

Airworthiness Information

- 1. IS-28B2 Sailplanes EASA AD 2016-0233 Mandatory**
<https://ad.easa.europa.eu/ad/2016-0233>
 ATA 53 – Fuselage – Aft Fuselage Frames and Stringers – Inspection. All owners notified.
- 2. All Grob 109 and G109B EASA AD 2016-0228 Mandatory**
https://ad.easa.europa.eu/blob/EASA_AD_2016_0228.pdf/AD_2016-0228_1
 Occurrences were reported of broken pivots of the tail wheel mounting bracket. Subsequent investigation attributed these events to corrosion and damage due to wear. This condition, if not detected and corrected, could lead to loss of rudder control, resulting in reduced control of the powered sailplane. All owners notified.
- 3. DG 400/500/600/800 self launchers EASA AD 2016-0259 Mandatory**
https://ad.easa.europa.eu/blob/EASA_AD_2016_0259.pdf/AD_2016-0259_1
 Reason: During service and annual inspection, DG found that some fuel hoses with textile fabric covering, installed from the beginning of the year 2015, had become weak or loose with time. The suspected root cause for this premature degradation is a manufacturing defect of a certain batch of fuel hoses. All owners notified.
- 4. Aeromot Xmango motorgliders BR-2017-02-08 Mandatory**
https://ad.easa.europa.eu/blob/20170208.pdf/AD_BR-2017-02-08_1
 Engine cylinder head inspection During service and annual inspection. All owners notified.
- 5. Stemme S10 VT and S/12 2017-0072-E Mandatory**
https://ad.easa.europa.eu/blob/EASA_AD_2017_0072_E.pdf/EAD_2017-0072-E_1
 It has been determined that, following improper heat treatment during manufacture, the material strength of an identified batch of propeller front transmission gear wheels is insufficient. All owners notified.
- 6. Rotax 912 iSc2 and Sc3 Sport 2017-0101-E Mandatory**
https://ad.easa.europa.eu/blob/EASA_AD_2017_0101_E.pdf/EAD_2017-0101-E_1
 ATA 74 – Ignition – Ignition House Sealing Plug – Inspection. All owners notified.
- 7. L-13 (Blanik) 2011-0135R3 Mandatory**
https://ad.easa.europa.eu/blob/EASA_AD_2011_0135_R3.pdf/AD_2011-0135R3_1
 This AD revises EASA AD 2011-0135R2 dated 02 August 2016. All owners notified.
- 8. SCHLEICHER ASH 25M, 26E, ASK21Mi, ASW22BLE50 2017-0136 Mandatory**
https://ad.easa.europa.eu/blob/EASA_AD_2017_0136.pdf/AD_2017-0136_1
 ATA 78 – Exhaust – Silencer – Replacement. All owners notified.
- 9. Lycoming Piston engines US-2017-16-11 Mandatory**
https://ad.easa.europa.eu/blob/2017-16-11.pdf/AD_US-2017-16-11_1
 EASA are adopting a new airworthiness directive (AD) for certain models of Lycoming reciprocating engines. This AD requires an inspection of connecting rods and replacement of affected connecting rod small end bushings.

10. HPH SPOL.S R.O. Glasfluegel 304 ES. SCHEMPP HIRTH FLUGZEUGBAU Discus 2c FES, SPORTINE AVIACIJA LAK-17B FES 2017-0167-E Mandatory

https://ad.easa.europa.eu/blob/EASA_AD_2017_0167_E.pdf/EAD_2017-0167-E_1

Occurrences of fire of the front electrical sustainer (FES) battery pack were reported, while the electrical engine was not in operation. An investigation is going on to determine the root cause of the fire.

Proposed AD These might not become full ADs

11. HOFFMANN PROPELLER PAD no 17-131 Advisory

https://ad.easa.europa.eu/blob/EASA_PAD_17_131.pdf/PAD_17-131_1

HO-V 62 propellers, all serial numbers (s/n). These propellers are known to be installed on, but not limited to, Diamond H 36 "Dimona", Scheibe SF 25 "Falke", Korff Luftfahrt (formerly Valentin) Taifun 17E, Schleicher ASK 16, E.I.S. Aircraft (formerly Fournier) RF 5 "Sperber" and Grob G 109 powered sailplanes.

