BRITISH GLIDING ASSOCIATION

BGA TECHNICAL COMMITTEE

TECHNICAL NEWSHEET TNS 2/4/93

PART 1 Airworthiness "AGGRO". Please add to the 1993 Blue Pages.

1.1. LAK 12 Aft Hook Installation. The factory supplied aft hook modification includes a "look-a-like" Tost type hook, which may fail to release under all backward-release situations. Replace with genuine Tost or otherwise rectify. (Seen at Badger Engineering, Hus. Bos.).

1.2. KA6CR (1961). Tailplane Mounting badly corroded. Annual inspections, in depth are required.

1.3. Libelle 201 (1971). Wing Spar Spigot Mounting plate corroded and GRP Spar end damaged. (Dave Reilly - Devon & Somerset Aviation).

1.4. SZD 55-1 Speed Brake Operating Rod in the cockpit detached from cockpit wall, at aft support. (Seen at RAFGSA Bicester).

1.5. LBA A/D 92-360 - Schempp-Hirth Elevator Vertical Driven Rod replacements. This A/D brings forwarded to June 1993, action date for replacement of certain rods. Contact Southern Sailplanes (0488 71774) for details. (Copy herewith).

1.6. MT - Propellers (Electric) fitted to SLMG's with LIMBACH or ROTAX 912 Engines. Service Bulletin No.7 requires action if "unusual RPM decrease or RPM surging" is experienced.

1.7. SZD "Junior". Rudder Cable Friction. (TNS/1/2/93 refers). An alternative solution to more flexible cables, is to replace the rudder pedal springs with a lower rating. (Reported by Sandy Torrance, Cambridge G.C.).

1.8. Grob Twin Astir's Exchange of Airbrake over centre lever. TM 317-47/2 revised 20/1/93 is copied. (LBA A/D 92/309/2 refers).

1.9. Grob Astir's - (most variants). Extension of Service Life. TM 306-30 (herewith) gives instructions for continuing airworthiness inspections to 12,000 hours. (LBA A/D 93-041 confirms).

1.10. Glaser-Dirks DG500 M LBA A/D 93-010 (herewith), requires Flight Manual revisions in respect of Rudder Sealing and Cooling Liquid Reservoir bracket failure.

1.11. L13 Blaniks. Main Spar Lower Flange Inspection. Bulletin L13/062 herewith, details the action required.

1.12. Schempp-Hirth Motor Gliders. Airworthiness Directives. CAA Foreign A/D's Vol III at issue 3 are attached.

1.13. DG400 & 500 Series Motor Gliders. Latest list of A/D's is attached. (Ref CAA Vol III issue 10).

1.14. GASIL Extracts herewith include :-
a) Incorrect fuel tank sealants
b) Ice in fuel filters!
c) CARE OF PASSENGERS - (SLMG Accident)

1.15. LS3 & LS4 Series. Trim Weight Holder Cracked. T.B. 3040/4033 herewith, refers.

1.16. LS6-C Flight Manual Revisions - correction to speed definitions and ASI colour markings. (Extract herewith).

1.17. GIPSY Series Engines. Oil Jet to Magneto drives blocked - engine failed. AAIB Bulletin 3/93 (herewith) uncovers this unknown source of lubrication!

1.18. KA7 - Airbrakes - Glue Line Failure. Report & Sketch from Northumbria G.C. defines the problem, which may lead to LOCKED-OUT-BRAKES.

1.19. DART 15 (and other variants?) Corrosion on the top boom (WING ROOT) - bonding of plywood to metal spar failed. Bolts removed and found corroded. (Reported by Roy Proctor, North Hill G.C.).

1.20. L'HOTELLIER Connectors. LBA AIRWORTHINESS DIRECTIVE 93-001 (herewith) introduces SAFETY PINS (MANDATORY) and gives instructions for continuing Airworthiness Maintenance.

1.21. FABRIC RECOVERING & the Compatibility of Adhesives, dopes and paints. Several instances have occurred of chemical incompatibility of materials supplied for recovering, with paints applied for finishing. Check most carefully with your suppliers, and comply with the manufacturers instructions. (Reported by Lasham).

PART 2 GENERAL MATTERS

2.1. KA8 Tailwheel Installation by Cambridge G.C, is BGA approved. (Sketch herewith).

2.2. ASW 24 Winglets. Tech Note 6 introduces this feature. (Kits available from Vendors).

2.3. Disabled Persons Manual Rudder for Grob G.103 (III). T/Note 315-53 (herewith) introduces this option.

2.4. G.103 (III) Canards for Spin Training. T/Note 315-53 (herewith) introduces this facility.

2.5. S.L.M.G.'s which have Flight Manuals. (Some have 4 page C's of A) and all TUGS. Details of the latest state of amendments must be recorded on the attached CAA FORM AD 200, when making application for C.of.A. renewal under the BGA (M3) Scheme.

Issue 10
March 1993

GLASER-DIRKS DG–400 AND DG–500 SERIES MOTOR GLIDERS

PART 1 – LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
83–171	Flexible wing fuel tanks.	Applicable to DG–400 Serial Nos. as detailed in Airworthiness Directive. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/3 also refers.
84–155	Rotax 505 engine, canopy jettison device, DEI, towing cable release mechanism.	Applicable to DG–400 Serial Nos. 4–1 to 4–87. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/6 also refers.
84–157	Power plant, vibration cracks.	Applicable to DG–400 all Serial Nos. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/11 also refers.
85–219	Replacement of fuel shut off valve gaskets.	Applicable to DG–400 Serial Nos. 4–1 to 4–140. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/14 also refers.
85–223	Powerplant – cable guides – inspection to prevent possible fouling of engine extension.	Applicable to DG–400 Serial Nos. 4–1 to 4–140. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/15 also refers.
86–138	Improved marking of canopy emergency release and re-location of ventilation placard.	Applicable to DG–400 Serial Nos. 4–1 to 4–176. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/16 also refers.
87–108	Inspection/Modification of engine extension/ retraction drive.	Applicable to DG–400 Serial Nos. 4–1 to 4–188. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/18 also refers.

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
87–109	Inspection/Modification of engine wiring.	Applicable to DG–400 Serial Nos. 4–1 to 4–178. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/19 also refers.
88–99	Empty weight CG range, plugged piece of hose at the pneumatic fuel pump, manual revisions and locking pins on wing tips.	Applicable to DG–400 Serial Nos. 4–1 to 4–228. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/20 also refers.
90–43	Modification of powerplant.	Applicable to DG–400 Serial Nos. through 4–249. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 826/22 also refers.
91–149	Modification of powerplant.	Applicable to DG–400 Serial Nos. 4–1 and subsequent. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Notes 826/24 and 826/25 also refer.
92–358	Airbrake control/control – hook up shaft 5ST57.	Applicable to DG–500M Serial Nos. 5E30M 14 up to 5E60M 25. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 843/3–2 also refers.
93–009	Manual revisions and rudder sealing.	Applicable to DG–500/22 ELAN and DG–500 ELAN Trainer all Serial numbers. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Notes 348/3S and 348/3T also refer.
93–010	Manual revision, rudder sealing and cooling liquid reservoir.	Applicable to DG–500M all Serial numbers. Compliance required as detailed in Airworthiness Directive. Glaser-Dirks Technical Note 843/5 also refers.

AIRWORTHINESS DIRECTIVE

TAS 1/1/93

93-010 Glaser-Dirks

Date of issue:
05. Jan. 1993

DG 500

Affected powered gliders:
German Type Certificate No. 843

Glaser-Dirks
DG-500 M
- all S/N's

Subjekt:
Manual revision, rudder sealing and cooling liquid reservoir

Reason:
1. Manual revision
2. During flight tests at very high speeds rudder vibrations caused by flow separation have been detected. By sealing the rudder gap these vibrations can be eliminated.
3. The bracket 5M68/1 of the cooling liquid reservoir may fail due to vibrations.

Actions:
1. Exchange of manual pages and
2. Installation of rudder gap sealing and
3. Modify the mounting of the cooling liquid reservoir in accordance with Glaser-Dirks Technical Note No. 348/3S and 348/3T, both dated November 30, 1992.

Compliance:
Actions must be accomplished before February 28, 1993.

Technical publication of the manufacturer:
Glaser-Dirks Technical Note No. 843/5 dated November 30, 1992 which becomes herewith part of this AD and may be obtained from Messrs.

Glaser-Dirks Flugzeugbau GmbH
Im Schollengarten 19-20

D-7520 Bruchsal 4
Federal Republic of Germany

Accomplishment and log book entry:
Action to be accomplished by an approved service station or an authorized person and to be checked and entered in the log by a licensed inspector.

