

CAA and EASA Airworthiness Directives (ADs) all owners notified.

1 Aileron and Airbrake Control Rod Connecting Devices EASA AD 2022-0230 Mandatory

<https://ad.easa.europa.eu/ad/2022-0230>

This only effects parts made by CALSBACH, INGENIEURBUERO UG fitted using EASA STC 10070970 to D\G AVIATION GmbH LS4, LS4-a, LS6, LS6-And LS6-b. Not many have this mode fitted.

2 Airbrake Control – Inspection / Modification EASA AD 2022-0229 Mandatory

<https://ad.easa.europa.eu/ad/2022-0229>

SCHEMPP HIRTH FLUGZEUGBAUV Ventus-2a Ventus-2b

3 Horizontal Tail Elevator U-Bracket – Inspection EASA AD 2022-0242-E Mandatory

<https://ad.easa.europa.eu/ad/2022-0242-E>

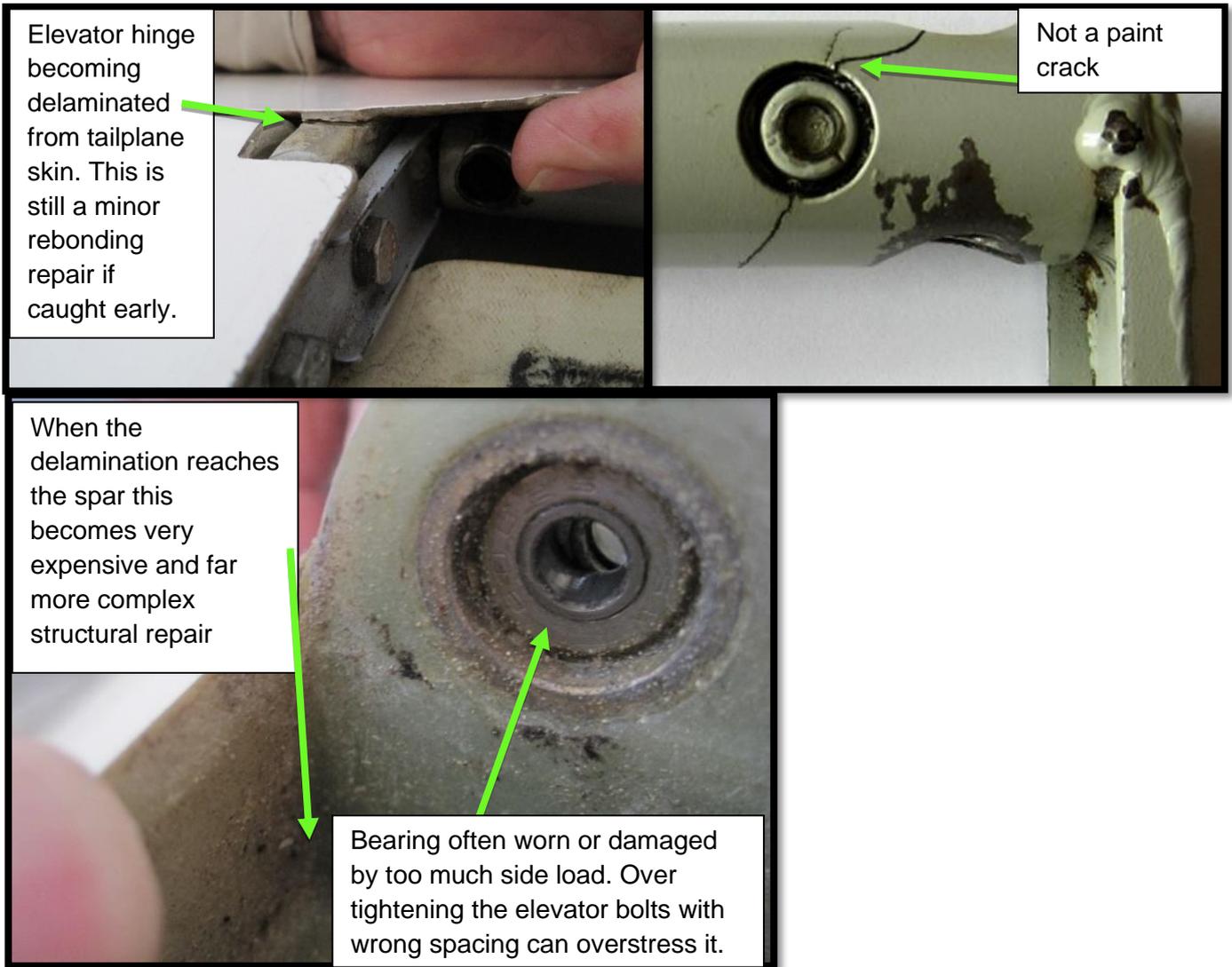
SCHEMPP HIRTH FLUGZEUGBAU Arcus, Arcus M, Arcus T, Duo Discus, Duo Discus C, Duo Discus T, Nimbus-4DM, Nimbus-4DT, Nimbus-4M, Nimbus-4T, Nimbus-4 and Nimbus-4D.

