TECHNICAL NEWS SHEET

TNS issue 2-2020 30th March 2020

Airworthiness Information

1. CEAPR DR 400 aeroplanes EASA AD 2019-0211 Mandatory
https://ad.easa.europa.eu/ad/2019-0211
Engine – Thermostatic Oil Cooler Bypass Valve – Inspection / Installation

2. CEAPR DR 400 aeroplanes EASA AD 2019-0242 Mandatory
https://ad.easa.europa.eu/ad/2019-0242
Aircraft Flight Manual – Use of the Disc Braking System – Amendment

3. DG-500 and DG-1000 sailplanes and powered sailplanes EASA AD 2019-0029 Mandatory
https://ad.easa.europa.eu/ad/2019-0237R1
Canopy Lock / Rear Locking Rods – Inspection / Check / Repair

4. CEAPR DR 400 aeroplanes EASA AD 2020-0001 Mandatory
https://ad.easa.europa.eu/ad/2020-0001
Air Intake Duct – Modification

5. BLANIK AIRCRAFT CZ L 23 Super Blanik EASA AD 2020-0068-E Mandatory
https://ad.easa.europa.eu/ad/2020-0068-E
Rudder Control Cable Attachment Screws and Hinge Bolts – Inspection / Replacement

6. Schemp Hirth Ventus 2 all variants EASA AD 2020-0063 Mandatory
https://ad.easa.europa.eu/ad/2020-0063
Flaperon Control – Inspection / Replacement. This was found on a UK based Ventus 2 using a (£15) 5.5mm camera with a built-in light source. Please keep looking where we do not always look.

This AD addresses inspection and replacement of corroded parts, but not prevention the underlaying cause. Be advised the hinges under the mylar are also likely to be affected by the same problem.

7. Solo 2625 02 engines – Software Update EASA AD No.: 2020-0056 Mandatory
https://ad.easa.europa.eu/ad/2020-0056 FlAn
An error was found in the ECU affected SW that can cause brief injection of fuel into one cylinder when the ECU is activated. This condition, if not corrected, could increase the time needed to (re)start the engine in flight, possibly resulting in reduced control of the powered sailplane.

8. Carbon Monoxide detection and prevention CAA SN–2020/003 Recommended
https://publicapps.caa.co.uk/docs/33/20200217SN2020003CarbonMonoxideContaminationMinimisation&DetectionInGAAircraft.pdf
This CAA safety Notice gives very clear information of how good quality maintenance and cheap (£15ish) commercially provided carbon monoxide detectors can help save lives as well as the old fashioned 'black' spot method.

9. Emergency Locator Transmitters and Personal Locator Beacon - Annual Testing
SIB No.: 2019-09R1 Recommended
https://ad.easa.europa.eu/ad/2019-09R1
All operators of aircraft with Emergency Locator Beacons (ELT) or Personal Locator Beacons (PLB).

10. Cable Terminals on Small Aeroplanes with a Mechanical Flight Control Cable System
https://ad.easa.europa.eu/ad/2019-12 **SIB No.: 2019-12 Recommended**
Old turnbuckles and locking swages do fatigue with age and use. They need to be checked regularly. Ideally locked so the safety wire can take the load if the turnbuckle breaks.

11. Hand-operated Fire Extinguishers SIB No.: 2019-16R1 Recommended
https://ad.easa.europa.eu/ad/2019-16R1
Occurrences have been reported of a quality issue on certain Halon-free fire extinguishers, manufactured by umlaut engineering GmbH (formerly P3 Engineering GmbH).

12. Aircraft Maintenance Programme under Part-ML SIB No.: 2020-05 Mandated
https://ad.easa.europa.eu/ad/2020-05
Under new regulations from 24th March EASA Part M Light replaces EASA Part M.

