BRITISH GLIDING ASSOCIATION

BGA TECHNICAL COMMITTEE

TECHNICAL NEWSHEET TNS 7/8/91

- PART 1 Airworthiness "AGGRO" Please refer to the BGA 1991 Blue Pages.
- 1.1. SZD "JUNIOR" Failure of the Elevator Drive Locking Sleeve to fully engage, after RIGGING. Please check on every D.I.

 Reported by J. Reeves. Kent G.C.
- 1.2. <u>Puchatz.</u> Incorrect Rigging of control travels found on yet another new aircraft.

 <u>Reported by Peter Pengilly. RNGC Culdrose.</u>
- 1.3. <u>Centrair Sailplanes</u> AD 91-113(A) herewith concerns confusion over the Colour Coding of Controls.
- 1.4. <u>KA7 Rudder Cable Failure</u> at Nicropress Swage. Swaging operation incorrectly carried out, and failure to inspect the finished product! (TNS 1/2/91 item 1.10 refers). <u>Reported by E.Sussex G.C.</u>
- 1.5. <u>KA7 Loss of Rear Canopy.</u> Locating lugs had been removed, allowing the canopy to slide off the hinges.

 Reported by E. Sussex G.C.
- 1.6. Grob G.102 Astir (Jeans). Rudder Pedals. With the Rudder adjustment in certain settings, the tube on the inner side of the pedal is capable of catching on the adjustment tube in the centre. Reported by Hilary Orton, R.A.E.G.C., after an exciting in-flight incident.
- 1.7. <u>KA7 Trim Cable Failure</u>. Diagram is self explanatory.

 <u>Reported by P.A. Ward Marchington</u>.
- 1.8. Olympia 2 Cracks in Elevators & Ailerons, as illustrated herewith.

 Reported by Ian Hipkin Highland G.C.
- 1.8. Hornet/Mosquito Series (AD 91-111) Canopy lifting/tilting mechanism requires inspection for compliance with Tech/Notes 206-16 & 303-18 at annual inspection.
- 1.9. <u>All Single Astirs. Elevator Hinge attachments.</u>
 TM 306-27/1 herewith has been mailed to registered owners by the BGA. Made Mandatory by LBA/Ad/89-209.
- 1.10. ASK 21 LBA AD/91-112 Introduces Flight Manual Changes. Tech Note 23 refers.

- 2.0. TUGS & S.L.M.G.'s
- 2.1. <u>G.109 Forced Landing</u>, following alternator failure due to flat battery, and inability to re-start. Loose connection on alternator.

Reported by Oxfordshire Sport Soaring, Enstone.

2.2. Pieper Stark Stamo Engines. Manual Amendments.

Amendment No. 3 Fuel & Oil Hoses - replace if :-

- a) braiding is damaged.
- b) if tube is hard or abraded.
- c) if any sign of leakage.

Helicoil Inserts in Spark Plug Holes. Only Heli-Coil thread bushes with meshed ends should be used, to avoid overheating of the Spark Plug, by loss of heat transfer to the Cyl. Head.

Amendment No. 4 Float Valve Wear in Zenith Carburettors type 28 RXZ, caused by changes in fuel specification - Valves should be checked every 150 hours. Replace valve assembly as required.

Amendment No. 5 Crankcase Cracks between upper right and lower engine mountings. Inspect for oil leaks.

Amendment No. 6 Crankshaft Housing Ventilation. Breather pipe must be vented overboard, and not into the intake filter, and should be cleaned regularly.

- 2.3. Grob G.109 Root Rib Studs FAA/AD/91/12/6 is advisory material only in the UK. This problem was notified in BGA TNS 5/6/91 item 1.1.
- 2.4. Extracts from GASIL's copied herewith :-
 - 1) Amendments to LAMS should have been received by all owners of Civil Registered aeroplanes.
 - 2) Banner Towing / Glider Towing Certification.
 - 3) <u>Care of Passengers</u>, whether in Gliders, Tugs & S.L.M.G.'s. You have a legal obligation under Article 36 of the ANO, and a Duty of Care under Common Law!
- 2.4. Ex RAF/ATC SLINGSBY T61(F) S.L.M.G's Guidelines on Civil Certification are copied herewith.
- 2.5. Turbo Ventus failure to start.
 - 1) Failure of the Valve Lifter, illustrated herein.
 - 2) <u>Failure of the Electronically Switched</u> (diode) in the fuel pump.