See Video of this issue https://www.youtube.com/watch?v=tTU2_UYDUy

This should not require an AD to find these problems. This damage is common after a ground loop, heavy landing, and excess side loads (not using a tail dolly for instance) on all Schemp Hirth (and VTC G81) fixed T tail tailplanes. All the Glasflugel (and Slingsby Kestrel) gliders are very similar by design and prone to the same.

Every annual and after ground loops, the elevators should be removed (take very careful notes/pictures of where every washer goes so you reassemble it correctly) and U bracket be inspected. Inspect the hinges for associated damage as well (unpeeling from the tailplane skin). Also check the tailplane inner elevator bearing is not like a 50 pence piece in rotation.





4 CEAPR Robin DR400 wing spar inspections

EASA AD 2022-0267-E

Mandatory

<https://ad.easa.europa.eu/ad/2022-0267-E>

This replaces a previous AD on the subject.

5 CEAPR Robin DR400 wing spar limitations

EASA AD 2023-0048-E

Mandatory

<https://ad.easa.europa.eu/ad/2023-0048-E>

This replaces a previous AD on the subject.

6 Lycoming engines

EASA AD/US-2023-05-16

Mandatory

<https://ad.easa.europa.eu/ad/US-2023-05-16>

This does not affect many UK aircraft but look carefully to be sure.

7 Arcus Landing Gear – Electrical Landing Gear Control

EASA AD 2023-0116

Mandatory

<https://ad.easa.europa.eu/ad/2023-0116>

Arcus T and Arcus M powered sailplanes

Safety Information

8 Medical fitness to use the privileges of a Part 66 licence and BGA inspector

Advisory

Every year, between 10 and 15 experienced BGA inspectors retire from the BGA airworthiness system, usually because of aging related issues that affect human performance. Constant self-appraisal of inspectors of fitness to exercise inspecting privileges is essential (one of the many reasons for regular human factor training).

It's important to be mindful that a lot age related changes can creep up insidiously. Sometimes to the point that you do not identify or think a change has/is happening to your ability to be an effective inspector. In extreme cases people around you might recognise/question your degraded human performance before you recognise it yourself. In all cases obviously seek medical advice when unsure.

The BGA advice for aging pilots, is also good guidance for inspectors as well <https://members.gliding.co.uk/bga-safety-management/managing-flying-risk-index/ageing-pilots/>

9 Required placards at ARC review

Whenever you issue an ARC you **MUST** ensure that all the placards specified in the Flight/maintenance manual are fitted. Things like undercarriage up/down signs, ASI markings and for ASW20/K21 hotelier top of fin placards for instance (for ones that have tail L'hotelier on the elevator).

Reported issues

10 Slingsby T61 canopy uncommanded jettison.

The notice below was sent to all T61 operators in the BGA system.

