



## Safety recommendation no. 11

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<b>Safety deficit</b>	<p>On 27 April 2015, approximately 300 m north of the Zweisimmen Airfield (LSTZ), the Comco Ikarus C 42, registered as HB-WAS, collided with the terrain due to a loss of engine power experienced during a simulated engine failure involving a 180° turn at too low a height.</p> <p>The accident happened during an annual proficiency check that was compulsory within the flying club. On board of the aircraft were a pilot and a flight instructor, who sustained serious and minor injuries respectively. The aircraft was destroyed.</p> <p>As part of the investigation, it was ascertained that the manufacturer had published the following recommendation in the emergency procedures section of the aircraft flight manual (AFM) of HB-WAS regarding the topic of 180° turns following an engine failure during a take-off:</p> <p>"3.2.1.2. Engine failure during take-off Depending on the speed and flying altitude (should be height!), immediately move the control stick forward, maintain the glide speed (90-100 km/h) and flare the aircraft normally. For 180° turns, a minimum height of approximately 80 m is required after establishing the gliding flight position. Below this height, land in a straight-ahead direction or straight-ahead with minor directional changes."</p>
<b>Safety recommendation</b>	<p>Topic: Emergency procedures with regards to the Comco Ikarus C 42; engine failure after take-off Target group: General aviation pilots and flight instructors, manufacturers, flight schools and the Federal Office of Civil Aviation (FOCA)</p> <p>The recommendation from the manufacturer stands in salient opposition to the generally known recommendations in current teaching materials provided by well-known aviation organisations in Switzerland. Furthermore, the manufacturer does not provide information regarding the conditions under which such a 180° turn could be flown. In this accident, the 180° turn was initiated at a height considerably higher than the stated minimum, but still did not allow the crew to find a suitable spot for an emergency landing. This shows that, in order to determine a decision height, an analysis of factors relevant to the situation such as runway, obstacles, topography, wind, aircraft mass, etc. has to take place before the take-off.</p> <p>In particular, the operators of this type of aircraft should raise awareness among their pilots regarding this and make the consequential potential risks a subject of discussion.</p>
<b>Addressees</b>	BAZL Bundesamt für Zivilluftfahrt

**Investigation report concerning  
the safety recommendation**