TNs 3/4/93

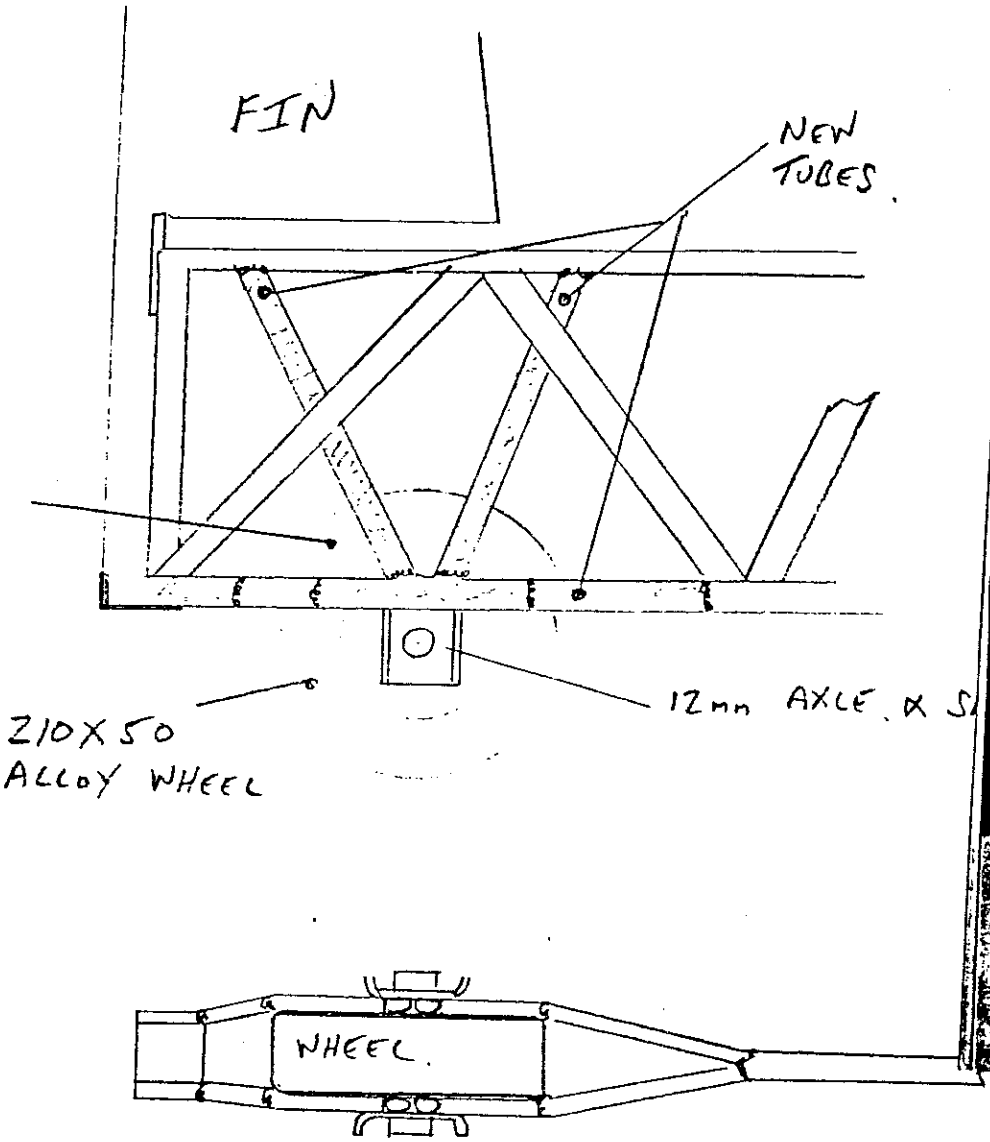
Issue 3
February 1993

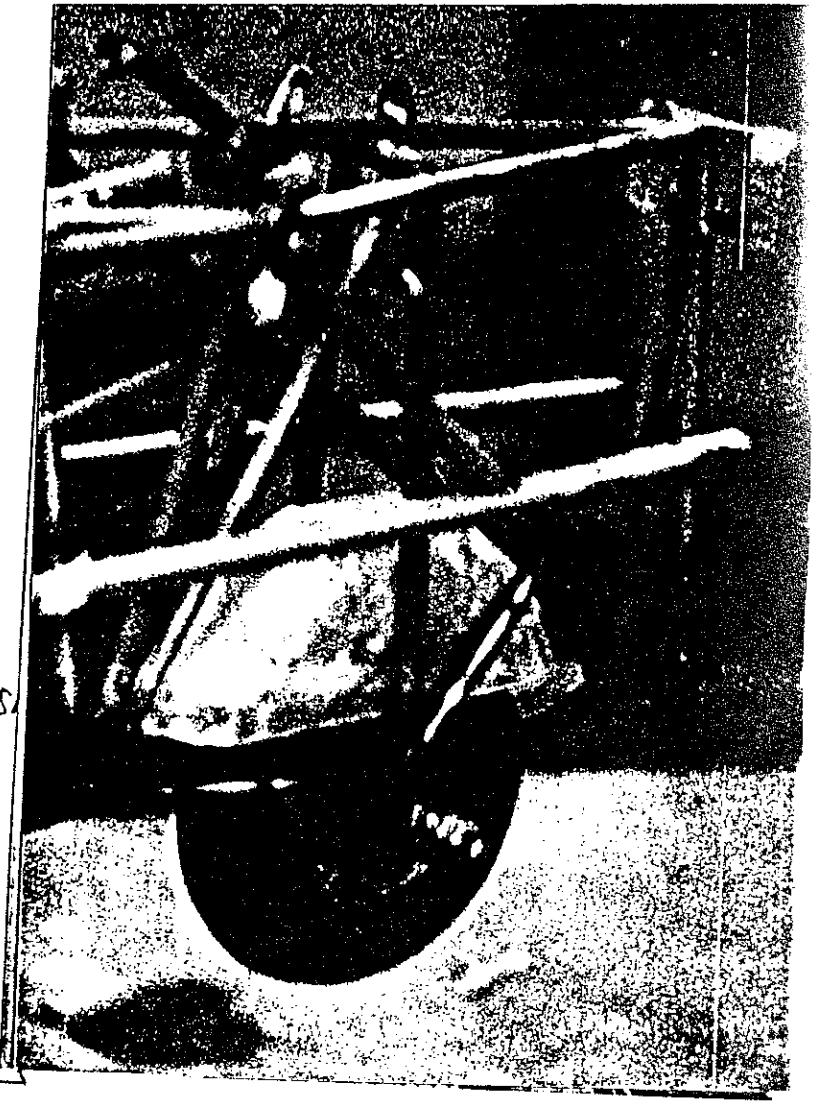
SCHEMPP-HIRTH MOTOR GLIDERS

PART 1 – LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
85–164	Propeller mounting – Failure of one strut in propeller mounting structure.	Applicable to Janus CM Serial Nos 2 to 6, 8 to 15 and 18. Compliance required as detailed in AD. Schempp-Hirth Technical Note No 809–1 also refers.
86–135	Fuel supply system – improvement. Maintenance Manual – replacement pages.	Applicable to Janus CM all Serial Nos. Compliance required as detailed in AD. Schempp-Hirth Technical Note No 809–3 also refers.
90–335	Elevator control system.	Applicable to Janus CM Serial Nos. 29 and 33 as detailed in AD. Compliance required as detailed in AD. Schempp-Hirth Technical Note No. 809–8 also refers.
92–360/2	Vertical elevator actuating rod inside the fin.	Applicable to Janus CM Serial Nos. up to 36 and Nimbus-3DM Serial Nos. up to 24 as detailed in AD. Compliance required as detailed in AD. Schempp-Hirth Technical Notes Nos. 809–9 and 847–4 also refer.

18" Tail Wheel





BGA Approval 1/ 8/11/93.

CAMBRidge G-C
K&8 Tailwheel.

LS6-c

2.10 MINIMUM EQUIPMENT LIST

1. Airspeed Indicator, scale 50-300 km/h (27-162 kts, 31-186 MPH)
   Colour marking see page 2-3 and example below.
   Approved types see Master Equipment List.
   Pressure pick-ups: Vertical tail fin pitot and lower forward fuselage side statics.