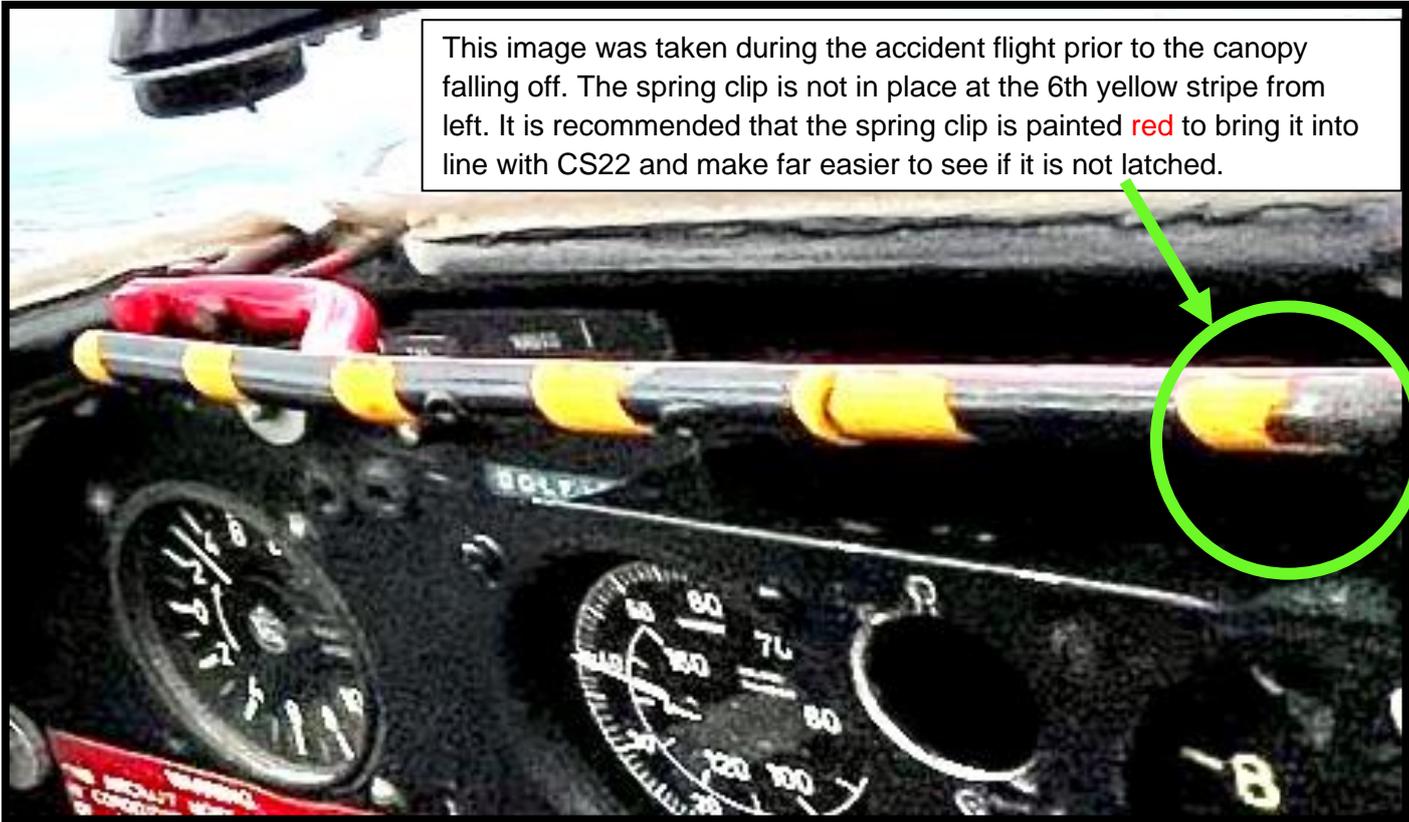
Notice to owners on how to avoid potential accidental canopy jettison on Slingsby T61F

On a recent flight, the canopy detached because the spring latch that keeps the front retaining hinge pins in place had become unlatched. This was possibly accidentally unlatched with a knee or foot while getting in/out of the cockpit. This was not noticed by the pilots. The pins eventually vibrated out and canopy jettisoned - as it is designed to do.

The BGA database (goes back to 1974) shows that this happened once before. But on that occasion the reason why was less conclusive. On the reported flight, the pilot was taking in-flight pictures that show the spring latch not secured. This pilot had also taken pictures on previous flights showing the spring latch in place. See images below.



This image was taken during the accident flight prior to the canopy falling off. The spring clip is not in place at the 6th yellow stripe from left. It is recommended that the spring clip is painted red to bring it into line with CS22 and make far easier to see if it is not latched.