12. Schroth Harnesses PAD no 17-108 Advisory

https://ad.easa.europa.eu/blob/EASA_PAD_17_108.pdf/PAD_17-108_1

These seat restraint systems are known to be installed on, but not limited to, GROB G 109B, DG-Flugzeugbau DG-300, DG-500 and DG-1000 series, Schleicher ASK21, Zakłady Lotnicze Marganski MDM-1 Fox and Swift S-1, Pilatus Aircraft Ltd. B4-PC11 and E.I.S. AIRCRAFT GmbH (formerly Fournier) RF-5 sailplanes and powered sailplanes. Also known to be retrofitted in many gliders not in the above list.

General Information

13. SZD 50-3 canopy latch (might be useful for Perkoz as well) Advisory

Many Puchacz have been fitted with a BGA Mod BGA 2003/11 found in TNS 06/03 (link below). This helps keep the canopy locked in flight. However, we have found the spring has been stretched and no longer doing its job of keeping the bias on lever in the closed position.

https://members.glidering.co.uk/wp-content/uploads/sites/3/2015/04/1430312306_TNS%2006.03.pdf



14. SZD 50-3 Life extension

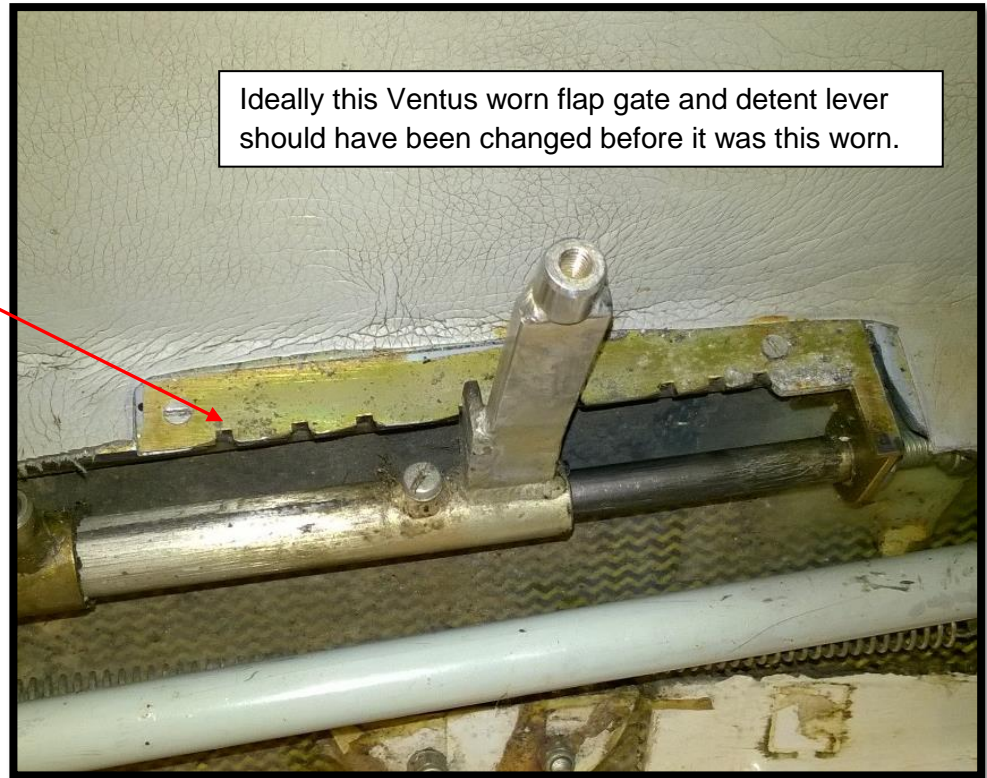
Advisory

A recent tour of the Perkoz sales team suggested there is now a Service Bulletin to extend the life of the Puchacz to 12000 hours, without having to take it back to Poland. This bulletin is not on the website. Contact PZL Allstar for details.