142 /1014

AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

Inspections and/or modifications described below are mandatory. No person may operate a product to which this

Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive

Translation of 'Consigne de Navigabilité' 81-113(A)

In case of any difficulty, reference should be made to the French original issue.

CENTRAIR sailplanes

Airbrake handles

This Airworthiness Directive concerns CENTRAIR sailplanes:

- ASW20F and ASW20FL all serial numbers,
- 101 PEGASE all types, all serial numbers,
- 201 MARIANNE all types, all serial numbers.

To avoid a possible confusion by the pilot, between the airbrake handle and another handle, due to the fading with age of the colour of the airbrake handle:

- Within three months following the effective date of this Airworthiness Directive:
 - . If the airbrake handle has lost its blue colour, replace it by a new handle as defined in the corresponding CENTRAIR Service Bulletins.

The colour will have to be checked at each annual inspection and the handle replaced when necessary.

Record the application of this Airworthiness Directive in the sailplane logbook.

Ref.: CENTRAIR Service Bulletins Nrs 20/14, 101/12, 210/09

EFFECTIVE DATE: JUNE 8, 1991

May 29, 1991

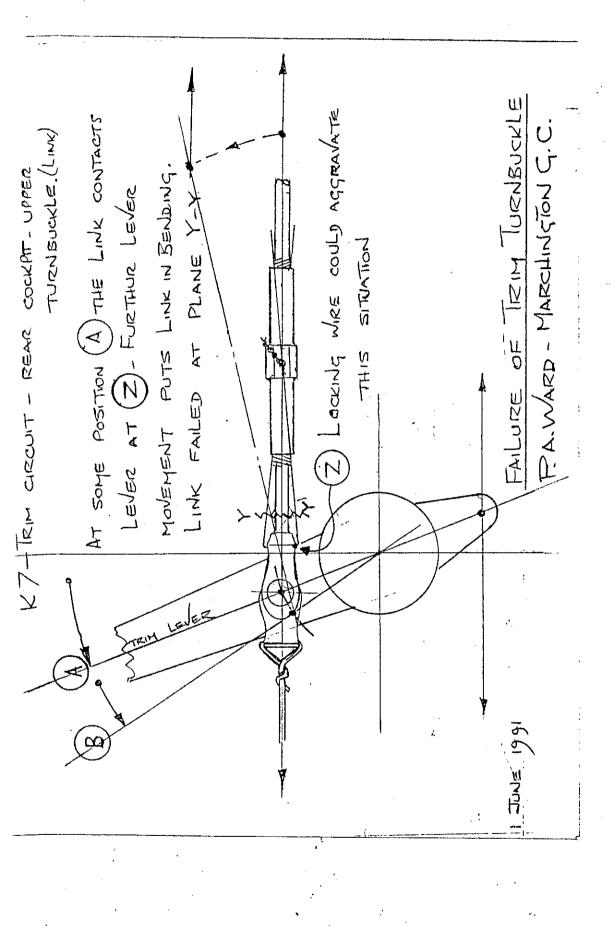
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CENTRAIR sailplane

91-113(A)