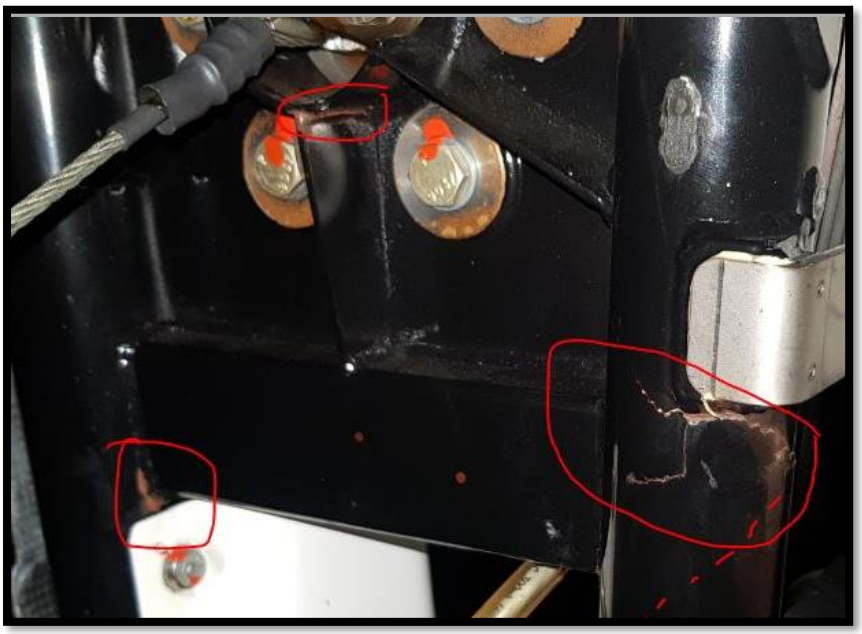
13. Logbooks and SDMP and final phase out of GMP Mandatory
From 1st October 2019, all ARCs will only be accepted if the SDMP maintenance programme and new style EASA logbooks (in compliance with CAA CAP398 regulation) are used. A new form 276 has been issued to from 1st October that must be used. Logbooks must have all applicable, non-applicable, and recurring ADs as well all Lifed items entered on the pink pages.

14. How to make and assemble Rotax 912 engines Advisory
https://www.youtube.com/watch?v=1Vx4cYj6nsQ
A very useful video on how brand new Rotax 912 engines are made and assembled.

15. Nimbus 2 but could be Schemp-Hirth other types Advisory
The airbrake handle became unlocked and unwound itself from the airbrake pushrod (stop nut with start Washer in this case). Luckily this happened on the ground. Please ensure that the handle is locked at every annual. If you find any unlocked, please inform us.

16. DG 1000M but could apply to all metal engine pylons. Recommended

https://www.dg-flugzeugbau.de/en/maintenance-service-aircraft/technical-notes found under DG1000 TN37
The technical note is not mandatory but really should be. The Flight Manual suggests the engine pylon is checked daily. But in this case, there are some fairings on the pylon that make a thorough inspection difficult. As you can see there is some rust in the cracks. This is not just a DG issue but can and has happened in most metal pylon type self-launching and sustaining sailplanes. In most cases only repair by replacement is allowed. Please can inspectors, remind owners of the daily inspection recommendation.



17. ASK21 Advisory

https://www.alexander-schleicher.de/wp-content/uploads/2019/01/21-WA-B-II-E.pdf
See video link of excessive play in drag spar fitting https://www.youtube.com/watch?v=fGzqIrhc7aU
See Schleicher Maintenance working instruction issued in 2018 above. This issue highlights the requirement of owners and inspectors to always check all working instructions and technical notes regularly as well as ADs. Some owners have fitted new drag spar fittings when not required, not realising you can go upto 14mm using over size pins. The pin in the video is a 12.4mm size in a 12.9mm hole and play is very excessive. This requires an oversize pin and reaming. Not a new drag spar fitting yet. Please check annually and as part of heavy landing and ground loop inspections.

18. ASK21 Canopy interlock Advisory

https://www.alexander-schleicher.de/wp-content/uploads/2015/03/210_TM36_DE.pdf

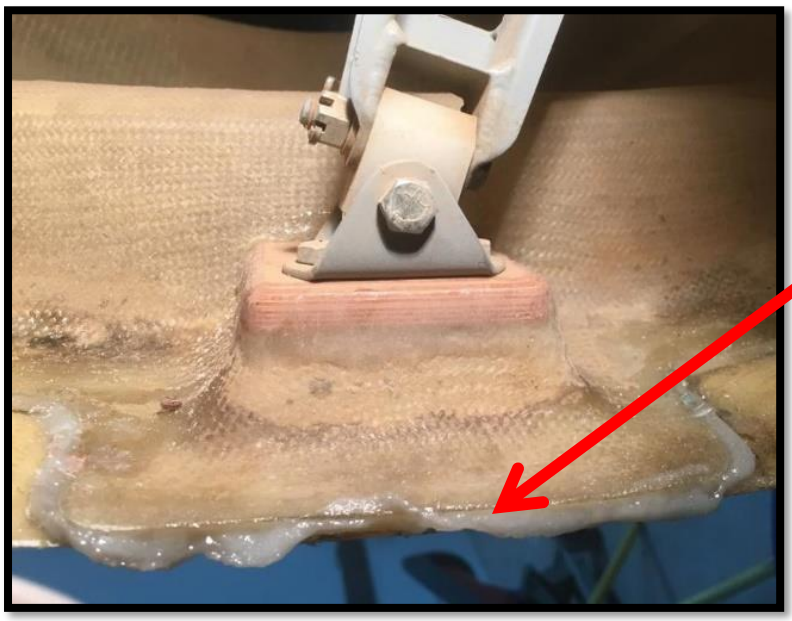
The original nylon interlock introduced in by Schleicher the 1980s after a large amount of rear canopy shattering accidents on take-off. There have been more recent accidents where the nylon interlock did not work because it had worn out after thousands of flights. Replace with metal as the above TM36 suggests.