15 All flapped gliders

Advisory

We have found a trend of very worn flap gates, detent pins and bias springs being too worn or broken. In landing flap, the loads on the detents and pins is very high. If the corners are rounded or bias spring weak, in heavy turbulence the flaps can jump to full negative flap, which below 100 ft is not recoverable. Come annual/ARC time ensure it is not too worn or weak.

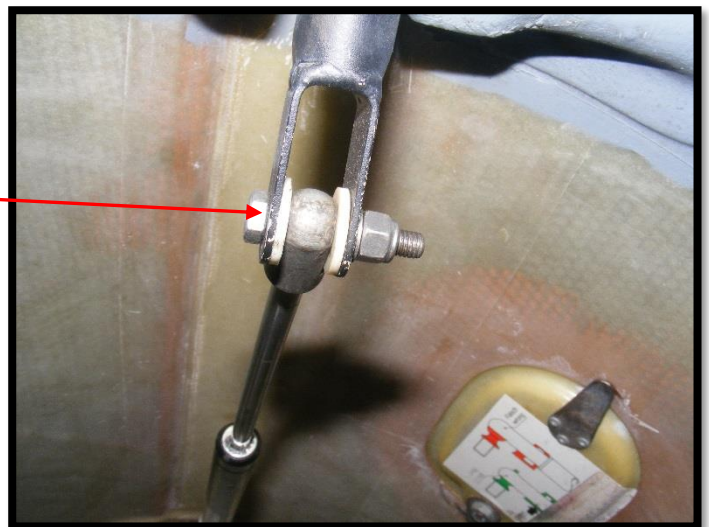


16. Canopy Gas struts problems

Advisory

We had a report of the end of the gas strut unscrewing from the piston. It appears the piston could rotate, so over a period of years it unscrewed from the end fitting. If found to be rotating, consider using Loctite to lock it.

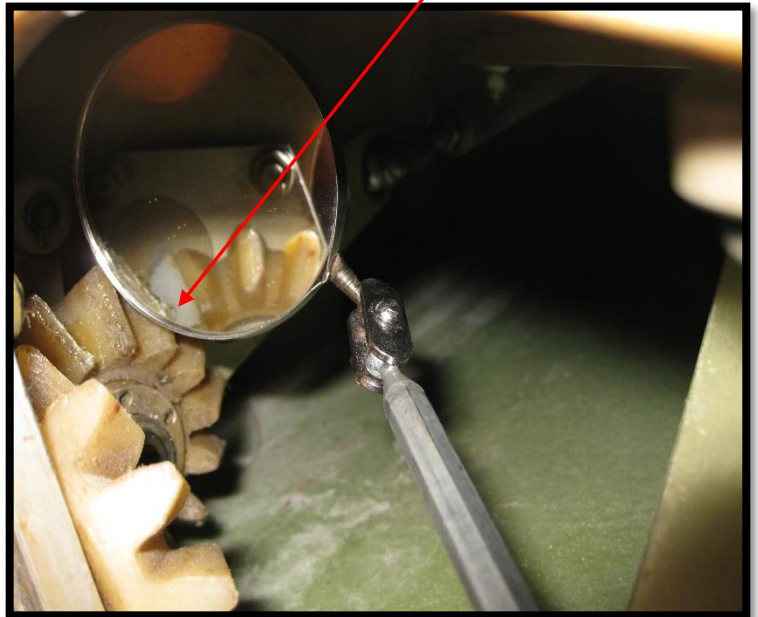
We have found the fork end fittings with elongated bolt holes. If not fixed it will eventually lead to the canopy collapsing.



17. SZD 51 Junior (but could apply to any GRP aircraft)

Advisory

A piece of resin from an old repair has jammed the airbrake cog (as shown in the inspection mirror). If you ever hear an unexplained rattle in a wing. Find out what is causing it. A lot of excess resin was subsequently removed.



18. Tool control and foreign objects

Advisory

Thorough inspections where most of the extremities are looked at, are now far easier accomplished with modern cheap cameras that wirelessly link to most phones.

