is to keep these signals protected, because any presence of an aircraft or vehicle within these areas is likely to create a disruption of the signals and therefore an unacceptable risk for aircraft operations. A runway-holding positions have to be established on a taxiway, such that a taxiing aircraft or vehicle cannot infringe an obstacle limitation surface or interfere with the operation of radio navigation aids.

The EASA Certification Specifications and Guidance Material (CS-ADR-DSN), Issue 2, and ICAO Annex 10, Aeronautical Telecommunications, Volume I, Radio Navigation Aids, define the need for protection of the ILS critical areas to ensure that there are no interferences of the ILS signals.

At this time, the safety concern described in this SIB does not warrant the issuance of a safety measure under Regulation (EU) 965/2012, Annex II, ARO.GEN.135(c), and does not warrant Safety Directive (SD) action under Article 13 of Regulation (EU) 1034/2011, nor under Regulation (EU) 139/2014, Annex II, ADR.AR.A.040.

Recommendations:
The Agency recommends that:

(a) Aerodrome operators review the locations of established runway-holding positions, particularly at locations where runway-holding positions are established within critical areas of ILS signals, and ensure that they comply with the applicable provisions, and that relevant procedures for the protection of the ILS signals are contained in the aerodrome manual;

(b) ANS providers review their procedures for ILS approaches in order to ensure that they contain the unconditional requirement that ILS critical areas are kept clear during ILS approaches to avoid permanent infringements of these areas;

(c) NAAs take into account, during their safety oversight activities, the recommendations in (a) and (b) above.

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