Technical News Sheet

Issue 3-2015	Date: 10/10/2015

Airworthiness Information.

Please note that more notices about the Schleicher BGA glue inspection will be sent out separately, as they are too big for one document.

Aircraft

1 MDM Fox EASA 2015-0182-E Mandatory

http://ad.easa.europa.eu/ad/2015-0182-E

Flight Controls – Control Stick – Inspection / Replacement. All owners have been notified.

2 Schempp-Hirth Arcus AD No.: 2015-0140 Mandatory

http://ad.easa.europa.eu/ad/2015-0140

Flight Controls – Air Brake Bellcrank – Inspection / Replacement. We have sent out a separate email to owners.

3 Duo Discus T, Nimbus 4D,T and M Versions EASA AD No. 2015-0139R1 Mandatory

http://ad.easa.europa.eu/ad/2015-0139R1

Flight Controls – Air Brake Bellcrank – Inspection / Replacement. We have sent out a separate email to owners.

4 Twin Astir, Twin Astir Trainer, Grpb G103 Twin II and G103A Twin II Acro Sailplanes

EASA AD No.: 2015-0116 Mandatory

http://ad.easa.europa.eu/ad/2015-0116

Flight Controls – Speed Brake Control System – Inspection / Replacement. We have sent out a separate email to owners.

5 All K13 LBA AD No 91-173 Dated 24.10.91 Mandatory

This is a reminder that this Mandatory AD needs to be repeated at every annual. We are having too many cracked brackets that most likely would not crack if this AD was complied with.
http://www.alexander-schleicher.de/wp-content/uploads/2015/03/130_TM14_E.pd

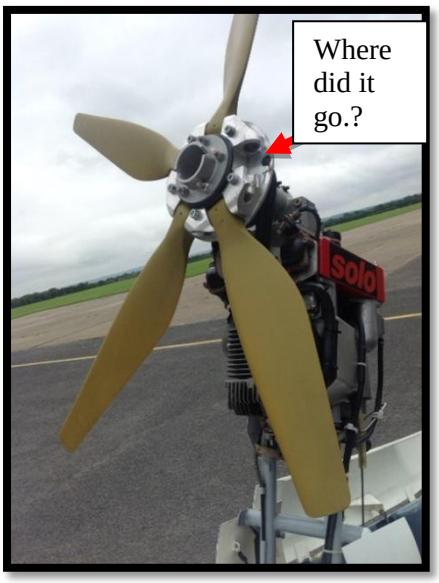
Engines and Propellers

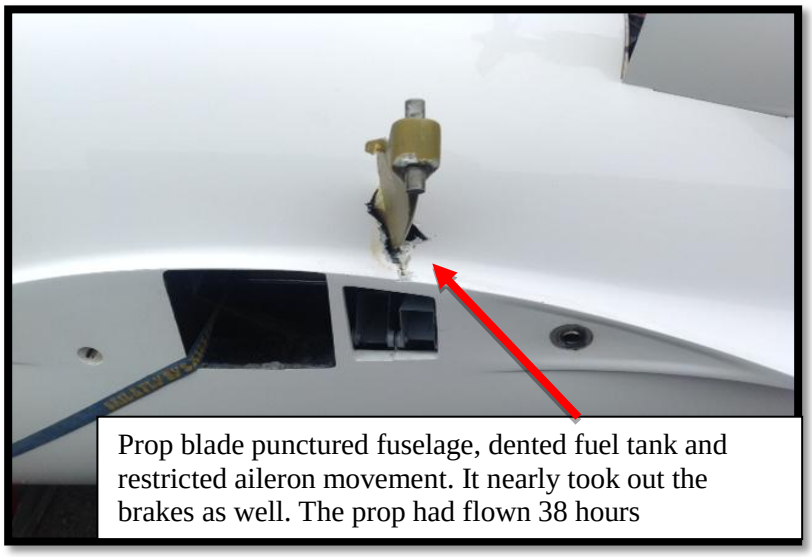
6 SF25C (fitted with Rotax 914) AD No : 2015-0200-E Mandatory

http://ad.easa.europa.eu/ad/2015-0200-E
Exhaust – Exhaust Duct / End-pipe – Inspection / Modification. Owners already notified.