Dead mouse in top of Std cirrus Fin. Could be seen through the slot in the top of fin. Missed on many previous annuals but spotted by Lucy Wootton



ASW15 found by owner. Mirror in amongst controls. Suspicion was it had been there for a year or 2.

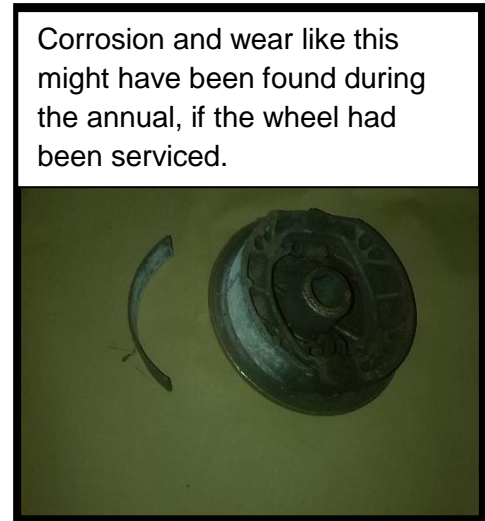
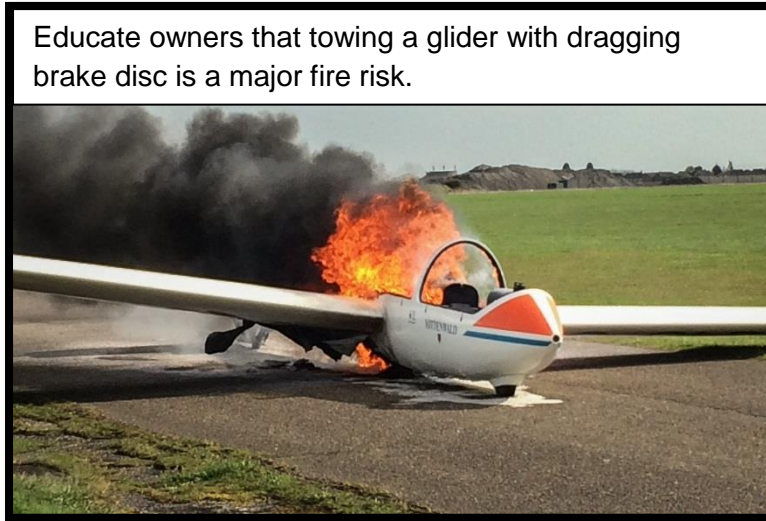


19. Wheel brake maintenance and educating owners about defects

Advisory

Drum brakes. You can only check for wear, corrosion and lubrication by removing the wheel.

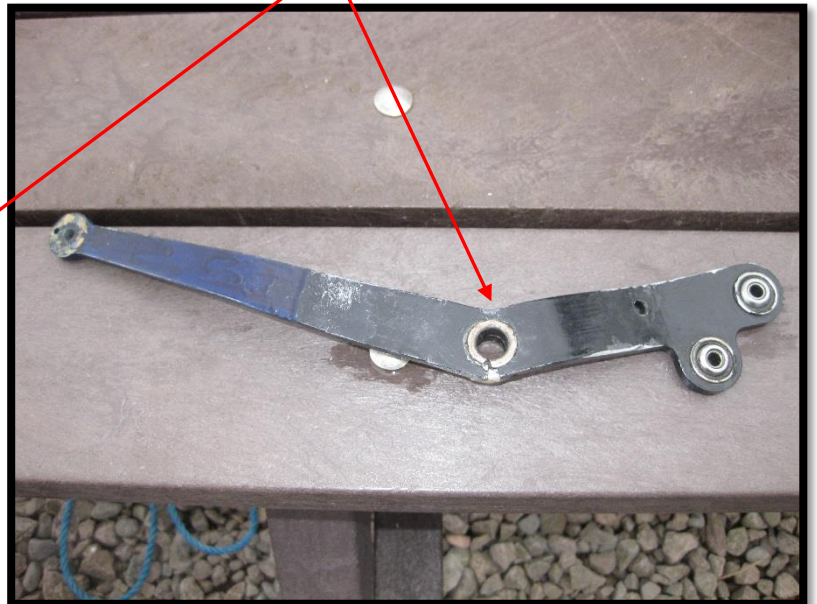
Disc brakes. Educate owners that even a slight dragging disc brake is a major fire risk and not just a deferred defect. Unfortunately we have seen a few of these fires in the UK on BGA gliders including another one this year.