19. ASK21 Elevator/aileron control rod support frame unbonded Advisory

See Video here https://m.youtube.com/watch?feature=youtu.be&v=-9m72PEbiew

Schleicher TM17 here https://www.alexander-schleicher.de/wp-content/uploads/2015/02/210_TM17_E.pdf

This delamination was found during an annual inspection. It would have been very easy to miss this. Schliecher have suggested following the details in the above TM17, but Ignore the serial numbers as this glider was out side those. Please inform us if any damage found.



The original joint has been cleaned, dried, degreased, inspected, re abraded and bonded back together. It still needs post curing (55'C for 12 hours) and the excess glue needs trimming on edge of wheel box per the Technical note 17.

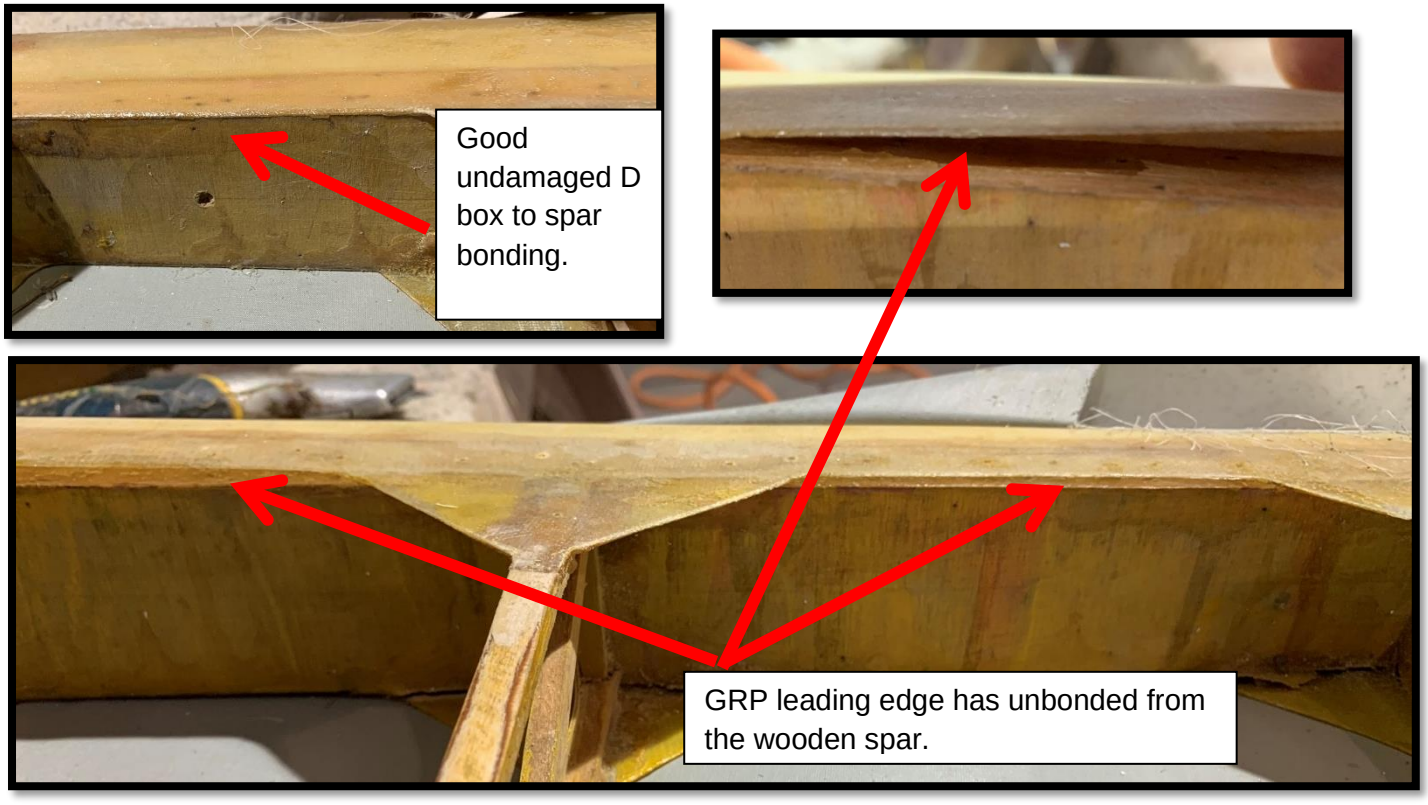
20. Slingsby T65 Vega Damage to fuselage controls (could apply to other types) Recommended