7 Schempp-Hirth Duo Discus T, Nimbus 4 DT (and possibly others) Advisory

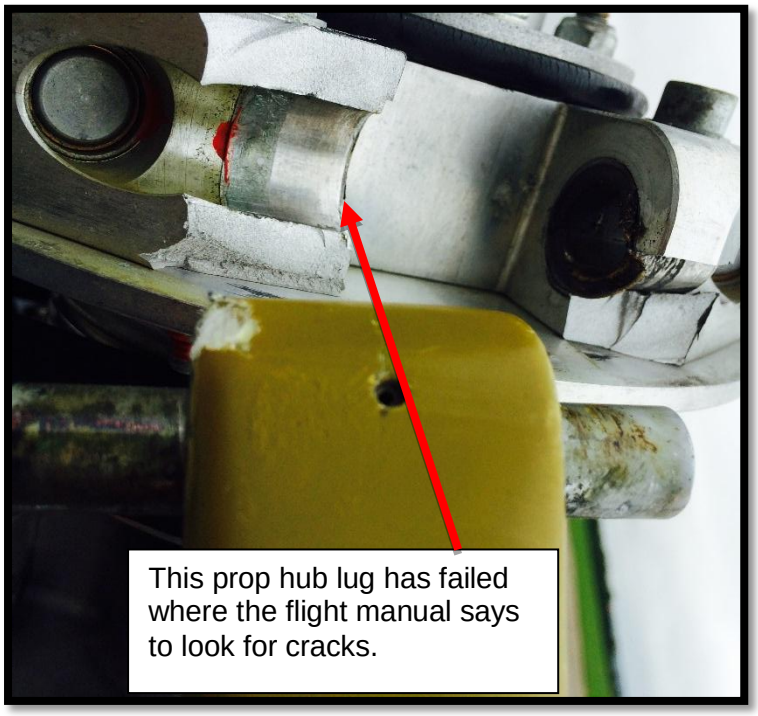
Propeller hub failure in flight. AAIB investigating.





This Duo Discus turbo was not subject to an AD that effected earlier versions with known prop hub cracks.

Talking to a number of inspectors, they say this is not an unknown problem. This is a good example of why reporting even minor cracks on critical parts enables the BGA to carry out trend analysis and advise CAA/EASA accordingly.