20. Airbrake levers, most gliders and motorgliders

Advisory

Most airbrake levers do not tolerate side loads, corrosion and repeated heavy hydraulic wheel brake use. After tens of thousands of flights, we have seen very occasional failures. On high cycle brake levers, every annual, very close inspection is required at the obvious points of highest stress. The smallest of cracks, bearing or bush problems require replacement or repair.



21. Inspecting for damage on SF25 but can apply to all aircraft

Advisory

Please see this small video made by Terry Mitchell at Bicester of the way significant damage can occur nowhere near the impact point of falling off a trestle. https://youtu.be/wwK_Z1fp muk

22. Tost and Ottfur hooks hang ups.

Advisory

This year we have had 3 hang ups where pilots tried to release and failed. 1 with a Tost hook, one with an Ottfur hook and one with an installation of a combination of an Ottfur nose hook with Tost belly hook. FOD from stones on the ground run was a possible contributing factor in 2 of the incidents. All hooks should be lubricated, inspected for wear (broken springs, wear and play in the claw, cage and lever) every year.

Ottfur hooks. There is a popular misnomer that Ottfur hooks have no life limit and all they need are occasional spring changes. In reality, they do wear out and need constant monitoring to ensure they work correctly. The Ottfur hook manual (exert below) recommends measuring the in-cockpit release load, while there is a 220lb load on the hook. Under load a poorly adjusted or worn Ottfur hook release load can exceed 80lbs lbs. This makes it very difficult or impossible for pilots to release under normal cable loads.

Tost hooks. Have an Airworthiness Directive mandating a life of 10000 actuations and apart from lubrication, if any maintenance is required, only Tost can do it.

Ottfur hooks fitted in a previous Tost installation. Most of these were done without the aid of design drawings and in some cases of poor adjustment created a 'break out' load on the release knob, that increases dramatically when there is load on the aerotow or winch cable. At annuals Ottfur hooks should be checked for this.

Technical support (and manuals) for Ottfur hooks is still available from Roger Andrews. (manual exerts below) rogerandrews@tiscali.co.uk

5. ODC GEOMETRY 'WEAR' CHECK.

It is recommended that in addition to the requirement given in Para. 4.2 above this check should also be carried out whenever release pull forces are considered, or reported to be high, and during routine spring changes.

Clean and lubricate the unit thoroughly and determine the Initial Set Up (ISU) Datum from the Test Certificate on Page 13, 14, or 15.

Apply a cable load of 1kN (220lbsf) in the direction of flight, using a suitable spring balance attached to the outer hole of a long (68mm) lever determine the force required to operate the lever. This should not exceed the ISU Datum load given in the test certificate + 2.5 daN (6lbsf).

Note:

If using a short lever this figure should be increased by about x 1.5.

If the Spring Balance is attached direct to the lever carriage the figure will increase by about x 2.0.

Failure to meet this criteria indicates that there is excessive wear in the ODC linkage and the unit should be returned for overhaul.

CABLE RINGS.

Both the CW300 and CW400 units are compatible with the standard Tost cable rings. (LN65901)

IMPORTANT NOTICE.

RELEASE LEVER OPERATING LOADS ARE SET BY AN ADJUSTER INCORPORATED IN EACH UNIT THAT REQUIRES THE USE OF CALIBRATED TEST EQUIPMENT.

ANY ADJUSTMENT CARRIED OUT INDEPENDENT OF THIS TEST EQUIPMENT WILL RESULT IN UNKNOWN RELEASE FORCES WHICH IF LOW MAY RESULT IN PREMATURE RELEASE OR, IF HIGH, THE INABILITY OF THE PILOT TO OPERATE THE RELEASE AND IS THEREFORE EXTREMELY DANGEROUS.

DO NOT TAMPER WITH THE ADJUSTER.

