



Safety recommendation no. 468

Date of the publication	16.05.2013
Number of the final report	2208
Safety deficit	<p>On 11 August 2012 a near-collision occurred in the Zurich terminal area between an Airbus A340-313 commercial aircraft and an ASW 20 glider because on the one hand the glider had flown into controlled airspace without clearance and on the other hand air traffic control had allowed the commercial aircraft to descend too low. The investigation revealed that airspace violations involving aircraft equipped with a transponder had occurred regularly and in relatively large numbers in recent years. Furthermore, there was also evidence of airspace violations by gliders; the systematic detection of these had not been attempted to date.</p>
Safety recommendation	<p>The Federal Office of Civil Aviation should, together with the air navigation service provider Skyguide, the relevant aviation associations and, where appropriate, in cooperation with the supervisory authorities of neighbouring countries, develop measures to ensure that airspace violations involving also aircraft that are not equipped with transponders are systematically detected and that the associated risks can be reduced.</p>
Addressees	BAZL Bundesamt für Zivilluftfahrt; BAZL Bundesamt für Zivilluftfahrt; BAZL Bundesamt für Zivilluftfahrt
Stage of the implementation	<p>Not implemented – On 16 June 2022 the FOCA announced the following: In 2016, the General Secretariat of the Federal Department of the Environment, Transport, Energy and Communications decided to take a holistic approach to the challenges posed by the development of airspace and aviation infrastructure. It thus set up the AVISTRAT-CH programme. The Department set itself a stakeholder-centred, 'clean-sheet' approach. Three years after the start of the programme, the AVISTRAT-CH vision was adopted. This is based on the user needs of industry and authorities. A strategy was drawn up from this vision, and was published on the FOCA website in June 2022. The strategy leads towards achievement of the vision, setting out the development steps that need to be taken by the authorities and the industry.</p> <p>The content of Safety Recommendation No 468 was discussed several times by expert groups during the strategy development phase. It is clear to all parties that safety gains can be achieved by fully equipping airspace users with transponders. In addition, as mentioned in the safety recommendation, in the case of airspace infringement by an aircraft not carrying a transponder it is difficult to draw conclusions from the incident as the radar images are often not very meaningful or primary radar sources have to be relied on. The AVISTRAT-CH strategy addresses Safety Recommendation No 468 as follows:</p> <ul style="list-style-type: none">• Strategic Priority 2-1 aims to gradually replace 'see, avoid airspace' (today e.g. E and G) with 'see, sense and avoid airspace'. This

means that there will only be a few (and peripherally located) airspaces in Switzerland in which it will be possible to fly completely 'invisibly' (e.g. hang-gliders in the mountains). In all other airspaces in Switzerland, especially in places with a lot of traffic, this will no longer be possible. This will result in higher (technological) visibility in Swiss airspace and thus less likelihood of collisions occurring.

- Under Strategic Priority 2-3, airspace utilisation data will be made available on end devices, i.e. airspace users will be informed in real time whether airspace is active or not. This will inevitably lead to better situational awareness and fewer airspace violations.
- Strategic Priority 2-4 addresses the importance of equipping airspace users appropriately. The industry and the authorities jointly envisage upgrading inadequately equipped aircraft with a view to improving (technological) visibility in airspace. This is also vital in view of the growing use of airspace by unmanned aviation (drones -> U-Space). During the implementation phase (from 2023) it will become clear whether the federal government will require aircraft to be equipped with a transponder or some other device. The FOCA will continue to work closely with the industry on this issue.

**Investigation report concerning
the safety recommendation**

Schlussbericht
Final report
