Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 24-006

Issued: 19 January 2024

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, Nimbus-4D sailplanes
Duo Discus T, Nimbus-4DT/DM powered sailplanes

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

TCDS Number(s): EASA.A.025, EASA.A.063, EASA.A.074

Foreign AD: Not applicable

Supersedure: None

ATA 52 – Doors – Canopy Locking Mechanism – Modification

Manufacturer(s):

SCHEMPP-HIRTH FLUGZEUGBAU GmbH (Schempp-Hirth)

Applicability:

Nimbus-4D sailplanes, Serial Number (s/n) 1 to 11 (inclusive);
Duo Discus sailplanes, s/n 1 to 422 (inclusive);
Nimbus-4DT powered sailplanes, s/n 1 to 12 (inclusive);
Nimbus-4DM powered sailplanes, s/n 1 to 58 (inclusive); and
DuoDiscus T powered sailplanes, s/n 1 to 96 (inclusive).

Definitions:

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

The TN: Schempp-Hirth Technical Note (TN) 380-1, TN 396-6, TN 868-4 and TN 890-5, as applicable.

Reason:

Occurrences were reported of Duo Discus and Nimbus sailplanes canopy opening during aerotow. The investigation concluded that the fuselage could be temporarily deformed due to forces related to acceleration. That deformation could allow the locking mechanism to move into the open position. In another occurrence, investigation could not conclude if the canopy was correctly locked, or remained unlocked, unnoticed by the crew (the handle in locked position but not connected with the fuselage pins).

These conditions, if not detected and corrected, could lead to the canopy opening in flight, potentially resulting in loss of control of the sailplane.

To address this potential unsafe condition, Schempp-Hirth issued the TN to provide modification instructions.

For the reasons described above, this AD requires modification of the canopy locking mechanism.

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

Required as indicated by this AD, unless the actions required by this AD have been already accomplished:

Modification:

(1) Within 12 months after the effective date of this AD, modify the sailplane in accordance with the instructions of the TN.

Ref. Publications:

Schempp-Hirth TN 380-1 and TN 396-6, published as a single document dated 27 July 2004.

Schempp-Hirth TN 868-4 and TN 890-5, published as a single document dated 23 February 2005.

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 16 February 2024.

2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

3. 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.

4. For any question concerning the technical content of the requirements in this PAD, please contact: Schempp-Hirth Flugzeugbau GmbH, Krebenstr. 25, 73230 Kirchheim/Teck, E-mail: info@schempp-hirth.com.