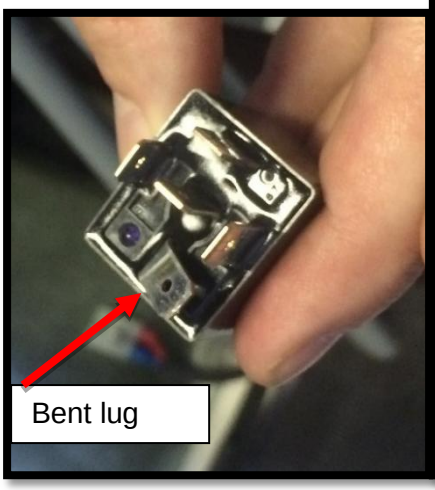
General Information

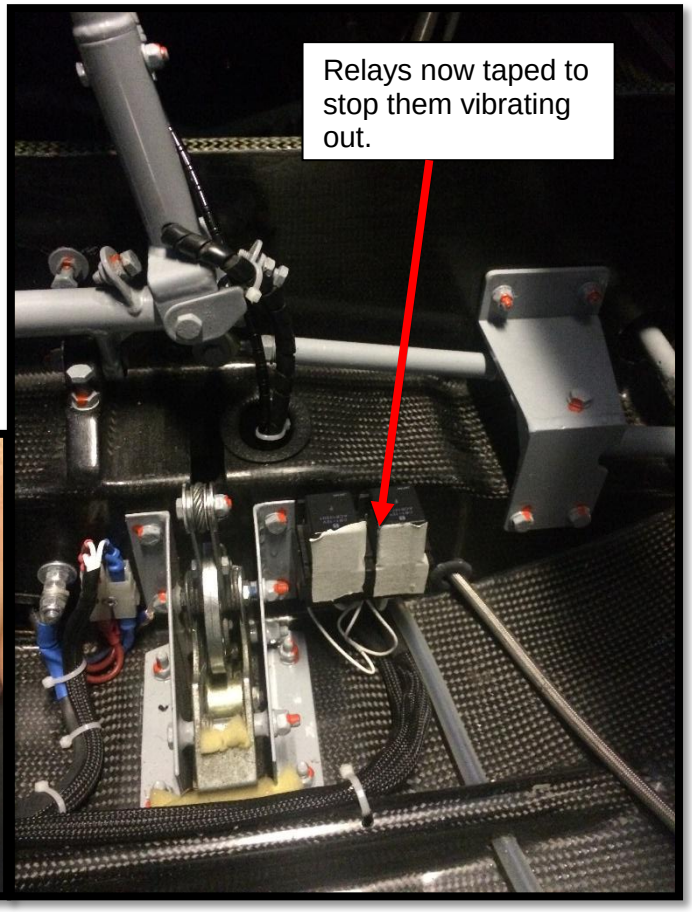
8 Duo Discus XLT (and possibly others) — Advisory

During a DI the pilot could not get the turbo to raise. Upon further fault finding, the problem was narrowed down to one of the two relays that live under the P2 seat. We removed the P2 seat and found one of the relays had come out of its connection block, was floating free in the fuselage and had one bent connector.

Our concern is that the connector had been bent by either the winch hook mechanism or the flight control mechanism.

The lessons is that on annual maintenance check the relays are very secure.



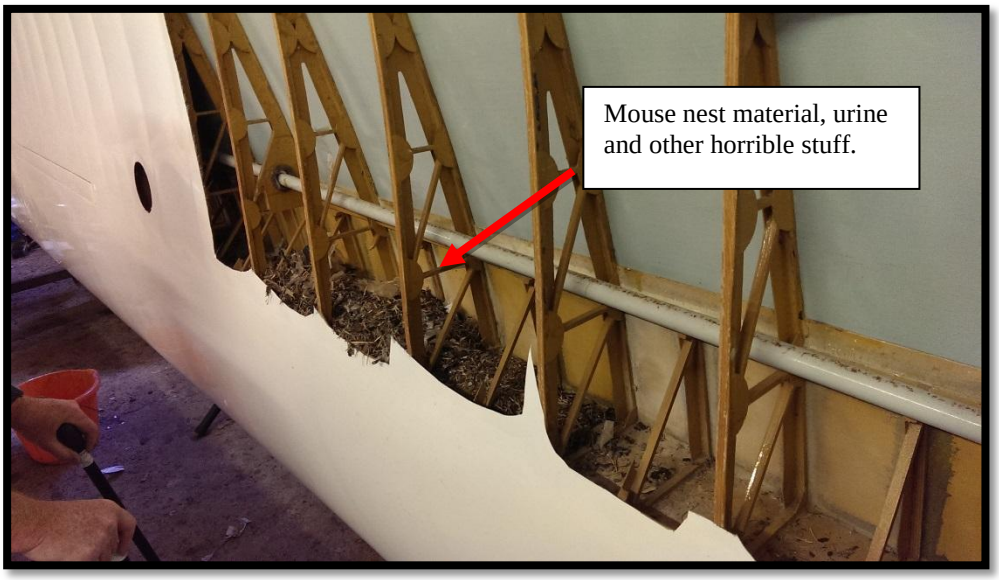


9 All Gliders. Reported by Lucy Wootton — Advisory

A cosmetically good K6 wing was found to have a mouse nest. The required repair was large.

This is a reminder that mice can get in the smallest holes and build their homes in the most remote places.