2. Altimeter in m (For Italy) or ft — See Master Equipment List in Maintenance Manual
3. Four piece seat belt harness
4. Magnetic compass *(For USA and Canada)*

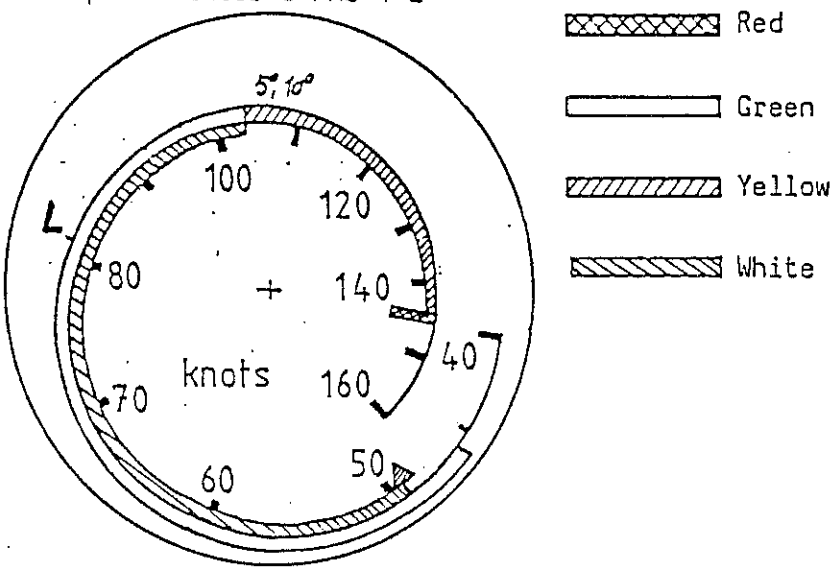
5. Back cushion or parachute in compressed form should not be thinner than 80 mm to 100 mm (3 to 4 in).
6. Checklist, type placard, data and loading placard, operating placards.
   For placards see pages 2-8 and Maintenance Manual chapter 10.
7. Flight Manual LS6-c.
8. When tail fin water ballast system is fitted:
   Remote indicating thermometer, approved types see Master Equipment List in Maintenance Manual.
   Vertical tail filling tube, for checking of tail fin tank valve

Additionally for cloud flying:

Airspeed indicator scale with 1 turn only,
scale 50-300 km/h (27-162 kts, 31-186 MPH)
Turn and Bank indicator
Compass, compensated in sailplane (Not for USA and Canada)
Variometer, range at least ±10 m/s (1970 ft/min, 19.4 kts)

Example of airspeed indicator colour marking :

Example: Winter 6 FMS 4-2



Erstellt: 18.Jan.93	Geprüft: 18. JAN. 1993

(6CFE2)

GROB LUFT- UND RAUMFAHRT	Service Bulletin TM 315-47/2	GROB G 103

This Service Bulletin substitutes the Service Bulletin TM 315-47, dated 22.04.1992.

Subject: Exchange of the airbrake over-centre lever P/N 103-4123/4124

Concerned: TWIN ASTIR S/N's 3000 - 3275
TWIN ASTIR TRAINER S/N's 3000 - 3275 (with suffix "T")

Urgency: latest at the next annual inspection, but latest 31 March 1993

Procedure: The exchange of airbrake over-centre lever P/N 103-4123/4124 is already provided within Service Bulletin TM 315-45 "Extension of Service Life" (refer to "Actions, item 4") during the 3000 hours inspection. Depending on reports of cracked airbrake over-centre levers, found during the 3000 hours inspection, an earlier exchange of the over-centre levers is mandatory as a precautionary measure (if not already performed).

Actions: The exchange of the airbrake over-centre levers must be performed according to the Repair Instructions No. 315-45/2 to Service Bulletin TM 315-45.

Material: The material incl. the Repair Instructions can be obtained from the manufacturer with the attached Purchase Order.

Weight and Balance: negligible

Remarks:
1. The exchange must be carried out by an authorized aviation work shop and has to be certified in the log book by an authorized inspector.
2. If the airbrake over-centre levers have already been exchanged during the 3000 hours inspection, accomplishment with this Service Bulletin has to be certified in the log book with reference to the Service Bulletin TM 315-45.
3. If you have sold your sailplane in the meantime, would you kindly pass this information on to the new owner and forward his name and address and aircraft s/n to us.

Mattsies, 20 January 1993 LBA approved

This Service Bulletin was originally written in German and approved by the German LBA on the 25 January 1993 and is signed by Mr. A. Skov. The translation has been accomplished to best of our knowledge and judgement. In case of doubt, the German original is authoritative.

Dipl.Ing. J. Altmann
(Airworthiness engineer certification staff)

DATUM / DATE	ERSETZT AUSGABE / ISSUE EDITION	BEARBEITET / PREPARED BY	MUSTERGEPRÜFT / APPROVED BY	SEITE / PAGE
20.01.1993	22.04.92	R.Vodermeier		1 of 1

5. Installation of an inspection hole according to Repair Instructions No. 306-30/2.

6. Inspection according to the Inspection Record "Extension of Life Time".

7. The following inspections (visual inspection, tapping) must be performed:

   a. wing root external:
      - wing/ fuselage attachment fittings secure in laminate
      - wing connecting bolts: wear, corrosion, deformation
   b. spar stub:
      - main spar spigot
      - spar pin fitting tight in laminate

Material: The Inspection Record and the material (for action 3) incl. Repair Instructions can be obtained from the manufacturer with the attached Purchase Order (please note the number of flight hours).

Weight and balance: Empty weight and the center of gravity must be determined newly (refer to Inspection Record)

Remarks:

1. The actions must be carried out by an authorized aviation workshop and have to be certified in the log book by an authorized inspector.

2. After inspection the completed Inspection Record must be filed in the airplane logbook, and a copy sent to GROB for evaluation.

3. If you have sold your sailplane in the meantime would you kindly pass this information directly to the new owner and forward his name and address and aircraft S/N to us.

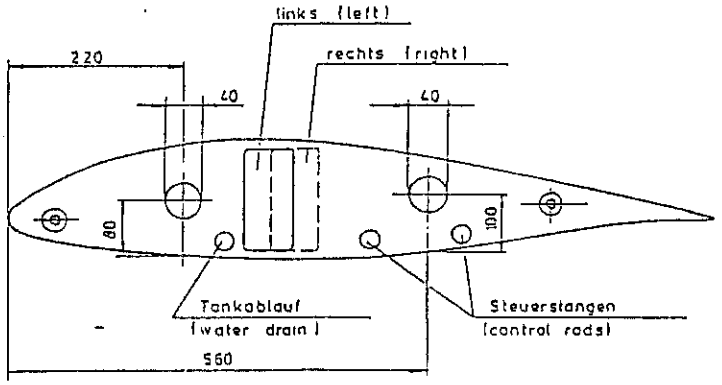
Mattsies, 09 September 1992

LBA approved
The German original of this Service Bulletin has been approved by the LBA on the 25 Jan. 1993 and is signed by Mr. U. Kopp.
The translation has been accomplished to our best knowledge and judgement. In case of doubt, the German original is authoritative.

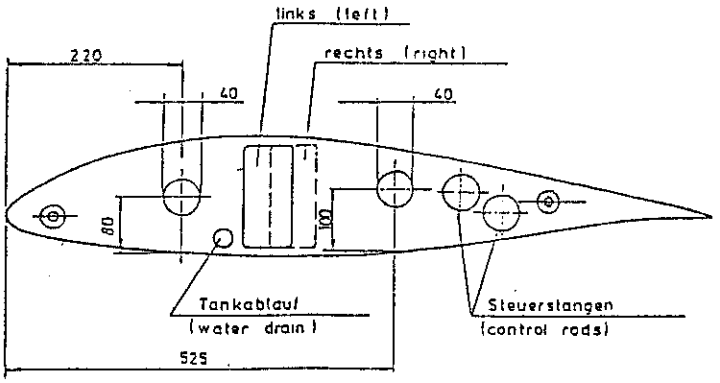
Dipl.Ing. J. Altmann
(Airworthiness engineer Certification staff)

2. Installation of inspection holes in the root rib (if Service Bulletins TM 306-18, TM 306-23 or TM 306-24 are not performed)

ASTIR CS, ASTIR CS 77, ASTIR CS Jeans



STANDARD ASTIR II, CLUB ASTIR II



3. Exchange of the elevator lever No. 102-3543 according to Repair Instructions No. 306-30/1.

4. Check, if Service Bulletin TM 306-26 action 4 has been performed.
If action 4 has been not performed, the airbrake over-centre levers must be exchanged according to the Repair Instructions No. 306-26/2.

GROB LUFT- UND RAUMFAHRT	Service Bulletin TM 306-30	GROB G 102

ASTIR's EXTENTION OF LIFE.

This Service Bulletin substitutes the Service Bulletins TM 306-18 dated September,30 1981, TM 306-23 dated December,6 1983 and TM 306-24 dated February,22 1984.

Subject: Extension of service life

Concerned:

ASTIR CS	S/N 1001 - 1536
ASTIR CS 77	S/N 1601 - 1844
ASTIR CS JEANS	S/N 2001 - 2248
STANDARD ASTIR II	S/N 5001 - 5061 (suffix "S")
CLUB ASTIR II	S/N 5001 - 5061 (suffix "C")
STANDARD-ASTIR III	S/N 5501 - 5652 (suffix "S")
CLUB ASTIR III	S/N 5501 - 5652 (suffix "C")
CLUB ASTIR IIIb	S/N 5501 - 5652 (suffix "Cb")

Urgency:

1. Before reaching a service time of 3000 flight hours:
   - ASTIR CS, CS 77, Jeans: actions 2, 3, 4
   - STANDARD ASTIR II, CLUB ASTIR II: actions 2, 4
   - STANDARD/ CLUB III, CLUB III b: action 5
2. Before reaching a service time of 3000, 6000, 7000, 8000, 9000, 10000, 11000 flight hours:

   all models: action 6
3. Before reaching 9500, 10500, 11500 flight hours:

   all models: action 7

Procedure: The results of performed fatigue tests have shown, that the service life of GRP/CRP-sailplanes can be increased to a maximum of 12000 flight hours.

