

# Technical News Sheet

Issue 4-2013

Date: 02/09/2013

#### **Airworthiness Information**

## 1 Slingsby Vega

Reported by John Gilbert, Essex Gliding Club

Flap disengagement lever pivot bolt missing preventing disengagement of the flap lock prventing alteration of flap settings. It is recommended to check tightness of the pivot bolt/nut and secure with thread lock.

Apply thread lock and check tightness

(Advisory)



#### 2 Standard Cirrus

Reported by Mike Randle

Air brake jammed open by the second paddle going the wrong side of the original paddle. This is a modification introduced by TN 278-32 and may have been altered or incorrectly embodied. There are inspection requirements at the end of the TN.

#### 3 SZD Pirat

Reported by Martin Smith, Dartmoor Gliding Society

Airbrake control restriction caused by installing a catch on an access panel when closed interferes with the air brake control rod. This type of panel is used on many older gliders and care must be taken when repairing or modifying.

(Advisory)

(Advisory)



## 4 SZD Puchacz (Advisory)

Reported by Robert Welford, Cambridge Gliding Club

Elevator trim tab operating wire failure. Water had seeped inside Bowden cable and rusted the cable. Check any stiffness and keep well lubricated.

## 5 Zaklady Lotnicze Marganski & Myslowski MDM-1 Fox

(Mandatory)

AD 2013-0166, SB BO-20/2013 MDM-1Fox

Wing spar to upper skin joint . Inspection/repair

http://ad.easa.europa.eu/blob/easa\_ad\_2013\_0166.pdf/AD\_2013-0166\_1

## **Propellers**

## **6 Hoffmann Propellers**

(Advisory)

EASA have issued SIB 2013-09 advising of suspected unauthorised overhaul or repair of Hoffmann propellers.

Propellers must be overhauled or repaired in suitably authorised facilities otherwise there is a possibility that unauthorised procedures may be used. Such actions could seriously affect the safe operation of the propeller. Operators are advised to review maintenance records to determine if overhaul or repairs have been carried out without authorisation.

http://ad.easa.europa.eu/blob/SIB\_201309\_Unauthorised\_Overhaul\_repair\_of\_Hoffman\_n\_fixedpitch\_propellers.pdf/SIB\_2013-09\_1

## 7 Oehler Folding Propeller

(Advisory)

Noted during BGA quality audit.

Radial cracks on inner part of leading edge of propeller blades. Show up as small dirty lines in composite. If cracks are observed do not use the engine until investigated or repaired.

Installed on Solo engines fitted to Ventus cT and other similar aircraft.

#### General

## The following are observations from recent BGA Quality Audits:

#### 8 Cable inspections

(Advisory)

Inspectors are reminded to observe limitations and recommendation regarding wear of control cables. Wear tends to occur in %5+tubes, lengths of cable that run through fairleads or tubes, around pulleys and other areas of contact.

Anything approaching 50% wear of the outer wires should be considered for change. This is easily observed by looking for %hiny+areas of cable and remember it may be necessary to rotate the cable to see the side away from view.

More information in BGA AMP leaflet 4-7

http://www.gliding.co.uk/bgainfo/technical/ampmanual.htm

#### 9 Nut safety

(Advisory)

% Safety+requirements must be observed for all fasteners including self-locking nuts. Nylon insert (Nyloc) and metal locking stiff nuts must have as a minimum 1 complete thread (not including the chamfer) protruding from the locking element. Self-locking

nuts should not normally be reused, but in certain applications where they are not safety critical they may be reused provided the stiffness is still effective.

## 10 Wire locking (Advisory)

When carrying out or inspecting wire locking the effectiveness safety must be assessed to ensure it is effective, in the correct orientation, the correct type (Stainless Steel or Inconel) and gauge of wire had been used and it is safe. It is important that all twisted ends are folded back to prevent injury to anyone coming into contact with it. Just cutting twisted wire and leaving sticking out is not acceptable.

Be especially careful to avoid sharp ends or wire that can catch in cockpit areas. Trim cables on K series gliders can catch arms, rudder cable turnbuckles on many gliders are close to lower legs/ankles are of particular concern.

Dond forget to only use copper or aluminium wire on items such as canopy jettison handle tell-tales as anything else will not break!

## 11 Fabric covering (Advisory)

When recovering or repairing the fabric the correct process manual must be followed. Anything else is not considered airworthy. Overlaps and seams must be correctly applied using the appropriate cement with the recommended overlap. Remember that some joins must be sewn even in modern man made %Dacron+type fabrics. All modern man made fabrics are susceptible to Ultra-Violet radiation degradation and so must be completely light blocked using an aluminium dope, to test for this the best way is to look from inside the structure whilst shining a light on the outside and if you can see any light there is insufficient UV blocking and more coats are required. This includes undersides as well.

Process manuals for all the modern fabrics are available and not expensive and it is a Part M requirement that you have this %pproved Data+when carrying out the work.

### Compliance Statement:

All mandatory inspections and modifications have been included up to the following: CAA CAP 455 Airworthiness Notices, Withdrawn. See CAP 562 and CAP 747. CAA CAP 747 Mandatory Requirements for Aircraft, issue: 3 amendment: 2012/05 State of Design Airworthiness Directives review date: 2 September 2013

#### For reference:

FAA Summary of Airworthiness Directives. Bi-weekly listing 2013-17
EASA Airworthiness Directives review date: 2 September 2013
EASA Airworthiness Directives Bi-weekly issue: 2013-17
CAA CAP 476 Mandatory Aircraft Modifications and Inspections Summary issue: 287

#### Maintenance Programme:

CAA/LAMS/A/1999. Issue 2, amendment 0 CAA/LAMP/A/2007, Issue 1, amendment 2/2008 BGA GMP 2005, Issue 1, amendment 2

Jim Hammerton Chief Technical Officer