GROB G. 102/ ASTIRS

7/8/90 POSA TINS 10/17 Eldness GROB Service Bulletin ASTIR CS TM:306-27/1 ASTIR II GROB-LUET, UND RAUMFAHRT This Service Bulletin substitutes the Service Bulletin TM 306-27 dated 13 Sept 1989. Inspection of all elevator hinges Subject: s/n 1001 - 1536 s/n 1601 - 1844 ASTIR CS Concerning: ASTIR CS 77 ASTIR CS Jeans s/n 2001 - 2248 as of s/n 5001C Club Astir II as of s/n 5001S Standard Astir II G 102 Club Astir III G 102 Club Astir IIIb as of s/n 5501C as of s/n 5501Cb G 102 Standard Astir III as of s/n 5502S before next flight Urgency: During operation of the above gliders parting of the inner elevator hinges has occured on occasion, caused Procedure: mainly by improper handling during preflight check. For precaution all elevator hinges, either on the horizontal tail or on the elevator, are to be checked for delamination. Especially attention should be paid for hairline cracks and small buckles around the hinges have defect has to be repaired before the next filest. Actions: Any defect has to be repaired before the next flight, according to Repair Instruction No. 306-27/1. Referring to pre-flight inspections in the future, please do never push the elevator over its constructional stop by force. The material (encl. Repair Instruction) can be obtained from the manufacturer on inquiry. Material: Negligible Weight and balance: The work must be carried out by a competent person or an authorized aviation work-shop and has to be Remarks: certified in the logbook by an authorized inspector. The German original of this modification information has been approved by the LBA on the 44 June 1991 and is signed by Mr. A. Skov. The translation has been accomplished to our best knowledge and judgement. In case of doubt, the German original is authoritative. LBA approved Mattsies, 04 June 1991 Dipl.Ing. J. Altmann (Airworthiness engineer Certification staff) If in the meantime you have sold your glider, we would ask that you kindly pass this information immediately to the new owner and forward his address and aircraft s/n to us. MUSTERGEPRUFT / APPROVED BY ERSETZT AUSGABE/ISSUE EORTION | BEARBEITET / PREPARED BY DATUM / DATE 1 of 1 k.vodermeier 04 June 1991



GROB 1093

GROB-WERKE GMBH AND CO. AIRWORTHINESS DIRECTIVE SMALL AIRCRAFT

ALUSORY Material DNLY.

91-12-06 GROB LUFT UND RAUMFAHRT: Amendment 39-7017. Docket No. 91-CE-05-AD.

Applicability: Model G 109B motor gliders (serial numbers 6200 through 6362), certificated in any category.

Compliance: Required within the next 3 calendar months after the effective date of this AD, unless already accomplished.

To prevent separation of the studs in the root rib stud plate that could result in loss of the aileron and airbrake control systems, accomplish the following:

- (a) Inspect the security of the studs in the root rib stud plate (part number 109B-4108) in accordance with the instructions in GROB Service Bulletin No. TM-817-29, dated August 6, 1990. If any loose studs are found, prior to further flight, repair the stud plate in accordance with the instructions in the referenced SB.
- (b) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the motor glider to a location where the requirements of this AD can be accomplished.
- (c) An alternative method of compliance or adjustment of the compliance time that provides an equivalent level of safety may be approved by the Manager, Brussels Aircraft Certification Office, Europe, Africa, and Middle East Office, FAA, c/o American Embassy, B-1000 Brussels, Belgium; Telephone (322) 513.38.30. The request should be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Brussels Aircraft Certification Office.
- (d) All persons affected by this directive may obtain copies of the document discussed in this AD upon request to GROB Luft und Raumfahrt, D-8939 Mattsies, Federal Republic of Germany; or may examine this document at the FAA, Central Region, Office of the Assistant Chief Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.

This amendment (39-7017, AD 91-12-06) becomes effective on July 5, 1991.

FOR FURTHER INFORMATION CONTACT:

Mr. R. Stoer, Program Manager, Brussels Aircraft Certification Staff, Europe, Africa, Middle East Office, FAA, c/o American Embassy, 1000 Brussels, Belgium; Telephone 322.513.38.30 extension 2710; or Mr. Herman Belderok, Project Officer, Small Airplane Directorate, Aircraft Certification Service, FAA, 601 E. 12th Street, Kansas City Missouri 64106; Telephone (816) 426-6932; Facsimile (816) 426-2169.