The T61 started life as a license built Scheibe SF25b in 1971. This was called the T61A. Over the next 10 years many versions were built culminating in the T61G.

Upon entering RAF Service (I believe that was the E variant, that was modified into the F variant by adding an electric starter), the original canopy front hinge and jettison mechanism was totally redesigned for the RAF.

The Military pre-flight checklist for the RAF variant, mentions that the latch must be checked every single flight. We have no data, as to whether there were any uncommanded canopy jettison accidents in RAF service. But based on a check of the clip every single flight. Its importance was recognised. See image of RAF checklist below

AP 101G-000-14 Card 3
(ALL)

COCKPIT CHECKS

PLUG INTO RADIO/INTERCOM			
Intercom ...	...	ON, if required	◆◆
Harness ...	...	Secure and adjusted	
Flying controls ...	...	Full, free and correct movement (not rudder pedals)	
Flight Instruments:			
Altimeter ...	...	Set to zero	
Turn and slip ...	...	On	
Propeller brake ...	...	Off	
Battery master ...	...	ON	◆◆
Generator warning light		On	
Cockpit ventilation	...	As required	
Spoilers ...	...	Operate, set closed	
Trim ...	...	Operate, set neutral	
Canopy		Closed and locked	
Canopy jettison locking clip ...	...	Engaged	*-
Compass ...	...	Condition Adjust (check way)	

But versions of the manual prior to the RAF variants that are not fitted with this clip understandably do not mention the clip. Make sure you are using the correct preflight checks for your variant of T61.

2.9.3 <u>Swamp Flight</u>		
T	- Throttle Friction.	As required.
T	- Trim.	30% fwd. neutral.
M	- Mixture.	Rich. (checked in)
F	- Fuel.	On and sufficient.
G	- Gearbox.	Set and serviceable.
H	- Hatch.	✖ Closed and locked. ✖
H	- Harness.	Secure and serviceable.

2.9.1 <u>Slip Flight</u>		
C	- Controls.	Full free, and correct movement.
B	- Ballast.	Within placarded limits.
S	- Straps.	Secure and comfortable.
I	- Instruments.	Set and serviceable.
T	- Trim.	30% fwd. neutral.
G	- Canopy.	Closed and locked. ✖
A	- Airbrakes.	Down, and wheel brake off.

The aircraft was built prior to modern CS 22 standards, so the colour coding is not the same as a modern civilian sailplane.

It is strongly recommended that the spring Latch is painted red. That way it conforms to current CS22 standards, and it is more noticeable if it is not attached to the canopy jettison handle (which is painted with black and yellow stripes).

ALL OPERATORS AND PILOTS with this military specified jettison system need to know that the canopy spring latch spring must be checked prior to take off every flight.