Actions: The airworthiness has to be demonstrated for each sailplane according to the established Inspection Record.

1. A revision of the Manuals will be performed during a new issue of the Flight and Maintenance Manuals.

DATUM / DATE	ERSETZT AUSGABE / ISSUE EDITION	BEARBEITET / PREPARED BY	MUSTERGEPRÜFT / APPROVED BY	SEITE / PAGE
09.09.1992		R.Vodermeier		1 of 3

LBA AD. 93-041 Confirms.

ROLLADEN-SCHNEIDER Flugzeugbau GmbH LBA-Nr.EB-4/I B-16	Technische Mitteilung Technical Bulletin	3040 No. 4033	Blatt 1/1 Edition 06.Jan.93

SUBJECT: Trim weight holder, bolted-on version

LS3 -
LS4 -

EFFECTIVITY: Sailplane models LS3 und LS4
Versions LS3, LS3-a and LS3-17: all serial numbers
Versions LS4 and LS4-a: all serial numbers

ACCOMPLISHMENT: Immediately

REASON: In several cases the trim weight holder according to drawing 4R8-19a) cracked or disintegrated in the welding region between base plate and fixture bracket

INSTRUCTIONS and MATERIALS:

1) Visual inspection of trim weight holder for cracks in the welding region between the sheet metal subparts, when cracks are detected, measure 3 must be performed immediately
2) Check sheet metal thickness of trim weight holder
3) Exchange trim weight holder made from 1 mm sheet metal against part no. 4R8-19c until Dec. 31, 1993.

Installation according to drawing 4BR-48 (unchanged)

For LS3 models only:
Several base plates have been welded directly to the pedal support bracket. Should cracks be detected in this case, contact manufacturer.

WEIGHT and BALANCE: Not affected

REMARKS: Accomplishment by national authority approved repair stations. Accomplishment must be checked by inspector and signed in logbook, for LS4 models also entered into TB-AD-Accomplishment List, page 14-1/2 (USA version page 6-1/2) of Maintenance Manual and signed by inspector.

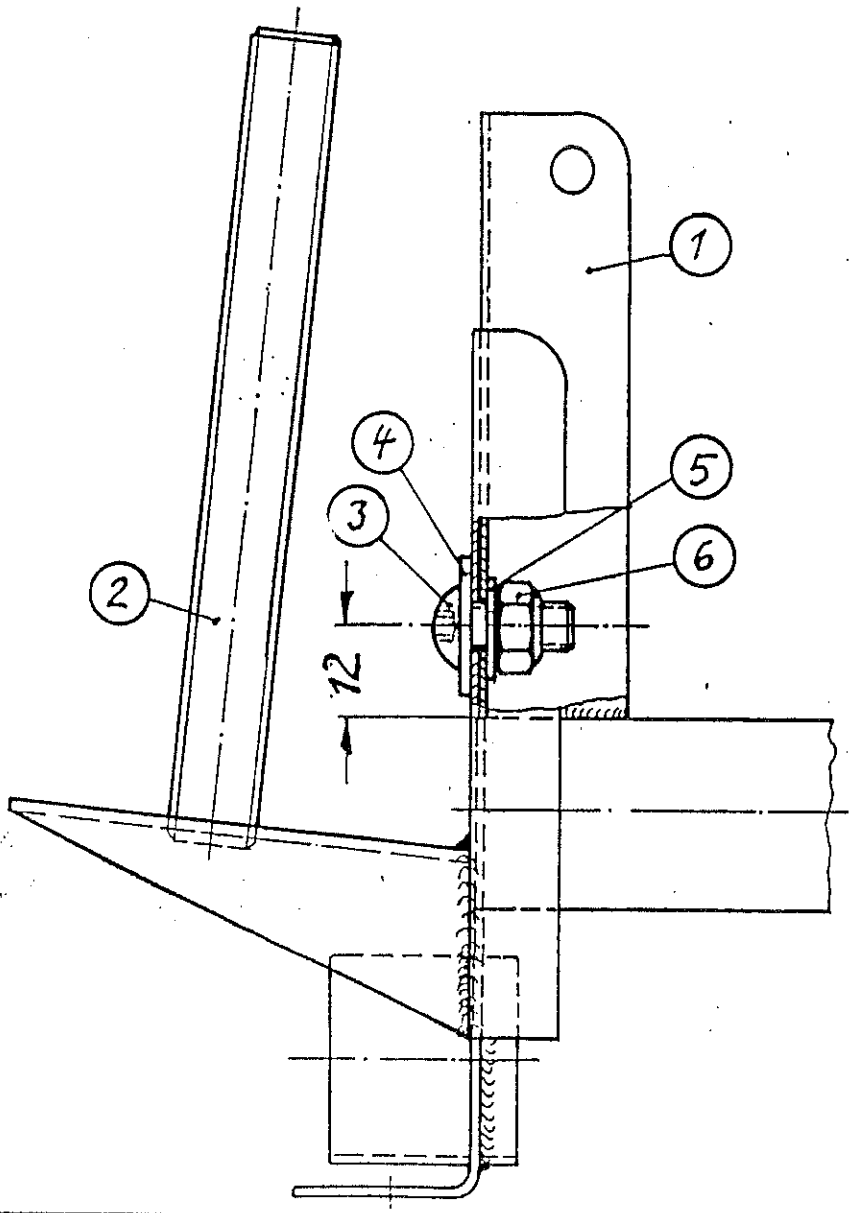
This Technical Bulletin is a mandatory LBA-approved Airworthiness Directive, No. 93-050

Erstellt: 06.Jan.93 Lauk	Geprüft: 6. JAN. 1993 Schaefer

06. 10. 82 Schaefer	Rolladen-Schneider Segelflugzeugbau	Maßstab: 1:1
	Datum / Name	Benennung: Montage Trimmbleihalterung / Fitting of trim weight attachment bracket	Zeichn.-Nr.: 4 BR - 48 a
Bea.	6.09.82 Zenker		
Gepr.		Schr	
Oberflächensch.:		Kommt vor: LS3, LS3-a, LS3-17, LS4	Ers. durch:
Rißprüfung:			Enst. aus:

Pos.	Stck.	Benennung	DIN/LN	Werkstoff	Zeichn.-Nr.	Sach.-Nr.
1	1	Pedalführungsbock			1R8-6a	
2	1	Trimmbleihalterung			4R8-19c	
3	1	Linsenschraube M6x16 oder	ISO 4380	10.9		
		Zylinderschraube mit niedrigem Kopf	DIN 7984			
4	1	Scheibe B6.4	DIN 9021	St		
5	1	Scheibe B6.4	DIN 125	St		
6	1	Sechskantmutter M6	LN 9348			

1 Pedal guide
2 Trim weight attachment bracket
3 Oval head screw M6x16 or hexagon head screw with low head
4 Washer 18mm outside diameter
5 Washer
6 M6 locking nut



a	12021	5293	Zenker
Zus.	Ä-M-Nr.	Dat.	Name

11/12/92
INS 1/2/93
3/4/93

AIRWORTHINESS DIRECTIVE

92-360/2 Schempp-Hirth

Date of issue:
08. Jan. 1993

Affected powered sailplanes and sailplanes:

SCHEMPP-HIRTH

Powered Sailplanes	Certificate-No.	Serial-Nos.
Janus CM Janus CT	809	up to 36 up to 19
Ventus bT Ventus cT Ventus cM	825	all up to 174 up to 84, 86 and 87
Nimbus-3T	831	all
Nimbus-3DT Nimbus-3DM	847	up to 55 up to 24
Discus-bT	863	up to 100

Sailplanes	Certificate-No.	Serial-Nos.
Standard Cirrus G	278	all
Nimbus-2B, -2C, -3 and -3/24.5	286	all
Janus B, C and Ce	295	up to 284
Mini Nimbus B & C	328	all
Ventus a, b, a/16.6 and b/16.6 Ventus c	349	all up tp 568
Discus a and b Discus CS	360	up to 446 up to 98
Nimbus-3D	373	up to 11

Subject:
Vertical elevator actuating rod inside the fin

Reason:
By coincidence of unfavourable circumstances, the rubber bellows sealing the vertical elevator actuating tube at the upper end rib of the fin may become filled with water, which -with the elevator secured in "fully up" position- may enter the steel tube through the telltale hole (for the threaded rod end) and accumilate at the lower end of actuating tube.
A failure of this control rod due to corrosion - directly above the welded seam of the U-shaped rod end - is therefore possible

Actions:
Perform a load test of the elevator control system in accordance with Schempp-Hirth Technical Notes.
If no objections can be raised as to the perfect function of the elevator control, then the change of the vertical elevator actuating tube be carried out in accordance with Schempp-Hirth Technical Notes.