The British Gliding Association Ltd. Registered No. 422605 England Registered Office as address

Administrator and Secretary: Barry Rolfe

Kimberley House, Vaughan Way, Leicester LE1 4SE Telephone 0533 531051 Facsimile 0533 515939

British Gliding Association

TNS 7/8/91

B.G.A. TECHNICAL MEMO

SLINGSBY T61 (F) "VENTURES ACQUISITION & CERTIFICATION

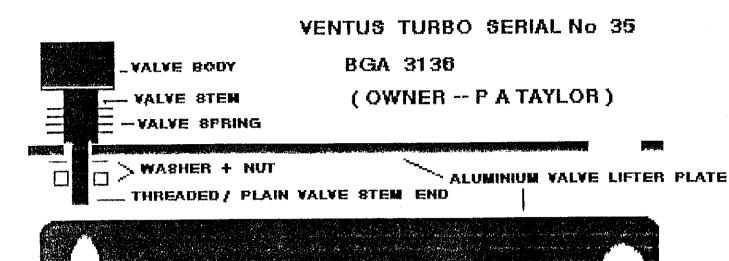
NOTES FOR YOUR GUIDANCE

- 1. Two T61(F's) G-BSWL and G-BSWM have already been issued with Private Category Certificates of Airworthiness, so the CAA are familiar with this variant.
- 2. Check that you have a complete and serviceable aeroplane, by rigging it, and running the engine.

Record engine Max RPM, Oil Press at Max and Min RPM, Oil Temperature, Engine/Propeller vibrations, Fuel & Oil leaks and the absence of CO2 contamination.

- 3. Check the documentation received from M.O.D :-
 - (a) Original (Public Transport) Certificate of Airworthiness issued by CAA against the Serial Number of each aircraft prior to delivery.
 - (b) Log Books for records of hours flown on engine and airframe, and for any modifications.
 - (c) Pilots Handbook.
- 4. Register with the CAA using CAA FORM 1. Apply the registration letters to wing and fuselage strictly in accordance with CAA instructions. (ANO Article 3 & Schedule 1).
- 5. Install a Steel Name Plate in the cockpit, with owners name and address. (ANO Schedule 1(B) 3).
- 6. Determine the condition of the paintwork and fabric, and rectify as required.

Patron Vice Presidents HRH The Duke of Edinburgh KG Air Chief Marshal Sir Theodore McEvoy KCB CBE Christopher R Simpson MA LLM Roger Q Barrett Tom Zealley BA PhD Ben Watson MA FCA



ELONGATED HOLES - ONE CHORDWISE / ONE SPANWISE

FOLLOWING FAILURE TO START IN AIR DUE TO ENGINE NOT SPINNING UP IN AIRSTREAM-INVESTIGATION REVEALED HOLES IN ALUMINIUM VALVE LIFTER PLATE HAD BECOME ENLARGED AND ELONGATED AS PER SKETCH.

THIS HAD ALLOWED ONE OF THE TWO VALVE STEMS TO PASS THROUGH THE PLATE HOLE SUCH THAT ACTIVATION OF THE VALVE LIFTER HANDLE FAILED TO LIFT THAT VALVE.

THE ELONGATION OF THE HOLES WAS UNDOUBTEDLY THE RESULT OF VIBRATION, ONE HOLE IN PARTICULAR WAS SURROUNDED BY A CONSIDERABLE BURR.

THIS PARTICULAR ENGINE HAS RUN FOR A TOTAL OF 31 HOURS IN 873 AIRFRAME HOURS.

I STRONGLY RECOMMEND ALL SOLO ENGINES BE CHECKED AS A MATTER OF URGENCY. COULD THIS HAVE ANY RELEVANCE TO THE RECENT TURBO VENTUS FATALITY? I SUGGEST THE ALUMINIUM PLATE NEEDS REPLACING WITH A STEEL PLATE, OR APPROPRIATELY SIZED STEEL WASHERS BE INTRODUCED ON BOTH SIDES OF THE ALUMINIUM PLATE.

P A TAYLOR - BGA INSP. 1/C/542

19 JULY 1991