Subject: Inspection of the propeller bearing play

Applicability: All powered sailplanes ASW 22 M, ASW 22 BE and ASW 22 BLE with Rotax 505A engine and MT-158-R-120-1A or KS-1C-158-R-108 propeller installed; Type-Certificate EASA.A.217; all serial numbers

The ASW 22 BLE 50R is not affected.

Classification: Major Change

Urgency: In case of the fibre reinforced propeller KS-1C-158-R-108: During the next 25 hours inspection

In case of the wooden propeller MT-158-R-120-1A: 12.5 hours after the last 25 hours inspection at the latest

Reason: The central screw joint of the upper belt pulley broke during a self-launch after a few minutes. This caused the loss of the upper belt pulley including the propeller.

Increased play in the propeller bearing is assumed as main reason.

Action:

1. An additional inspection of the propeller mount is added in the maintenance table of the maintenance manual:
   - In case of the fibre reinforced propeller KS-1C-158-R-108: 25 hours inspection
   - In case of the wooden propeller MT-158-R-120-1A: 12.5 hours after the last 25 hours inspection at the latest

2. The play of the propeller bearing has to be measured at the propeller blade tip in the intervals given in point 1. Therefore, the toothed belt has to be removed, as its tension prevents a reliable measurement. If the propeller blade tip is moved in direction of flight, no play must be measurable.

3. Replace the central propeller screw.

   In addition check the ball bearing for its condition (rough movement or excessive play) and in case of any doubt replace it.

4. A socket head screw and a plain washer is used for the mounting of the upper belt pulley on the shaft. The screw is secured with Loctite (screw lock) and has to be tightened with a torque of 100 Nm. Check the bearing play (by moving the propeller blade tip) already during the assembly – it has to be 0 mm.

5. Check the static unbalance of the propeller before assembly and if necessary do a static balancing of the propeller.

6. The manual pages listed below have to be included in the manuals until 31.12.2016 at the latest. If an inspection according to point 1 is necessary before this date, the manual pages have to be included during this inspection.

   Exchange of the following manual pages with the new issue TN 15 dated 07.05.15:
   - Maintenance manual: 7.9 / 7.10 / 7.13

   In addition this TN 15 has to be inserted in the appendix of the maintenance manual (section 12).

7. If an exchange of the toothed belt is necessary due to a different reason or at a different time (means not in scope of a scheduled maintenance task), the actions of point 2 up to and including point 4 have to be performed also.

Material and Drawings:

- Central propeller screw (DIN 912 M12x70 strength class 8.8)
- Plain washer 50 mm diameter, 6 mm thickness, 12 mm hole, material C45
- Screw lock Loctite 270

Mass and Balance: no influence
Notes: For ordering the proper material and for further information please contact directly:
Binder Motorenbau GmbH
Alter Frickenhäuser Weg 15
97645 Ostheim v. d. Rhön
Tel.: +49(0)9777 - 92 00
Fax: +49(0)9777 - 92 01
Mail: binder.motorenbau@t-online.de

S/N 22066 and 22051 have done the change already, only the manual pages have to be exchanged / inserted.

The structural measures must only be accomplished by the manufacturer Alexander Schleicher or by a maintenance organisation according to European Union Commission Regulation (EC) 1321/2014 Part M / Section A / Subpart F. The measures must not be done by pilot/owner, individual maintenance programs must not exclude this measures.

All actions are to be inspected by certifying staff according to European Union Commission Regulation (EC) 1321/2014 Part M / Part 66 in the scope of a modification and have to be certified in the sailplane inspection documents and in the sailplane logbook. The change to the manual is considered being eligible for release by the Pilot-owner pursuant to M.A.801(b)3 and must be entered on the page „Record of Revisions“ and in the „List of effective pages“.

In countries outside the scope of EC 1321/2014 the corresponding national rules shall apply.

Poppenhausen, 07.05.2015

Alexander Schleicher
GmbH & Co.
i.A.
(M. Heide)

This Technical Note bases on a change, which was approved by EASA under the major change approval EASA 10066302.