Light Sport Aviation Limited



Office: 01494 524020

<u>lsa@live.co.uk</u> <u>www.lightsportaviation.org.uk</u>

SERVICE BULLETIN SB/EUR/016 ISSUE 1 Amateur Kit and Factory Built Aircraft Engagement of wing flap actuator pin into the flap guide

Date: 07 May2015

Classification: Essential

Background:

An accident, which was caused when one flap retracted during the landing approach, led to an uncontrollable roll resulting in considerable damage to the aircraft. After examination it was found that that the flap actuator pin was not properly located in the guide in the flap root rib and became disengaged when the flaps were extended.

Nature of Defect:

Possible insufficient engagement of the wing flap actuator pins into the guides in the flap root ribs.

Airworthiness Implications:

Insufficient engagement of the wing flap actuator pins into the guides in the flap root ribs may cause wear of the guides. In extreme cases the pin or guide may fail causing a loss of flap controllability.

Aircraft Affected:

All Amateur kit and factory built aircraft manufactured prior to the date of this bulletin. Types are:

- Aerotechnik EV-97 Eurostar
- Aerotechnik EV-97A Eurostar
- Aerotechnik EV-97 Eurostar SL
- EV-97 TeamEurostar UK
- EV-97 Eurostar SL Microlight.

Inspection Required:

NOTE: This bulletin is equivalent to Evektor Bulletin EV97-028a SR

Within 25 flying hours from the date of this service bulletin, or at the next annual inspection, whichever comes sooner, carry out the following actions:

1. Check the engagement of the flap drive pins into the flaps. With reference to Fig 1, check the clearance between the drive lever with the pin and the nearest surface of the guide in

the flap rib – dimension A. Check this clearance for each flap when at full deflection of 50°. This can be done using a vernier calliper or a ruler.

If the exposed length of the pin (dimension A) is less than or equal to 17 mm, no further action is required.

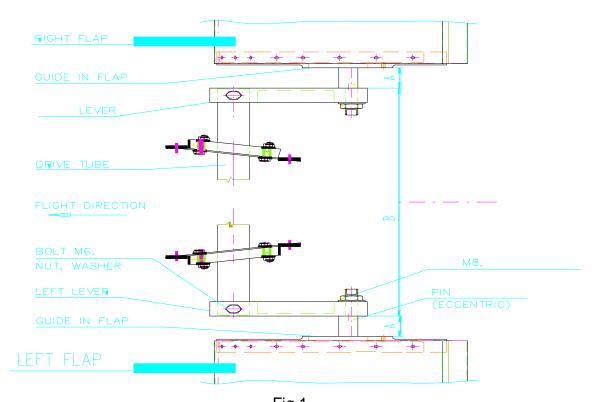


Fig.1

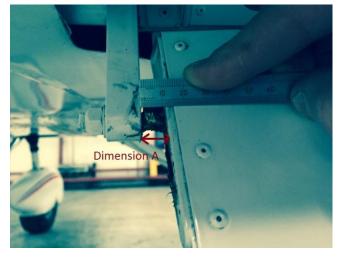




Fig. 2 – Measuring dimension A.

If the measured dimension A is greater than 17mm but less than or equal to 20 mm, adjust the pin as specified in 2. below. If the measured dimension A is greater than 20 mm, Contact Light Sport Aviation.

2. If dimension A is greater than 17mm but less than or equal to 20 mm. Adjust the pin as described below.

- a. With reference to Fig. 3, mark the position of pin's angular displacement (the pin is eccentric).
- b. Release the nut securing the pin.
- c. Unscrew the pin by 1 or 2 complete turns to increase the distance between the shoulder of the pin and the lever., see Fig. 4. This distance must not exceed 3 mm



Fig. 3 – Marking the pin position

4. Ensure the angular displacement marks are aligned and that there is a minimum of two threads protruding from the lock nut after adjustment then secure the pin by tightening the lock nut.

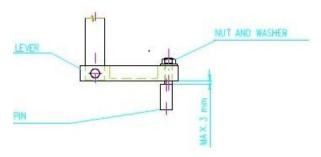


Fig. 4

This Service Bulletin will be the subject of consideration for the issue of a Mandatory Permit Directive (MPD) by the CAA.

Notification & Recording

Notify the BMAA or LAA, as appropriate, and Light Sport Aviation of any findings and adjustments made. Record compliance with this bulletin in the aircraft's log book; keep a copy of the bulletin in the aircraft's records.

Repair Scheme

This may be required if the gap (dimension A) is greater than 20mm.

Prepared By:

Dr. Edmund Otun Technical Director

Checked By:

Mr. Steve Pike Director