

Safety recommendation no. 581

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Safety deficit	On an SF 25C 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. The crew, who were unaware that the control stick was broken, therefore lost control of the motor glider during the take-off run. The aircraft hit the ground hard, collided with a tree and came to a halt severely damaged. The investigation revealed that the broken steel rod was heavily corroded on the inside and therefore weakened. According to the manufacturer's drawings, the material used was St 35 machine steel (now E235), which has low corrosion resistance. There were no manufacturer's instructions recommending that periodic checks should be carried out for crack or corrosion formation or to ascertain the integrity of the anti-corrosion coating of these control components.
Safety recommendation	The European Union Aviation Safety Agency (EASA), in cooperation with the aircraft manufacturer Scheibe Aircraft GmbH, should take measures to ensure that SF 25 motor gliders are only operated if there are no such signs of corrosion on their control components and control rods.
Addressees	EASA Europäische Agentur für Flugsicherheit
Stage of the implementation	Implemented. On 11 March 2022, the European Union Aviation Safety Agency (EASA) issued Emergency Airworthiness Directive (EAD) 2022-0043-E (superseded by EAD 2022-0066-E of 11 April 2022) requiring repeat inspection of flight controls on aircraft type SF 25 for corrosion and replacement of affected parts.
Investigation report concerning the safety recommendation	Vorbericht Zwischenbericht Intermediate report Schlussbericht

Tel.: +41 58 466 33 00, Fax.: +41 58 463 33 01 info@sust.admin.ch

www.sust.admin.ch