



Safety recommendation no. 586

Date of the publication	28.03.2023
Number of the final report	2394
Safety deficit	<p>On an SF 25C Falke motor glider the right control stick broke directly above the weld seam at the transmission joint so that it could no longer be used to control the aileron and elevator. The design was such that the aileron, but not the elevator, could still be controlled with the left stick.</p> <p>The motor glider had been manufactured in 1977. The investigation revealed that the broken steel rod was heavily corroded on the inside and therefore weakened.</p> <p>Other glider models of comparable design and manufactured during the same time period also experienced structural failure due to material fatigue or other signs of ageing.</p> <p>In older aircraft of similar design, the maintenance manuals usually do not contain any maintenance specifications in relation to material fatigue and ageing for older aircraft with high operating times. Such specifications are however necessary to ensure the airworthiness of ageing aircraft. It is particularly important to check basic components of an aircraft for signs of ageing, such as the flight controls or structural elements.</p> <p>A standardised process for establishing a special inspection programme for older general aviation aircraft at the level of the supranational supervisory authority does not yet exist.</p>
Safety recommendation	The European Union Aviation Safety Agency (EASA) should establish maintenance specifications in relation to material fatigue and ageing for older aircraft with high operating times and of a similar design type to the Scheibe SF 25.
Addressees	EASA Europäische Agentur für Flugsicherheit
Stage of the implementation	<p>Partially implemented or specific implementation is planned.</p> <p>On 1 June 2023, EASA informed the STSB of the measures taken with regard to Safety Recommendation No 586: The EASA intends to issue a new Safety Information Bulletin (SIB) that will address material wear and maintenance issues associated with ageing wood-framed gliders, and which will also include recommendations on metal parts and their corrosion behaviour. The publication of this SIB is planned for Q4 2023.</p>
Investigation report concerning the safety recommendation	<p><u>Vorbericht</u> <u>Zwischenbericht</u> <u>Intermediate report</u></p>

Schlussbericht