Always be vigilant for odd noises (moving twigs) when turning the wings over**.**



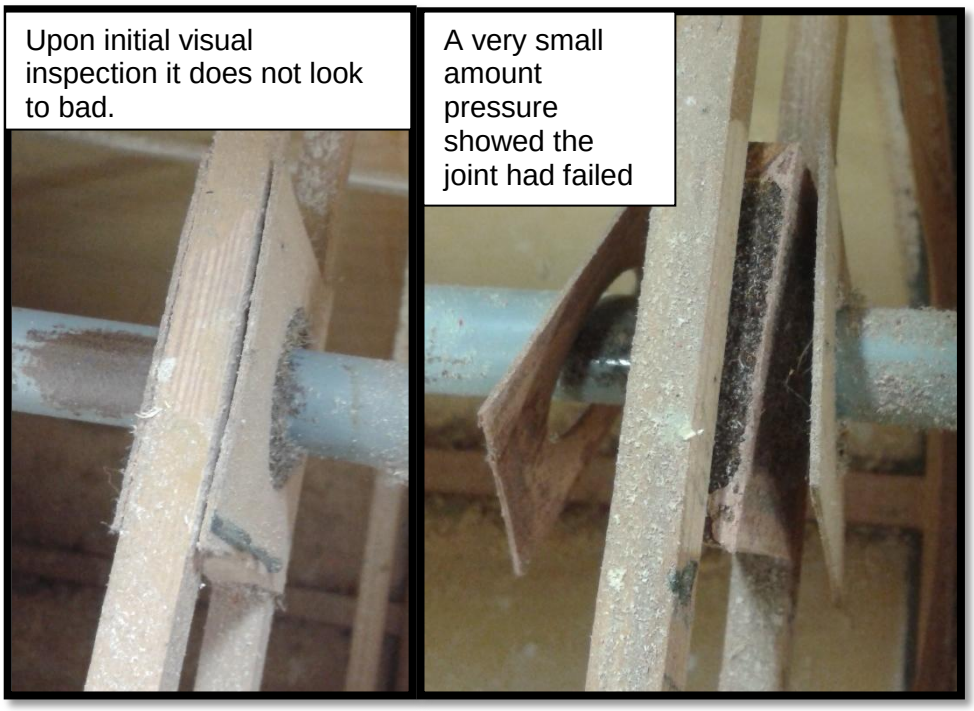
10 K6 (and also all Scheicher wooden gliders) (reported by Dave Bullock) Advisory

Glue failure of the elevator pushrod guides.

The rest of the glider was not too bad.

When performing glue inspections do not assume that, when the rest of the airframe is good, that all the small (but critical joints) are also sound.

This failure could easily have caused flutter or worse.

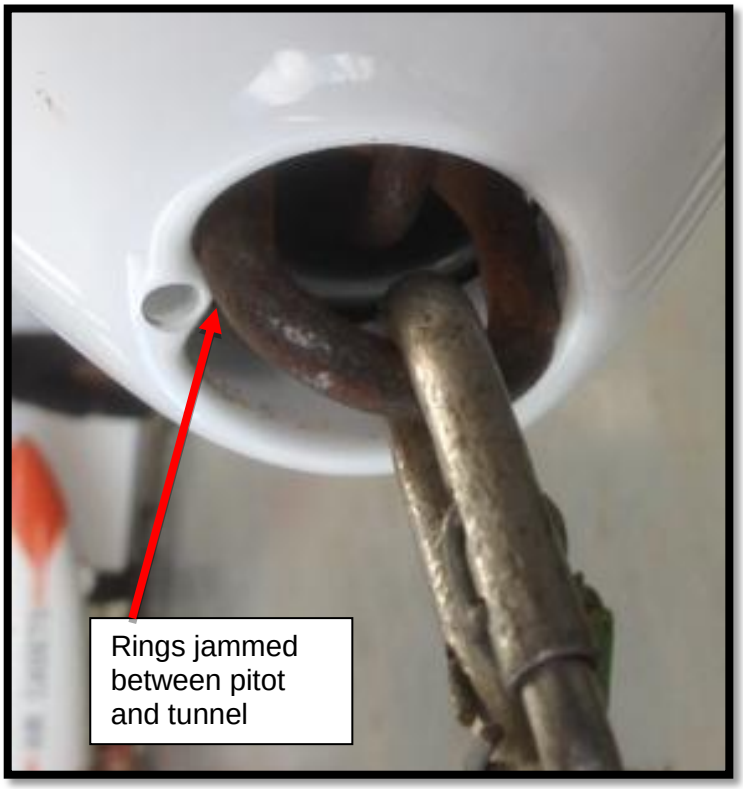


11 Schempp-Hirth Discus (and others) After Refinish/Repair Advisory

After any repairs or refinishing work to the nose of any glider with a nose hook that requires the rings to go in a tunnel.