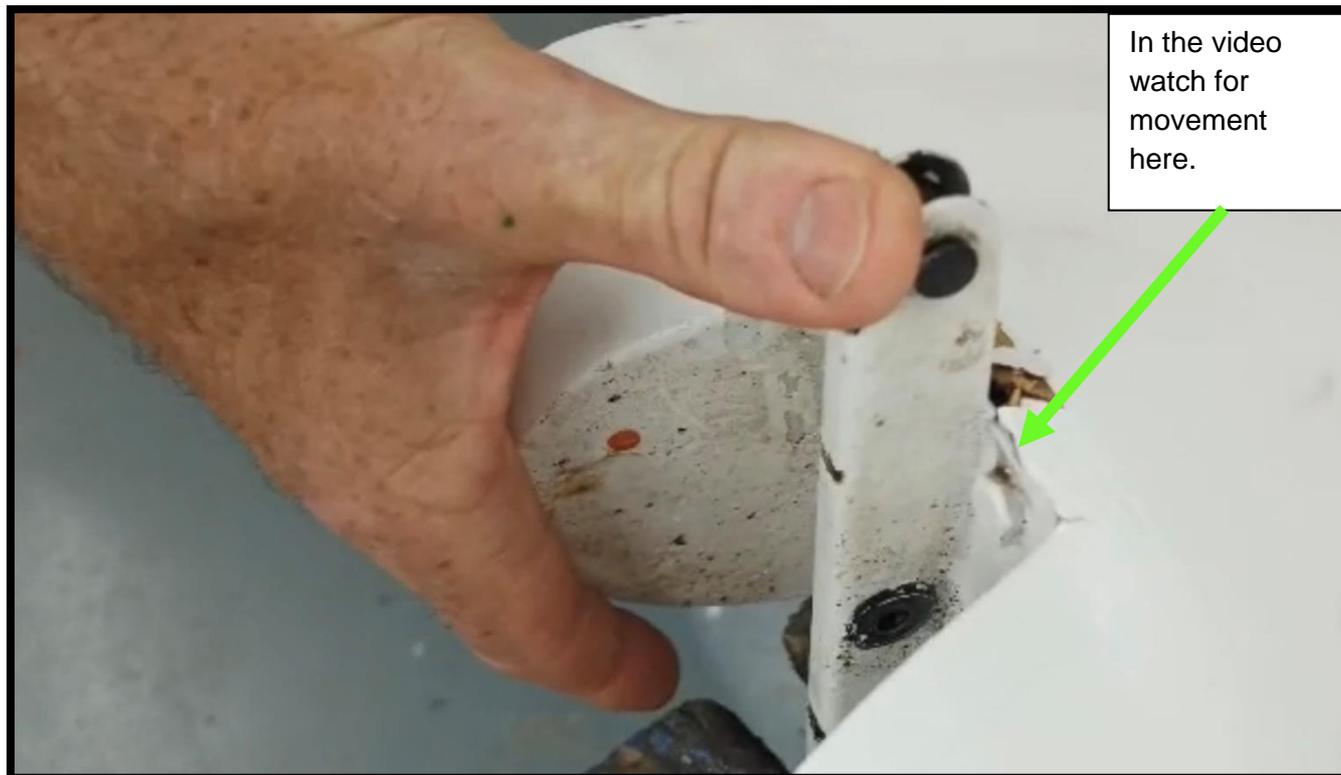
11 K2 lower rudder hinge found lose due to glue joint failure

Advisory

See video <https://youtu.be/oo9NpuHp3n4>

This failure was discovered during an inspection before it became a flight safety issue. It would have been very easy to miss this failure. This applies to all the hinges and hard points (elevator, rudder, trim and ailerons)

Checking for glue failure is now part of the bread and butter of wooden sailplanes. As such, if you find any unusual failures, please report it to us. We are now working on version 7 of the glue inspection, that will take on board modern media education, show failures like the one below, include enhanced inspections inside tailplanes (and K6e elevators) and non-removable fins (like K2 and K6) as well as testing steel tubing in the fuselage for internal corrosion.



12 ASW20/19 Pagase undercarriage/airbrake lever confusion

Advisory



See image of ASW 20. You have 3 similar levers Flaps, brakes and U/C. Most of these gliders have been broken at some point in their life, due to the pilot using the wrong lever on the approach.

Help prevent this by making sure that the airbrake lever is blue and the Flap and U/C levers are not also Blue.

Only the brake handle should be blue, not the flap or U/C lever as well.

13 ASK21 cover to prevent FOD in the controls

Advisory

The K21 has been used in the the UK for 42 years now, it has become apparent that FOD was sometimes accidentally being put into the K21 controls, when people try and use the space behind the instructors head to store coats etc. Not noticing the big red label that says not to put anything there. The sure fix is to buy (from Schleicher) and fit the panel to prevent anything falling into the controls. This appears to be standard on new k21. See image below.

