



Safety recommendation no. 574

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Safety deficit	<p>On 13 October 2019, a British Airways commercial aircraft and a four-seater motorised aircraft came dangerously close to each other west of Zurich Airport in the Terminal Control Area of Zurich Airport because the single-engine aircraft had entered the Terminal Control Area without clearance.</p> <p>Airspace infringements of this kind occur several hundred times a year. This high number and the possible consequences of a mid-air collision is considered a significant risk.</p> <p>Contributing to this safety deficit usually are situations in which the trajectories of large commercial aircraft and general aviation aircraft operated under visual flight rules converge dangerously because the latter enter airspaces primarily used by traffic under instrument flight rules without the approval of air traffic control.</p> <p>Thus, an increase in close encounters (Airprox) in Swiss airspace can also be observed in the period from 2008 to 2019.</p> <p>In numerous investigations, the STSB has already identified this safety deficit and issued the following safety recommendations (SR) to the FOCA:</p> <p>SR No. 466 (16.05.2013): Definition of transponder mandatory zones - partially implemented</p> <p>SR No. 467 (16.05.2013): Measures to ensure that controlled airspace boundaries are respected - not implemented</p> <p>SR No. 468 (16.05.2013): Systematic detection of airspace infringements (even without transponder) and reduction of the associated risks - not implemented</p> <p>SR No. 484 (19.08.2014): Review and simplification of the airspace structure surrounding Zurich airport - not implemented</p> <p>SR No. 518 (20.03.2017): Carriage of an operational and switched-on transponder for all aircraft - not implemented</p> <p>SR No. 519 (20.03.2017): Redesign of the airspaces with sufficient dimensions surrounding Swiss airports - not implemented</p> <p>SR No. 520 (20.03.2017): Measures to warn air traffic controllers of unauthorised entries into controlled airspace - implemented</p> <p>The FOCA intends to remedy this safety deficit within the framework of the major project "Airspace and Aviation Infrastructure Strategy Switzerland" (AVISTRAT CH). However, its full implementation is not expected before 2035.</p>
Safety recommendation	<p>Prior to the full implementation of the AVISTRAT-CH project and in a timely manner, the Federal Office of Civil Aviation (FOCA) should take appropriate measures, including measures in the area of the safety recommendations No. 466, 467, 468, 484, 518 and 519 already issued, to ensure that the risk of a close encounter as a result of an airspace infringement is reduced.</p>

Addressees

Stage of the implementation

Not implemented – FOCA comments in a letter dated 11 October 2022 as follows:

"The FOCA is continuously concerned and strives to reduce the probability of a dangerous approach in air traffic. However, a complete elimination of the associated residual risk is not achievable. In order to classify the residual risk as objectively as possible, a quantitative calculation of the collision probability for the airspace affected by the incident was already carried out as part of the implementation of Safety Recommendation SE 484. The calculations are based on movement data from large aircraft traffic and incident data from general aviation.

From the point of view of the FOCA, the present safety recommendation SE 574 does not contain any new concrete proposal or any preventive measures (in accordance with Article 17(1) of Regulation (EU) No 996/2010 of the European Parliament and of the Council of 20 October 2010) which, in the opinion of the STSB, must be taken immediately to improve aviation safety. For this reason, it is not possible for the FOCA to implement the present safety recommendation.

However, the FOCA will continue to strive for the implementation of the safety recommendations already issued. A "nesting" of the safety recommendations (incorporating already issued safety recommendations into a new safety recommendation) is not expedient from the FOCA's point of view. Although this approach may suggest a subjective urgency, it does not, in the view of the FOCA, support the implementation of the safety recommendations already issued."

Investigation report concerning the safety recommendation

Vorbericht
Schlussbericht
Final report
