

Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 20-119R1

Issued: 25 September 2020

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

SCHEMPP-HIRTH FLUGZEUGBAU GmbH

Type/Model designation(s):

Duo Discus (powered) sailplanes

Effective Date: [TBD - standard: 14 days after AD issue date]

TCDS Number(s): EASA.A.025, EASA.A.074

Foreign AD: Not applicable

Supersedure: None

ATA 27 – Flight Controls – Airbrake End Stops / Bushings – Inspection / Replacement

Manufacturer(s):

Schempp-Hirth Flugzeugbau GmbH (Schempp-Hirth)

Applicability:

Duo Discus sailplanes, serial number (s/n) 1 to 541 inclusive, except s/n 534;

Duo Discus C sailplanes, all s/n; and

Duo Discus T powered sailplanes, s/n 1 to 174.

Definitions:

For the purpose of this AD, the following definitions apply:

Affected part: Air brake end stop plastic bushings (22 mm), and single (metal) end stops.

Serviceable part: Air brake end stop plastic bushing (32 mm) made of better material.

The applicable TN: Schempp-Hirth Technical Note (TN) 396-20 and TN 890-16, as applicable, both at Revision 1.

Reason:

Occurrences were reported of experiencing jerky extension of the airbrakes at very high air speeds, in some cases of which the airbrake blades interlocked. An increasing number of age-related damage was observed on a specific version (22 mm plastic bushes) of the airbrake end-stops.

This condition, if not corrected, could lead to blockage of the airbrakes, possibly resulting in reduced control of the (powered) sailplane.

To address this potential unsafe condition, Schempp-Hirth issued the applicable TN (original issue) to provide instructions to replace the affected parts with a new version bushing, made of better material.

Since PAD 20-119 was issued, it was discovered that early s/n sailplanes were equipped with a single metal end stop per airbrake. The applicable TN was revised accordingly. This PAD is revised to include those metal end stops in the definition of 'affected part' to ensure these are inspected.

For the reasons described above, this PAD proposes to require replacement of certain affected parts with serviceable parts. For other affected parts, this PAD proposes to require a one-time inspection for sufficient overlap and, depending on findings, accomplishment of applicable corrective action(s). This PAD also proposes to prohibit (re)installation of affected parts.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) For sailplanes with air brake end stop plastic bushings (22 mm) installed, within 3 months after the effective date of this AD, replace each affected part with a serviceable part, as defined in this AD, in accordance with the instructions of the applicable TN.

Inspection:

- (2) For sailplanes with single air brake metal end stops installed, within 3 months after the effective date of this AD, inspect each affected part in accordance with the instructions of the applicable TN.

Corrective Action(s):

- (3) If, during the inspection as required by paragraph (2) of this AD, insufficient overlap is found, before next flight, contact Schempp-Hirth for approved corrective action instructions and accomplish those instructions accordingly.

Credit:

- (4) Modification of a (powered) sailplane, accomplished before the effective date of this AD in accordance with the instructions of the original issue of Schempp-Hirth TN 396-20 / TN 890-16, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that (powered) sailplane.



Parts Installation:

- (5) After modification of a (powered) sailplane as required by paragraph (1) of this AD, do not install any affected part on that (powered) sailplane.

Ref. Publications:

Schempp-Hirth TN 396-20 / TN 890-16 dated 29 June 2020 (published as a single document).

Schempp-Hirth TN 396-20 Revision 1 dated 18 September 2020, including the associated working instruction (Arbeitsanweisung).

Schempp-Hirth TN 890-16 Revision 1 dated 18 September 2020, including the associated working instruction (Arbeitsanweisung).

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. This Proposed AD will be closed for consultation on 09 October 2020.
2. The original issue of this PAD was posted on 12 August 2020 as PAD 20-119 for consultation until 09 September 2020. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this PAD
3. Enquiries regarding this PAD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this PAD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this PAD, please contact: Schempp-Hirth Flugzeugbau GmbH, Krebenstrasse 25, 73230 Kirchheim / Teck, Germany, Telephone: +49 7021 7298-0, Fax: +49 7021 7298-199, Email: info@schempp-hirth.com.

