



## Safety recommendation no. 436

<b>Date of the publication</b>	17.06.2011
<b>Number of the final report</b>	2104
<b>Safety deficit</b>	<p>On 7 August 2010, the paraglider pilot took off at 11:14 off from Fiescheralp at 2150 m/M. The glider pilot of HB-3162 took off in aerotow at 11:59 on runway 05 of Münster airfield. He flew mainly in slope soaring without gaining altitude in the area near the Galmihorn hut.</p> <p>Due to the thermal conditions, there were only flights in the immediate vicinity of Münster airfield for most glider pilots. The volume of traffic was considerable, requiring a heightened level of attention from both the glider pilot and the paraglider pilot. The paraglider and the glider circled, or flew figure eights, together for four minutes at the Galmihorn hut. The paraglider pilot gained altitude while circling, while the glider pilot continued his figure eights at practically the same altitude. Three minutes later, the paraglider pilot ended his circling flight, after gaining 135 meters in altitude, and went on flying straight ahead in a north-easterly direction a little higher than the glider. The glider then overtook the paraglider on the left who was flying in a straight line. The glider, which had the slope to its left and whose track was about 20° less than that of the paraglider, was flying about three times faster. During the glider's subsequent right turn, turning away from the slope towards the glider, the two aircraft collided.</p> <p>The glider pilot did not survive the impact of the glider on the ground. The paraglider pilot did not suffer any fatal injuries as a result of the landing. Death subsequently occurred due to positional asphyxia.</p> <p>GPS devices with an integrated "Flarm" collision warning system have recently become available for hang glider pilots. Had such an equipped device been carried by the paraglider pilot, it would very likely have warned the glider pilot of the impending collision, thereby causing him to take evasive action, which would very likely have prevented the accident. The conflicting nature in the operation of gliders and hang gliders in the same airspace identified from this accident and other incidents should be rectified with the aim of improving safety.</p>
<b>Safety recommendation</b>	The Federal Office of Civil Aviation, together with the Swiss Hang Gliding and Paragliding Association, should promote the use of collision warning devices among hang glider pilots.
<b>Addressees</b>	BAZL Bundesamt für Zivilluftfahrt
<b>Stage of the implementation</b>	Implemented – The FOCA agrees with the wording of the safety recommendation and notes in its letter of 28 August 2023 that a safety workshop in January 2011 demonstrated a strong need to improve information sharing. The findings were submitted to the CASO at the time in a statement dated 10 February 2012. The information, for example on the use of FLARM in hang gliders, was

(i) passed on to group members by the safety officers in the annual training courses for gliding groups and (ii) published in the SHA magazine 'Swiss Glider' (August 2011 issue).

In order to encourage the use of collision warning devices by hang-glider pilots, a flat-rate subsidy of CHF 72 has been made available via the Special Financing for Air Transport (SFLV) programme since November 2018 for the purchase or retrofitting of gliders with Flying Ad Hoc Network (FANET) and FLARM devices. All pilots with a Swiss Hang Gliding Association licence who are resident in Switzerland are eligible for the subsidy. In addition, all manufacturers offering FLARM in their equipment have been informed about the subsidy and told about the relevant procedure. According to estimates from the company Skytraxx GmbH, which focuses on the development, production and marketing of electronic navigation instruments for use in paragliding and hang gliding, about half of the eligible pilots have claimed the subsidy. This corresponds to around 3,000 devices sold since November 2018.

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**Investigation report concerning  
the safety recommendation**

Schlussbericht

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