



Safety recommendation no. 539

Date of the publication	30.05.2023
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Safety deficit	<p>During a public flight demonstration, two ultralight aircraft of a triple formation collided north-east of Dittingen airfield (LSPD).</p> <p>The safety of third parties is listed in the purpose article of the Federal Office of Civil Aviation's (FOCA) Guideline on Flight Event Requirements (Richtlinie Flugveranstaltungsauflagen – FVA). In the version of the directive valid at the time of the accident, there were no references to a risk assessment to be carried out or indications of measures to be taken to ensure the safety of third parties outside the demonstration area.</p>
Safety recommendation	<p>The Federal Office of Civil Aviation (FOCA) should ensure the assessment of hazards and the evaluation of risks to third parties during public air shows, as well as require the organiser to take precautionary measures to ensure safety.</p>
Addressees	BAZL Bundesamt für Zivilluftfahrt
Stage of the implementation	<p>Implemented – In a letter dated September 4, 2023, the FOCA informs that, following the accident in Dittingen, it has introduced the development of a risk assessment for all organizers of air shows in Switzerland and provides a template for this purpose. Organizers must systematically identify the hazards of their event, assess the risk, and implement and document risk mitigation measures (mitigations). At least one hazard assessment must include the topic of "third-party risks such as populated areas, roads and railroads". This statement, which has already been correctly reproduced in chapter 4.3 "Measures taken since the accident" in the Final Report No. 2331 on the collision of the two aircraft D-MSON and D-MUHH, is still valid in our view.</p> <p>The purpose of the existing and regularly adapted flight event regulations is to ensure the safe and orderly conduct of public flight events and to ensure the safety of spectators and third parties (Directive Flight Event Regulations FVA of 1.7.2020). The spectator areas at air shows are protected, among other things, by defined minimum distances (runway to spectators and demonstration axis to spectators). These distances (minimum requirements stipulated in the FOCA guideline) are harmonized throughout Europe and internationally and have been regularly reviewed in recent years. Excerpt from a FOCA template on Risk Assessment: "At any public event there are hazards that may cause harm to people. It is necessary to identify these hazards and the related risks that may arise from them and minimize them if necessary. At least one risk concerning third parties not involved in the display itself to be mentioned (populated areas, highways, roads, railways)."</p> <p>The documents are reviewed by the FOCA in cooperation with the affected municipalities and cantons, the Air Force and, if necessary,</p>

the Federal Office for the Environment (FOEN) according to standardized criteria. In the event of a positive overall assessment, the FOCA issues the permit and sets the conditions and requirements necessary for safety and environmental reasons (Art. 89 LFV). Compliance with these conditions is regularly monitored and enforced by the FOCA directly on site. The FOCA will continue to implement the recognized international standards and lessons learned from incidents and accidents so that the high level of safety at air shows in Switzerland is continuously maintained and the measures and regulations remain robust enough, even with increasing complexity, so that spectators and third parties are exposed to as few risks as possible.

**Investigation report concerning
the safety recommendation**

Schlussbericht
Vorbericht