Compliance:

1) Before the next flight perform a load test of the elevator control system. If objections can be raised as to the perfect function of the elevator control system, change the elevator actuating rod before the next flight.

2) If no objections can be raised as to the perfect funktion of the system, change elevator actuating rod as follow:

   a) year of manufacture: until 1987 and with tube thickness 0,5 mm
   at latest on June 30, 1993 X

   b) year of manufacture: 1988 and later and with tube thickness 0,5 mm
   at latest on December 31, 1993

   c) year of manufacture: all and with tube thickness 1,0 mm
   at latest on December 31, 1993

Technical publication of the manufacturer:

Schempp-Hirth Technical Note No.: 831-8 dated October 30, 1992 and No.: 809-9, 825-17, 847-4, 863-3 dated November 20, 1992 and No.: 278-33, 286-28, 295-22, 328-10, 349-16, 360-9, 373-5 dated November 19, 1992 which becomes herewith part of this AD and may be obtained from Messrs.

Southern Sailplanes
Membury Airfield
Lambourn
Berks
RG16 7TH
(0488 71774)

Accomplishment and log book entry:

Action to be accomplished by an approved service station and to be checked and entered in the glider's log by a licensed inspector.

Note:

This Airworthiness Directive supersedes AD-No. 92-360 dated November 12, 1992.

Nat.Corp. Uherské Hradiště

member of

Aero Trust of Czechoslovak Aeronautical Works Prague

Czechoslovakia

MANDATORY BULLETIN No. L 13/062

Effectivity: All gliders L 13 and L 13 A Blaník after they have flown 2.000 hours.

Reason: On one glider was during the operation investigate a crack fissure on the flange strap situated on the wing´s main spar lower flange in the area of the hinge.

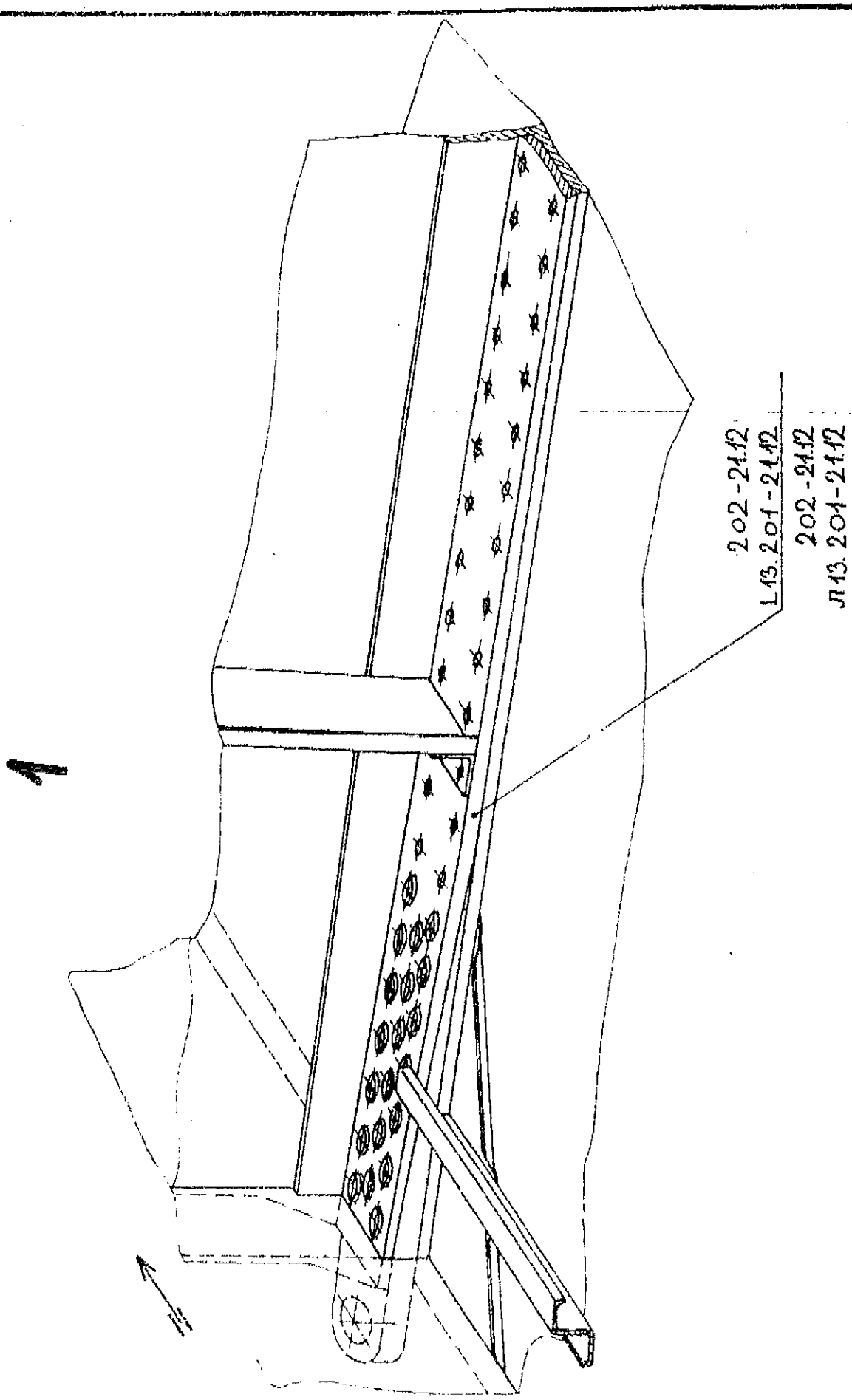
Description: An inspection of the flange strap and the visible parts of the wing span have to be carried out.

To be accomplished not later than:	By the next 50-hours periodical inspection.
To be accomplished by:	Check by user.
Cost covered by:	Not applicable.
Material availability:	Without material.
Validity:	Immediately after bulletin delivery.

Ing. Karásek	Ing. Lukas
Manufacturer	Customer's Representative
Ing. Olšan	Ing. Novák
State Aviation Inspection	Ministry of Foreign Trade

A. Accomplishment Instruction

1. Dismantle the wing of the fuselage.
2. Place the wing on suitable stands.
3. During the hole in the rib No. 1 put a lamp into the cavity of the wing behind the main spar.
4. Check the flange strap on the lower flange Dwg. No L13.201-21.12 /L13.202-21.12 for the right side/ and accessible parts of the spar's lower flange in the area between rips No. 1 - 3 for crack fissures /fig. No. 1/. Especial locate the places around the rivets, from where the crack fissure's direction of propagation to the flange strap is probable.
5. As far as there have not been found any crack fissures, attach the wing back on the fuselage.
   In case that you have found crack fissures, stop immidiately the operating with the glider, announce this fact to the manufacturer and wait at his standpoint.
   At the same time announce to the manufacturer following data about the glider's operation:
   - the number of take-offs and flight hours
   - the ratio between take-offs with winch and by towing aeroplane
   - the ratio between take-offs with extendend and inserted wing flaps
   - time ratio between double and solo flights
   - time per cent for flights by aerial aerobating trainings
   - who and when had been major overhaulings carried out



L13/062	Vypracoval Ing. Zajíc	Kontroloval	Schválil	List: 3 Listů: 3

SK 4

MTZ 32 S

AAIB Bulletin No: 2/93 **Ref: EW/G92/12/01** **Category: 1c**

Aircraft Type and Registration:	Slingsby T61A Falke, G-AYUR
No & Type of Engines:	1 Stark-Stamo MS 1500 piston engine
Year of Manufacture:	1971
Date & Time (UTC):	5 December 1992 at 1500 hrs
Location:	Strubby Airfield, Lincolnshire
Type of Flight:	Private
Persons on Board:	Crew - 1 Passengers - 1
Injuries:	Crew - None Passengers - Minor
Nature of Damage:	None
Commander's Licence:	Private Pilot's Licence
Commander's Age:	35 years
Commander's Flying Experience:	60 hours (of which 39 were on type) Last 90 days - 2 hours Last 28 days - 2 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