Part of checking the job is done correctly is to make sure that rings cannot possibility get jammed in the tunnel

Do not leave this job to the pilot on the first post-refinish/repair flight.

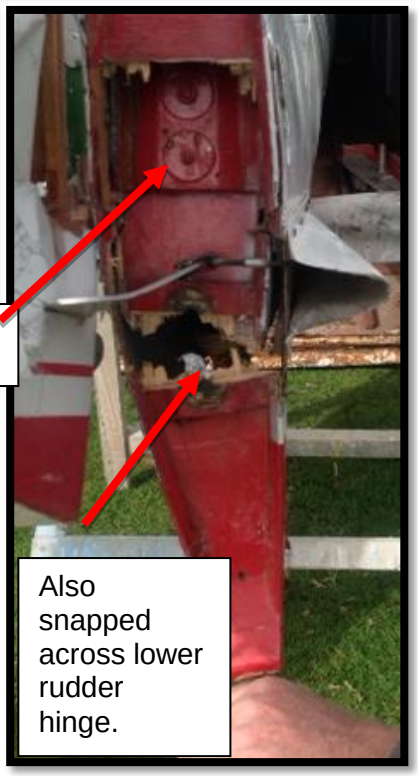


12 Slingsby Skylark 2 and 3 Series **Advisory**

This glider suffered a tail strike on a slightly snatched winch launch; the tailskid and lower sternpost on this Skylark 3 failed.

This resulted in the pilot losing all elevator and rudder control during the rest of the launch and subsequent crash.

There is no indication of any pre-accident damage or glue failure on this glider when inspected after the accident. It is fair to say the original design of tailskid and short leaf spring provides almost no cushioning at all, if the tail strikes the ground.



On later versions of Skylarks the design was changed, presumably to make the tailskid more able to withstand a tail strike.

The newer design has a much longer leaf spring and a fairing in front of the tailskid retention bolts to stop the bolts catching on rocks etc.

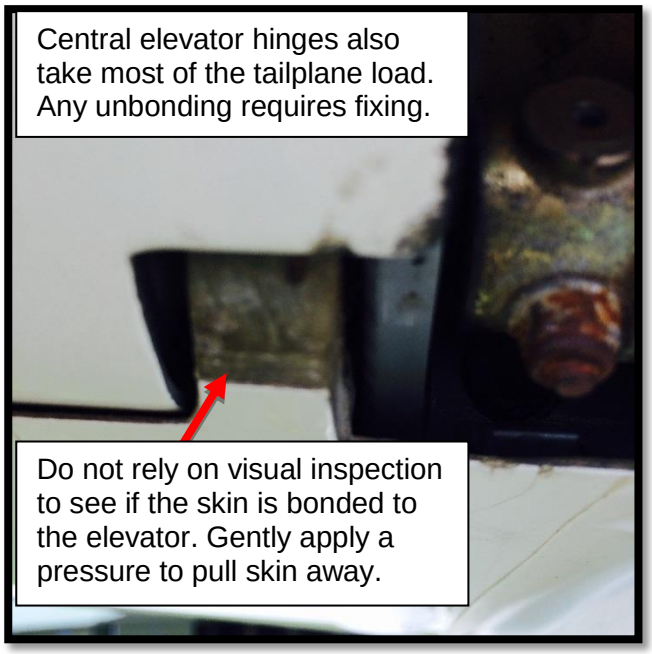
If you have the old design, then you can modify it to the newer design.

Operationally, the vintage gliding people at Lasham always have somebody hold the tail on the ground prior until all-out to prevent a tail strike.