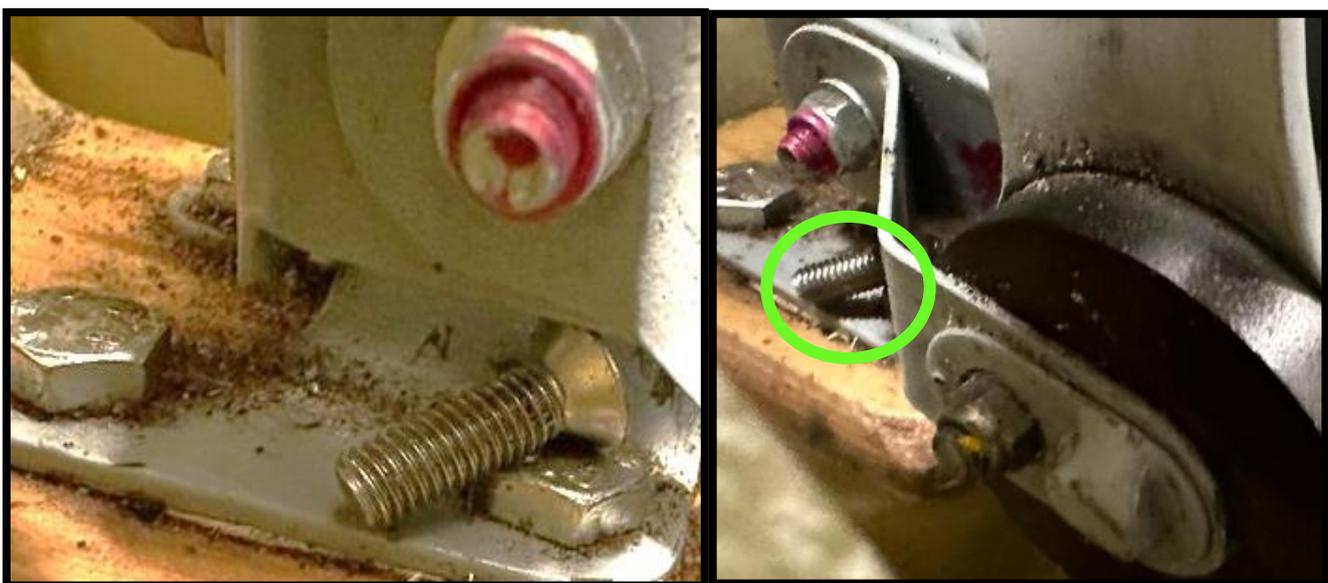


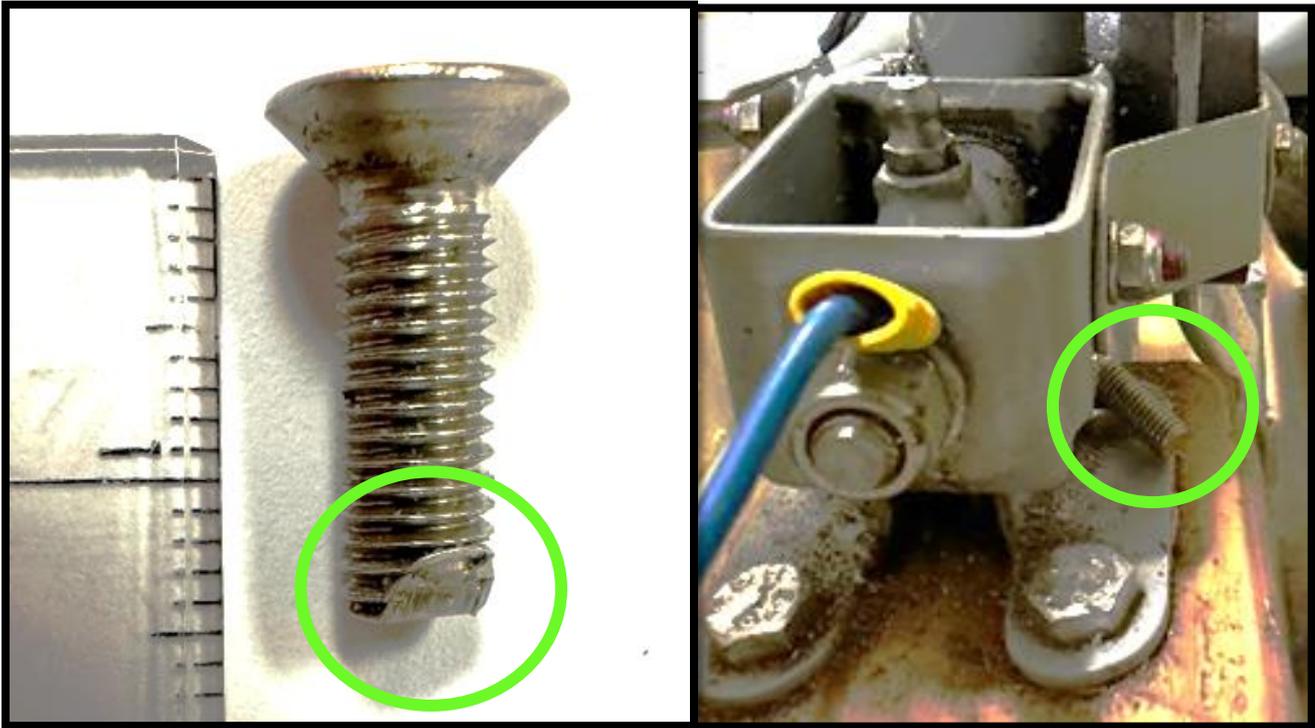
14 ASK21 control restriction caused by lose seat screw (can apply to many other types)