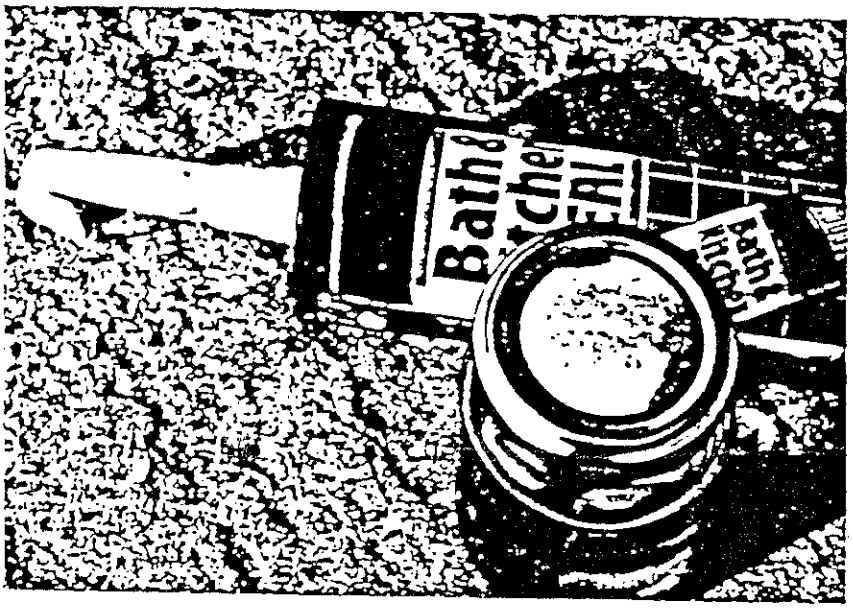
In order to reach the intended take-off area, the aircraft had to be taxied through a gap in a low fence. On approaching the gap, the pilot became concerned about the clearance between the aircraft's left wing tip and the fence. He stopped the aircraft and asked his passenger, who held a PPL, to leave the aircraft and walk beside the left wing tip to ensure adequate clearance from the fence. Egress from the Falke cockpit is between the wing leading edge and the propeller. The passenger who was seated in the right hand seat, left the aircraft and started to move towards the rotating propeller. The pilot immediately stopped the engine while shouting a warning, but was unable to prevent his passenger sustaining minor injury to his left hand caused by contact with the propeller.

GASIL
GENERAL AVIATION SAFETY INFORMATION LEAFLET
The Monthly CAA Accident Prevention Leaflet
February 1993

1. SILICONE SEALANT - AGAIN! P/E

Aircraft type : Auster AOP9, registration G-BDFH
Date : 3 May 1992

Extracts from *AAIB Bulletin.*



The aircraft suffered an engine failure during a transit flight and the aircraft force landed in a field causing damage to the landing gear.

A detailed examination of the aircraft fuel system revealed that the left-hand non-return valve was partially obstructed by a slug of rubbery material and this restricted the flow of fuel through the valve. The material was carefully examined and was found to have the general appearance of a silicone rubber compound which had become softened and swollen by prolonged contact with fuel. Further examination of the fuel system, and blowing the lines through with an air line, resulted in the forcible ejection of further pellets of similar rubbery material.

It was discovered that the left fuel tank gauge unit had been removed and then replaced some two years previously and it had been sealed with clear silicone rubber sealant, similar to that sold commercially as a domestic bath sealant.

CAA COMMENT:

Silicone rubber compounds of the type sold as bath sealants are not suitable for use in environments in which they are likely to come into contact with petroleum spirits. The material softens, sometimes dissolves, disbonds and swells, particularly in the presence of gasoline. A simple test carried out as part of the investigation showed that a disc of silicone rubber immersed in aviation gasoline for a period of 48 hours swelled to approximately twice its original size. Clearly, small beads of silicone sealant which drop off and find their way into fuel pipe work and valves do not only cause immediate obstruction, but the restriction will become more severe as the material swells over a period of time.

CONTENTS

CAA

15. CARE OF PASSENGERS

P

Aircraft type : Slingsby 61 Motorglider (also see AAIB Bulletin)
Date : December 1992

The pilot taxied the aircraft to the side of the control tower where he had arranged for a low fence to be dropped to allow the aircraft through. He was unhappy about the left wing clearance so he asked the passenger to leave the cockpit and to walk with the left wing. The pilot did not stop the engine since the passenger was an experienced power pilot used to working near aircraft. He left the cockpit, turned to his right and walked into the propeller from the rear. The pilot shouted a warning and shut down the engine but it was too late the propeller had struck the passenger and broken his arm.

Aircraft type : Microlight
Date : June 1992

The pilot did not notice that his passenger was wearing a scarf. During the flight, the scarf came off and tangled around the engine pulley and split the drive belt to the propeller. The pilot switched off the engine and glided safely down into a field. (This particular type of microlight was fitted with a pusher propeller behind the pilot and passenger.)

CAA COMMENT:

Pilots must never forget that they are totally responsible for the safety and well-being of their passengers. In the second case quoted above, it was indeed fortunate that the passenger was not strangled by the scarf. Safety Sense Leaflet No 2A, Care of Passengers, explains in detail the pilot's responsibilities for their passenger and the ways in which they can make the passenger's flight an enjoyable and worthwhile experience. Copies of this leaflet are available from Printing and Publication Services at Cheltenham whose address is shown at the bottom of page 2.

9. ICE IN FUEL FILTERS

P/E

Aircraft type : Piper PA23 Aztec
Date : December 1992

It was reported to the engineer that fuel was leaking from the left-hand fuel filter.

Investigation revealed that the filter was full of water which had frozen, forcing the filter apart allowing fuel to leak. The filter bowl on the left-hand side was completely full with an ice block and the right-hand bowl was half full of ice.

Both filter bowls were scrapped due to a high degree of corrosion.

CAA COMMENT:

Here is yet another hazard of water in the fuel. As everyone knows, when water freezes, it expands, and there is thus a likelihood of a pipe or hose splitting under the pressure or, as in this case, forcing a filter unit apart.

QUOTAM

"Accidents happen because men are foolish and reckless, and negligent and lazy. Sometimes, because there isn't enough money for what they want to do. One crash in a hundred may have been

AAIB Bulletin No: 3/93 **Ref: EW/G92/11/17** **Category: 1c**

Aircraft Type and Registration:	DH82A Tiger Moth, G-AJTW	
No & Type of Engines:	1 De Havilland Gipsy Major Series 1 piston engine	
Year of Manufacture:	1939	
Date & Time (UTC):	21 November 1992 at 1326 hrs	
Location:	Tibenham, Norfolk	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 1
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Damage to propeller, left main landing gear leg oleo, engine cowlings and rudder	
Commander's Licence:	Private Pilot's Licence	
Commander's Age:	45 years	
Commander's Flying Experience:	454 hours (of which 373 were on type) Last 90 days - 19 hours Last 28 days - 7 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

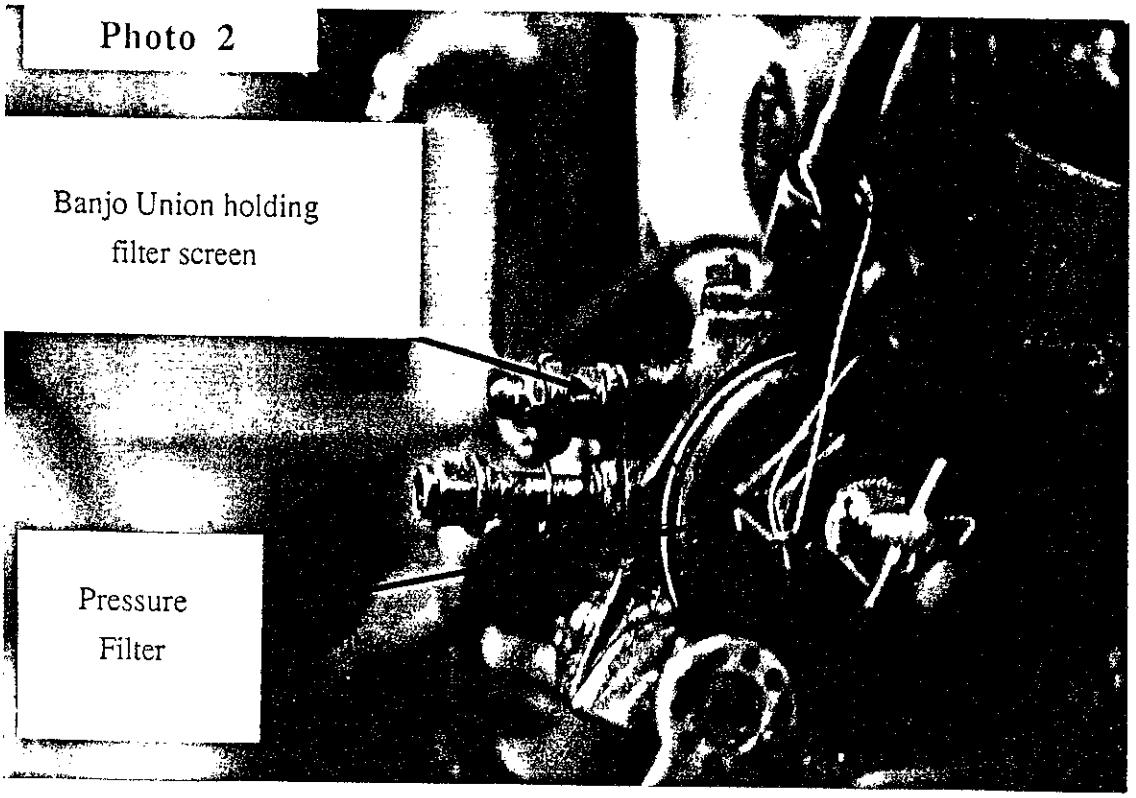
The aircraft was on a base leg for landing at Tibenham airfield when the engine stopped, picked up for a moment, then stopped finally. The failure was sudden and unexpected at 300 feet, and the propeller had stopped rotating before touchdown. The pilot continued the forced landing approach straight ahead, and as no usable area of asphalt surface was reachable the forced landing took place on farmland. After touchdown the aircraft rolled for about 20 metres and then nosed over due to the waterlogged nature of the field, and came to rest inverted. The pilot released himself and then assisted his passenger to unstrap and leave the aircraft.

