

Airworthiness DirectiveAD No.:2024-0059Issued:05 March 2024

Note: This Airworthiness Directive (AD) 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.

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

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: 19 March 2024

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 numbers (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 or 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). The fatal accident, which occurred in 2023, has again highlighted that the risks associated with inadequate design still exist, and that there is a need for improvement.

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

In 2004 and 2005 Schempp-Hirth issued the TN (later revised) to provide modification instructions. Those TN have been identified as proper solution in response to the potential unsafe condition described above.

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. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
- This AD was posted on 19 January 2024 as PAD 24-006 for consultation until 16 February 2024. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, 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: <u>ADs@easa.europa.eu</u>.
- 4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the <u>EU aviation safety</u> reporting system. This may include reporting on the same or similar components, other than those covered by the design to which this AD 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 AD, please contact: Schempp-Hirth Flugzeugbau GmbH, Krebenstr. 25, 73230 Kirchheim/Teck, E-mail: <u>info@schempp-hirth.com</u>.