13 Finding Damage on Schempp-Hirth, Glasflugel, and Slingsby Tailpanes at Annual or after Ground Loop or Heavy Landing. Advisory

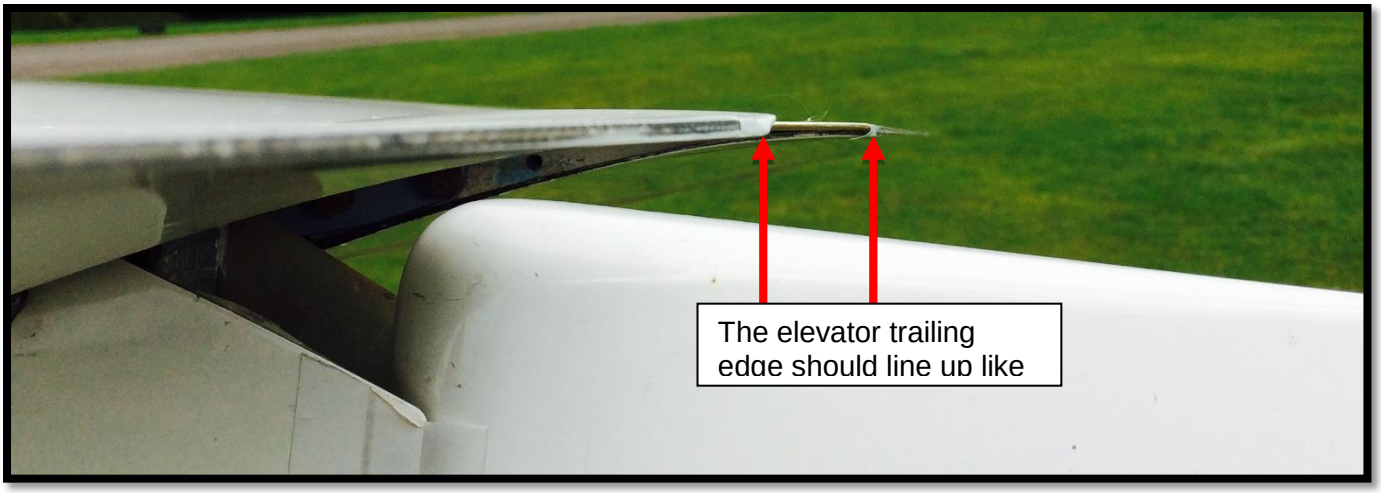
Owners and inspectors are not always finding damage on composite gliders in a timely manner, either on daily inspection, annual inspection or during heavy landing or ground loop inspections. The maintenance manuals can be unclear about what to look for.

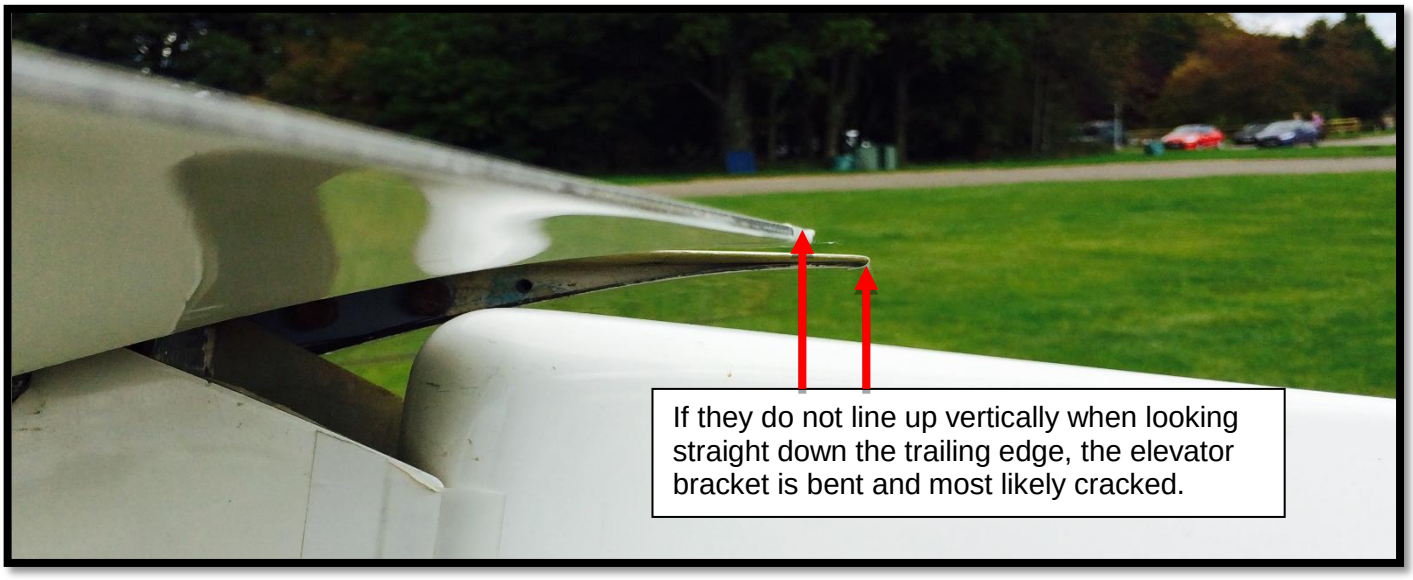
A lot of Schempp-Hirth, Glasflugel and Slingsby (Kestrel) gliders share a common taiplane/elevator design. The example in the picture is a Duo Discus.