An engine strip revealed that both spiral gears in the magneto drive had worn to the extent that the drive had failed, see photo 1. Oil is fed to the driving spiral gear by jet, and then drops onto the driven spiral gear where it collects in a hollow so that the gear runs in an oil bath. The oil pipe supplying the jet contains a filter screen inside the banjo union on the pressure filter, see photo 2: the filter screen was found to be blocked preventing the supply of oil to the magneto spiral gears. The gauze filter screen is not called up for any scheduled inspection.

Other instances of failure of the oil supply to the magneto gears have been noted due to the blockage of the jet.

Safety Recommendation

93-10 It is recommended that the CAA introduce an inspection of the magneto gear oil supply filter screen and oil jet at the next appropriate inspection and subsequently at intervals to be determined by experience. (Issued 22 February 1993)



TNS 3/4/93

Northumbria Gliding Club

Tel. No. 091 385 5515

10, Castlefields,
Bournmoor,
Houghton-le-Spring,
Tyne and Wear.
DH 4 6 HH

Dear Dick,

Ka 7 Airbrake - glueline failure

Please find enclosed diagrams which illustrate a problem found on the Club Ka 7 last weekend.

The problem will not show itself on a 'normal' DI, it is not easy to see the glue line involved and the airbrake will work well on the ground, so pre flight checks give no warning of what is to happen in flight.

Once airborne, the airbrakes function if opened up to half way but some 'stiffness' may be experienced when it comes to closing them. This is caused by the glue failure allowing the plywood to be deformed by the airflow, allowing it to rub against the inside of the brake box.

This is bad enough, but is nothing compared to what happens when the brakes are fully opened. The plywood is deformed sufficiently to ensure that it strikes the recess of the brake box, and no amount of pressure on the brake lever will free it. The airflow ensures that it cannot return. The brakes are now locked out, and an out landing or undershoot situation is almost inevitable.

I believe that Ka 7, Ka 8 and Ka 13 have similar airbrake constructions and may need careful checking now and at each C of A, if not at each DI.

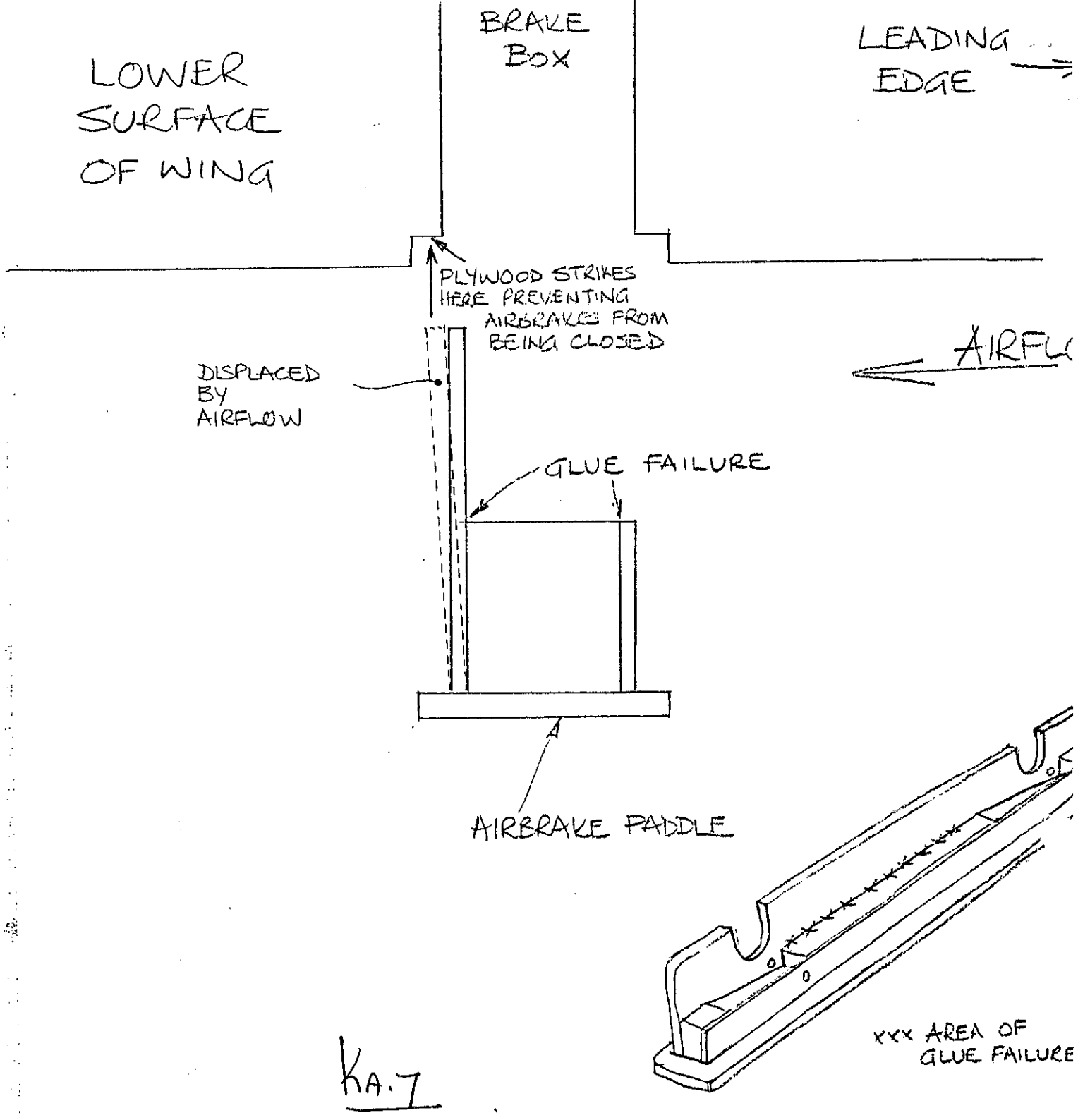
I hope that the diagrams are clear enough, if not please let me know and I will try to illustrate the problem in another way.

Regards,

Yours sincerely,

John Graham
I/C/855ME

PTO →


LOWER SURFACE OF WING
BRAKE BOX
LEADING EDGE
PLYWOOD STRIKES HERE PREVENTING AIRBRAKES FROM BEING CLOSED
AIRFL
DISPLACED BY AIRFLOW
GLUE FAILURE
AIRBRAKE PADDLE
xxx AREA OF GLUE FAILURE

KA.7

Luftfahrt-Bundesamt
D-3300 Braunschweig

Airworthiness Directive

Translation of the "Lufttüchtigkeitsanweisung" (LTA). In case of any difficulty, reference should be made to the German original issue.

93-001 L'Hotellier

Date of issue:03.03.1993

Affected aeronautical equipment:
L'Hotellier ball and swivel joints

- all sailplanes and powered sailplanes equipped with l'Hotellier ball and swivel joints with lock plates.

Subject:
Inspection and Modification of l'Hotellier quick release attachment

Reason:
Reported incidents involving l'Hotellier ball and swivel joints have prompted the LBA to have investigations made as to the operational safety of l'Hotellier ball and swivel joints.

The results have shown that the friction surfaces of the lock plates will be run in and smoothened after a relatively small number of operations. As has been demonstrated in the tests, in this case even normal operating conditions are sufficient under unfavourable circumstances to surmount the static friction (i.e. the lock plates open).

Action and compliance:

Compliance: following actions must be accomplished not later than March 31, 1993

The ball and swivel joints with lock plates must be secured. For this purpose, the following actions are to be accomplished:

1) If the joints are not yet equipped with safety pins (e.g. l'H 140-31 made by Hotellier), these safety pins have to be retrofitted. In certain cases it may become necessary to rebore the hole in the lock plate, which is provided for visual inspection, to ø 1.2 mm so that the safety pin can be inserted (see figure 1).