23. Pawnee tailwheel spring bolt failure

Advisory

When this fails there is possibility of the rudder movement being restricted. Recommend a proper inspection of this bolt on a regular schedule.

24. Fitting of new radios

Advisory

When fitting new radios be sure to exercise Trimmers in extreme positions to ensure adequate clearance. At ARC/Annual time be especially careful to check pilot owner fitted radios (allowed if they use converter plugs) for this.

After December 31st 2017, ensure that the 8.33 mandate is complied with. Note that CAA radio buying refunds are time limited as well.

Trim lever can hit radio causing restrictions.

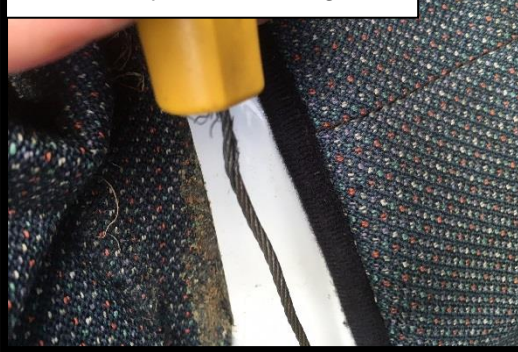


25. T handles and knob maintenance (all gliders)

Advisory

We have found too many frayed cables, broken or weak return springs and broken outer cables still in service. Some of these perhaps should have been fitted at annual. These cables and springs can be the fiddliest to replace on the entire glider, and can take many hours as well as requiring none generic parts (especially Grob rudder cable adjuster cables with too much internal friction etc).

These frays can cut fingers.



T handles or knobs that can fall in the stick recess are unacceptable. Train pilots to put the glider U/S if this happens.



26. CS Stan update

Advisory

This expands the list of tasks that can be performed on EASA aircraft when there is no Type Certificate holder data covering what you need to do. This includes fitting of cameras onto the airframe legally, use of different glues and many other expansions of tasks. Go to link below.

<https://members.glidering.co.uk/wp-content/uploads/sites/3/2016/01/CS-STAN-AMP-2-7-1.pdf>

27. Engine parts duplicates

Mandatory

Engines and their associated parts, like cylinders engine mounts and, on Self Launching sailplanes, retention cables (and many more) are all parts that, if not fastened and locked properly, can cause major incidents. Common sense says these parts require a second set of eyes to ensure they are attached and locked correctly.

28 Self Declared Maintenance Program SDMP

Mandatory

All EASA tugs. Motor gliders and newly imported gliders after October 2016 should now be flying on the SDMP system. LAMP is now withdrawn. Please contact me for advice on this if this is causing you problems. (note we are not able to help aircraft not in the BGA CAMO).

28 T61 transition to Annex 2 all versions

Advisory

Although these are currently being administered as EASA aircraft we are expecting an Airworthiness and Permit Directive mandating a fatigue life. (under EASA or Annex 2 if this does not happen they will be grounded). Shortly after the Directives are issued we expect to be able to administer them as Annex 2 on the NARC system or the LAA possibly on a permit system. Meanwhile administer them as EASA aircraft. You will be notified as soon as we have a firm timeline for transition into Annex 2.

29 Inspector renewals and refresher training dates

Advisory

If you have not submitted you inspector renewal please do so now. Refresher and Human Factors training is required every 5 years. Most legacy inspectors came into the system 10 years ago when EASA took charge. As a result, a lot of inspectors must refresh this Winter. We will need to run at least 3 courses after Christmas. If you think your club can host a meeting on a Saturday and is likely to attract 25 or more inspectors then please contact me. The course dates are found on this link below.

<https://members.gliding.co.uk/courses/courses/>

Gordon MacDonald
Chief Technical Officer

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, amdt 2016/01 superseded on 21 July 2017
State of Design Airworthiness Directives: review date 01/10/17

For reference:

FAA Summary of Airworthiness Directives: bi-weekly listing 2017-20
EASA Airworthiness Directives: review date 01/10/2017
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 (**now withdrawn**)
BGA GMP: Issue 1, amendment 2