This is most likely rigging damage caused by the ailerons and stick not being neutral when inserting the wing into the fuselage. The same could also apply to airbrakes. The bearing of the bell crank bashes the edge of the receiving tunnel and over time it starts to unpeel.

Mclean aviation has a few Slingsby spares that would save having to repair them if they are damage.

21. Slingsby T51 Dart Wooden tailplane legacy poor quality repair. Recommended

This old repair was accomplished by using expanding foam in the GRP leading edge of the tailplane. But as it expanded there was insufficient space and it pushed the skins off the tailplane spar. Years later during a re-cover the damage was found.



22. Fitting switches and attaching hardware to pushrods **Advisory**

This is a flap indicator slider that has been tie wrapped to a pushrod near the joint of the rose bearing. Although this particular installation did not cause a control restriction, more thought must be given to what would happen should on hot day the tie wraps become soft and allow the slider to move, or if the tie wraps become old and brittle. Could this jam the flaps etc? Put simply, it needs to be installed more securely.

23. Hook corrosion caused by pilot relief system **Advisory**

This hook should have been changed before it got this corroded**.**

24. Corona Virus COVID19 **Advisory**

This is having a knock-on effect to all aspects of life. Some of these are engineering issues and some are compliance with paperwork issues. EASA have announced several exemptions that only apply to commercial aircraft. We understand that they will consider exemptions for lighter weight aircraft in coming weeks. We will pass these onto you when we find out if they have been able to issue exemptions.

Social isolation knock-on effects on maintenance of aircraft and inspector currency
Most inspectors, workshops, owners and airfields are now socially isolated, meaning owners cannot transport their aircraft to maintainers. This will likely cause a huge backlog when social isolation requirements are lifted. We are looking at ways of helping to deal with this.

Aircraft stuck in the wrong place with expired annual/ARCs. Non-ground transportable aircraft tugs and some motor gliders that cannot fly to their normal maintenance providers may run out of Annual/ARC. They will need EASA ferry permits issued by the CAA. Note for none EASA tugs (PA18 Super Cubs mostly). The

old pre EASA A conditions apply, they do not require any CAA involvement to issue a No passenger carrying ferry flight permission. More advice to follow on this when we have heard back from the CAA.

Inspector currency. Some inspectors still require refresher, initial issue, ARC currency, ARC initial issue training and interviews. We are urgently looking at how to run these courses and interviews online using internet media systems.

Corrosion of engines Many turbos, motor gliders and tugs have had minimal flying over the Winter and with an extended period of down time may need engine inhibiting or where possible a *long* engine run to boil off all moisture in the engines, as described in the engine manual. Not doing so can result in corrosion to bearings, cylinders, camshafts and crankshaft thus radically shortening their life and increasing risk of failure. 2-strokes are perhaps more susceptible. But please refer to your engine manuals.

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 2020/01 24th March 2020
State of Design Airworthiness Directives: review date 28/03/20

For reference:
FAA Summary of Airworthiness Directives: Small Aircraft, Biweekly 2020-06, 3/2/2020 - 3/15/2020
EASA Airworthiness Directives: review date 28/03/2020
EASA Airworthiness Directives: bi-weekly issue 06
CAA CAP 476 Mandatory Aircraft Modifications and Inspections Summary: issue 287

Maintenance Programme:
CAA CAP 411/LAMS/A/1999: Issue 2, amendment 0 (for none EASA motor gliders and tugs only)
BGA GMP: Issue 1, amendment 2 (for non EASA gliders only)
BGA SDMP 267 (for EASA sailplanes and powered sailplanes only)

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