



Airworthiness Directive

AD No.: 2017-0225

Issued: 17 November 2017

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

SCHROTH SAFETY PRODUCTS GmbH

Type/Model designation(s):

Seat Restraint Systems

Effective Date: 01 December 2017

ETSO Authorisation(s): 40.073/10 and 40.073/11

Foreign AD: Not applicable

Supersedure: None

ATA 25 – Equipment / Furnishings – Seat Restraint Systems – AFM Amendment / Modification

Manufacturer(s):

Schroth Safety Products GmbH, Schroth Safety Products LLC (formerly known as Takata Protection Systems Inc., BAE Safety Systems Products Inc. and Schroth Safety Products Corp.)

Applicability:

Schroth Safety Products (hereafter referred to as "Schroth" in this AD) seat restraint systems Part Number (P/N) 4-01-(), P/N 4-02-(), P/N 4-03-(), P/N 4-04-(), P/N 1-09-043201BCR, P/N 1-09-483D01 and P/N 510100-01 REVA, all dash numbers, all serial numbers, if equipped with a buckle type as listed in Appendix 1 of this AD.

These seat restraint systems are known to be installed on, but not limited to, GROB Aircraft AG G 115 and G 120 series aeroplanes; GROB Aircraft AG G 109B, DG-Flugzeugbau DG-300, DG-500 and DG-1000 series, Schleicher ASK21, Zakłady Lotnicze Marganski MDM-1 Fox and Swift S-1, Pilatus Aircraft Ltd. B4-PC11 and E.I.S. AIRCRAFT GmbH (formerly Fournier) RF-5 sailplanes and powered sailplanes.



Reason:

Occurrences were reported of individual latches of the restraint system unfastened from the buckle without prior activation of the release mechanism. Investigation determined that, for certain buckles, certain load patterns that occur during aerobatic flying may result in high abrasive wear of the buckle retaining pins and/or the latches, eventually leading to unintended release of the latch(es).

This condition, if not corrected, could lead to failure of the restraint system, possibly resulting in injury to the occupant or reduced control of the aircraft.

To address this potential unsafe condition, Schroth revised manufacturing and refurbishing procedures, allowing installation of non-affected buckles only, and issued Service Bulletin (SB) 40.073-25-01 to provide additional limitations for restraint systems equipped with affected buckles. It was determined that Schroth seat restraint systems, having a date of manufacture or a date of modification of 07/17 (week/year) or later, were (during manufacture/modification) not equipped with an affected buckle type as listed in Appendix 1 of this AD.

For the reason described above, this AD prohibits aerobatic flights for aircraft equipped with affected buckles.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Note 1: For the purpose of this AD, an affected buckle is a buckle type as listed in Appendix 1 of this AD. An affected part is an affected buckle, or a seat restraint system equipped with an affected buckle, or a seat equipped with an affected buckle.

Note 2: For the purpose of this AD, an affected aircraft is an aircraft that is equipped with an affected part (see Note 1 of this AD), and which, according to the applicable Aircraft Flight Manual (AFM), is certificated in the aerobatic category.

AFM Amendment:

- (1) For affected aircraft (see Note 2 of this AD): Within 30 days after the effective date of this AD, install a placard as specified in Table 1 of this AD in full view of the pilot(s), amend the applicable AFM, inform all flight crews and, thereafter, operate the aircraft accordingly.

Amending the AFM can be accomplished by inserting a copy of this AD into the AFM, or an approved AFM (temporary) revision issued by the aircraft type certificate holder.

Table 1 – Temporary Placard

NO AEROBATICS ALLOWED

Replacement:

- (2) After replacing each affected part (see Note 1 of this AD) on an aircraft with a non-affected part, in accordance with applicable aircraft maintenance instructions, the placard and AFM amendment, as required by paragraph (1) of this AD, can be removed from that aircraft.



Part Installation:

(3) Do not install an affected part on any aircraft that, according to the applicable AFM, is certificated in the aerobatic category, as required by paragraph (3.1) or (3.2) of this AD, as applicable.

(3.1) For an affected aircraft (see Note 2 of this AD): After removing each affected part from that aircraft as specified in paragraph (2) of this AD.

(3.2) For a non-affected aircraft: From the effective date of this AD.

Ref. Publications:

Schroth SB 40.073-25-01 original issue dated 07 July 2017.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. This AD was posted on 04 August 2017 as PAD 17-108 for consultation until 01 September 2017. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact: Schroth Safety Products GmbH, Customer Support, Im Ohl 14, 59757 Arnsberg, Germany, Telephone: +49 (0)2932-9742 134; Fax: +49 (0)2932-9742 42
E-mail: aerospace@schroth.com.



Appendix 1

Table 2 – Affected Buckle Types

SL 10.0	SL 10.56	SL 11.5	SL 12.5Y	SL 15.6A
SL 10.05	SL 10.5A	SL 11.5Y	SL 12.9	SL 15.75
SL 10.06	SL 10.5Y	SL 12.0	SL 12.9J	SL 15.7A
SL 10.0A	SL 10.5Z	SL 12.0A	SL 14.0	SL 40.0
SL 10.0AV	SL 10.8	SL 12.0U	SL 14.0A	SL 40.0V
SL 10.0V	SL 10.8B	SL 12.0UK	SL 14.0Y	SL 40.3V
SL 10.0Y	SL 10.8Y	SL 12.0Y	SL 14.3	SL 40.3X
SL 10.0Z	SL 10.9	SL 12.3	SL 14.5	SL 40.5
SL 10.3	SL 11.0	SL 12.3A	SL 14.5A	SL 40.5X
SL 10.3A	SL 11.05	SL 12.3Y	SL 14.5Y	
SL 10.3Y	SL 11.0A	SL 12.5	SL 15.3A	
SL 10.5	SL 11.0Y	SL 12.5A	SL 15.6	
SL 10.55	SL 11.3	SL 12.5U	SL 15.67	

Figure 1 – Buckle Type identification



Buckle Type in this example is SL 10.8