At every annual and after any sort of unusual event, you should ensure that the elevator's trailing edges line up with each other, and that the taiplane skins are still bonded to the centre hinges.

If the elevators do not line up, it mostly likely the metal elevator U fitting that bolts the elevators together that is bent. It needs to be replaced (do not consider bending them straight!). It would be a good idea to teach owners to check this on every DI.





14 New EASA Regulation: CS STAN Standard Changes and Standard Repai Advisory
https://easa.europa.eu/system/files/dfu/Annex%20IV%20to%20EDD%202015-016-R.pdf

This is a very useful EASA document that allows standard changes of parts and repairs, where there is no other data. For instance, if fitting a radio to a Slingsby Vega, this document will allow you to approve the installation yourself. It is only 51 pages long and well worth spending an evening reading.

Note: if you ever use CS STAN for a repair or change of part exchange, then you and the owner must fill out page 4 in the acceptable means of compliance in the link below.
https://easa.europa.eu/system/files/dfu/Annex%20II%20to%20EDD%202015-016-R.pdf

15 New EASA Regulation: 2015/1088 Minimum Inspection Programme (MIP) Advisory

http://www.caa.co.uk/docs/224/20150729%20Minimum%20inspection%20programme.pdf

Just to make it clear, the BGA GMP is the example that EASA use as the Minimum Inspection Program on sailplanes. This is another welcome regulation change that will allow a relaxation of previously mandatory but arguably unnecessary maintenance. Two possible examples of application, when you have a good engineering justification: propellers might well be allowed to be put on calendar condition; and 100 checks on Puchacz can be reviewed to see if they are really required.

The basic document is a bit vague. We are awaiting promised clarification from EASA/CAA to ensure that, however we use this regulation change, it will not cause the aircraft to be grounded by the CAA disagreeing upon audit. Do not use or make any assumptions without first consulting the CTO.

This will result in change to the GMP where the owner will have to sign annually to accept the maintenance program, plus any deviations from the TCDS holder maintenance manual and service bulletins. This will formally be the responsibility of the owner, not the inspector. As an example, where straps and engines are put on condition, this will now be solely be the responsibility of the owner. More information will be sent out as soon as we have it.

16 Finding Damage in Composite and Wooden Structures Advisory
To help inspectors and owners find damage I am planning to make a number of short videos on how to inspect various gliders after heavy landings etc**. If any of you have a suitable aircraft with damage, please let me know.** When edited we will put them on the website for all to see.

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: 2014/2
State of Design Airworthiness Directives review date: 08/10/15

For reference:
FAA Summary of Airworthiness Directives. Bi-weekly listing 15-20
EASA Airworthiness Directives review date: 08/10/15
EASA Airworthiness Directives Bi-weekly issue: 20
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, Issue 1, amendment 2

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