Advisory

The pilot experienced a control restriction after a loop that restricted aileron movement. Eventually the restriction cleared, and a normal landing was made. Upon examination a seat screw that had come out of the lower rear seat pan (not easy to see on a DI), was found under the front the front stick mechanism. The screw had witness marks caused by the front stick mechanism control restriction.

A lot of 2 seat gliders have large open areas, where FOD can travel into the controls from the back cockpit. K13, K21 and Duo Discus for instance. They all have large openings in the back cockpit, under the front seat, where the instructors must put their legs to use the rudder pedals. This is by design and cannot be fixed without a huge design change. If FOD gets in that area, over time it is free to travel around the entire front seat area causing problems.





But why was the screw lose? This was possibly caused by how the seat must be installed.

With most glider seats, they are flexible and not perfectly jugged. You must install the seat and loosely put in all the screws before you tighten them all up. It becomes a 2 part process, fit all the screws first and only then tighten them all up. It would be very easy to not torque a previously lose screw up, as could still look flush and tight.

The fact that the average Rivnut relies entire on the screw clamping down on the seat to increase the friction does nothing to help retain a lose screw if not fully tight. And overtightening them can break the Rivnut lose. Moral of the story is make sure they are tight enough and it's a good idea to have second person check.

15 Do you know how modern CAA Part ML airworthiness works?

Advisory

The CAA Airworthiness Code is a very good and readable document that sets out the principles of Part ML. If you have not read it, its well worth a look. Link below

https://publicapps.caa.co.uk/docs/33/CAP2400P%20Airworthiness%20Code_print.pdf

16 Recent changes in CAA Part ML law

Advisory

The UK Government are occasionally copy and pasting the latest EASA laws into UK law. Hence, we had some changes to the ARC certificate at very short notice recently. These law changes can take effect on the day of law change with no/little transition time. Soon there will be more changes (like EASA version 4 of CS Stan becoming approved). We will be updating a lot of documents in the BGA as this happens. We will inform you when we do this.

17 Complex maintenance work packs

Advisory

When performing list 2 complex maintenance, the BGA only requires the complex maintenance workpack. We do not need the annual maintenance and ARC data as well.

18 BGA CLUB DEVELOPMENT CONFERENCE – Sunday 19th November 2023

Advisory

Due to demand, I will be running a morning session for club technical officers on all new developments to do with BGA airworthiness matters. Please go to the link below for more details.

<https://members.gliding.co.uk/events/bga-club-development-conference-sunday-19th-november-2023-at-park-inn-raddison-hotel-northampton/>

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 4, Amendment 2021/01 date 25 June 2021

State of Design Airworthiness Directives: review date 15/09/23

CAA Airworthiness Directives reviewed 15/09/23

For reference:

FAA Summary of Airworthiness Directives: Small Aircraft, Biweekly 2023-19, 08/28/2023-09/10/2023

EASA Airworthiness Directives: review date 15/09/2023

EASA Airworthiness Directives: bi-weekly issue 18 2023-08-21 to 2023-09-03

CAA CAP 476 Mandatory Aircraft Modifications and Inspections Summary: issue 287

Maintenance Programme:

CAA CAP 411/LAMS/A/1999: Issue 2, amendment 0, edition 5 (for none Part21 motor gliders/tugs only)

BGA GMP: Issue 1, amendment 2 (for non-Part 21 gliders only)

BGA SDMP 267 (for EASA sailplanes and powered sailplanes only) updated 30/07/2021 Part ML AMC

Gordon MacDonald
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