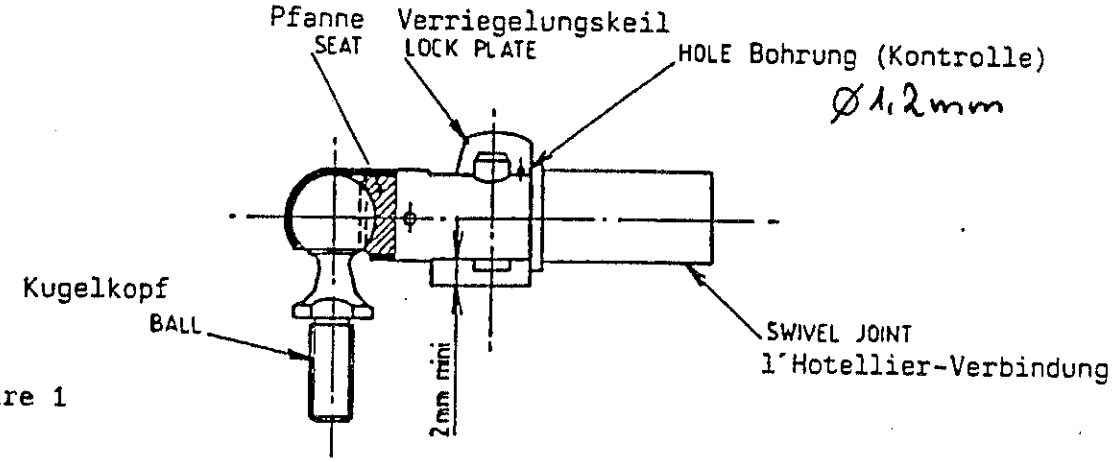


figure 1

Insertion of a safety pin is not applicable for l'Hotellier ball and swivel joints which are already equipped with other approved locking systems (e.g. Uerlings sleeve or LS-safety sleeve), or if such system are newly installed.

LBA-approved locking systems for l'Hotellier ball and swivel joints are:

a) Uerlings sleve (no figure)

b) safety pin (see figure 2 and 2a)

c) LS safety sleeve (see figure 3)

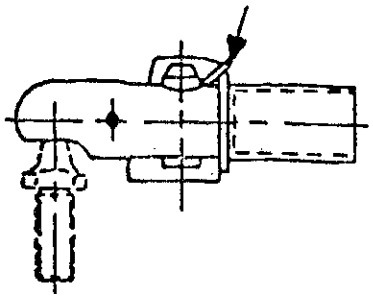


figure 2

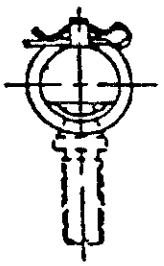


figure 2a

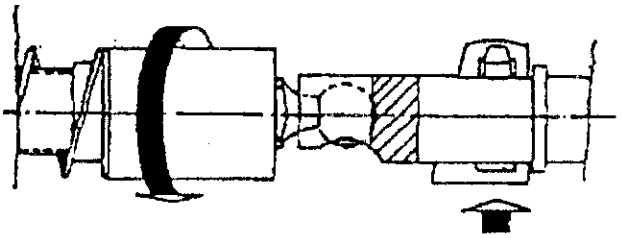


figure 3

Uerlings sleeves (specification number SE-00I/78) as well as LS safety sleeves can only be installed for straight joints and transmissions, but cannot be used for 90° joints.

2) Flight Manual

Section "Rigging"

a) The recommendation given in several Flight Manuals that the lock plate of l'Hotellier ball and swivel joints "should be secured" is to be deleted and to be replaced by the following sentence:

"The l'Hotellier ball and swivel joint must be secured."

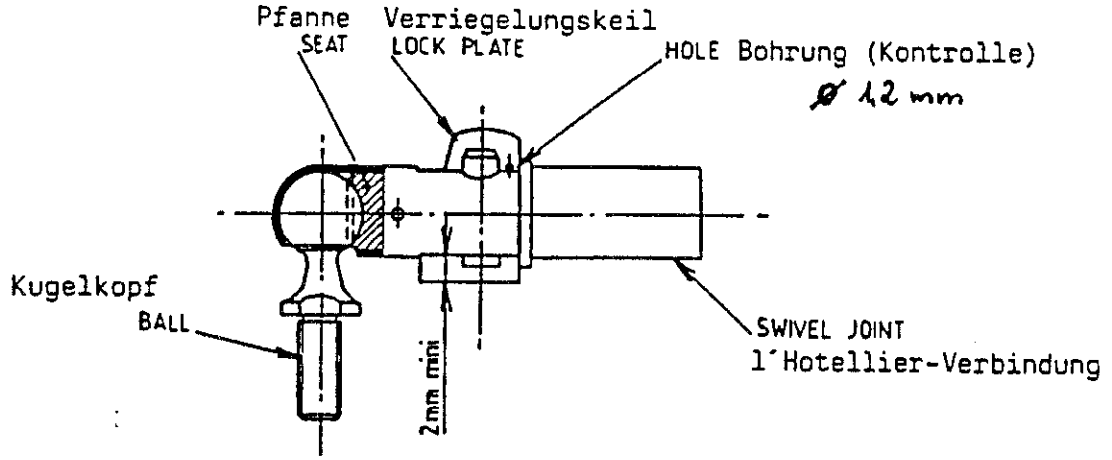
b) If older Flight Manuals do not contain information on l'Hotellier ball and swivel joints, the following paragraph (probably on a new page) is to be included in the Flight Manual under the Section "Rigging", if the l'Hotellier joint is or is to be secured by means of a safety pin:

Hotellier Ball and Swivel Joints

Prior to installation everyone should familiarize with the functioning of Hotellier ball and swivel joints.

The swivel is to be slid completely over the ball with the lock plate pressed down. During locking the lock plate moves back slightly so that in a correct joint the hole on the narrow edge of the lock plate becomes visible.

The safety pin is to be inserted in this hole thus securing the ball and swivel joint.



Warning:
Unsecured ball and swivel joints may open automatically in flight.

These entries in the Flight Manual can be made in writing or as a copy indicating the AD-No. 93-001.

Entry in the list of effective pages is to be made indicating the AD-No. 93-001.

3) Maintenance Manual
The enclosed Instructions for Maintenance (l'Hotellier, issue B 01/89) become herewith part of the operating instructions and are to be included in the Maintenance Manual for the sailplane or powered sailplane - as far as this has not been done already by the manufacturer of the sailplane or powered sailplane concerned.

4.) All l'Hotellier ball and swivel joints are to be inspected in accordance with the above Instructions for Maintenance. Joints exceeding the allowable tolerances are to be replaced.

LTA-Nr.: 93-001

1- PREVENTIVE AND SAFETY MAINTENANCE

The action of the ball within the swivel should be a drag load.due to minimum friction. To this end, the ball and swivel joint should be lubricated. Lubricant shall be applied after cleaning the parts, before their assembly, using non cold-setting grease.

e.g. : ESSO GENERAL PURPOSE SPRAY CONTAINING SILICONE ENRICHED OILS (recommended for units exposed to sand and grit).

After each installation make sure that the ball is safely engaged into the swivel. A pilot hole is provided in the lock plate to this end. When the connection is true, the hole can be seen and pin " B ", part reference L'H 140-31, or other items (integral only with the lock plate), may be fitted.

2- SCHEDULED INSPECTION

During yearly overhaul, or once every 500 flight hours, whichever comes first, check the balls and swivels. Proceed as follows :

2-1 Determine ball concentricity (See Fig. 1)

The maximum permissible deviation between ball shaft and sphere is 0.05mm. This check aims at detecting any buckling of drive rods.

2-2 Determine ball sphericity (See Fig. 2)

The variation between a number of spherical diameter readings shall not exeed 0.05mm. This check aims at detecting any abnormal ball fretting.

2-3 Check condition of threaded parts of ball

No thread should show any damage. On assembly, the collar should safely rest on its base. The ball shall be secured by an adequate locking device.

2-4 Visual inspection of swivel joint

The swivel should show no sign of distorsion or peening in the recess where the ball fits, or at the seat and locking system. The aim of such inspection is identical to that of § 2-1

2-5 Projection of lock plate bottom after fitting ball into swivel joint

(refer to drawing)

The projection shall exceed 2mm. The aim of this requirement is identical to that of § 2-2.

2-6 Check attachment of drive rod and swivel joint

When the swivel is adjustable, check that the attachment of drive rod and swivel is tight and secured by an adequate locking device.

2-7 Check the operation of swivel after assembly

There should be no binding of seat or lock plate due to oxidation or to any other reason.

Date

Rev.

TECHNICAL DATA
-N° IM.10.01A
ISSUE B 01/89

INSTRUCTIONS FOR THE MAINTENANCE
L'HOTELLIER BALL AND SWIVEL JOINTS

E08

LTA-Nr.: 93-001

In case any of the above 7 checks is not within allowance, the ball and swivel joint shall be removed and replaced with a new unit. It is anyway recommended to replace ball and swivel joints once in 10 years, or after 3000 hours of flight.

IMPORTANT NOTE

Defective parts may be returned for TECHNICAL INVESTIGATION TO Ets Louis L'HOTELLIER

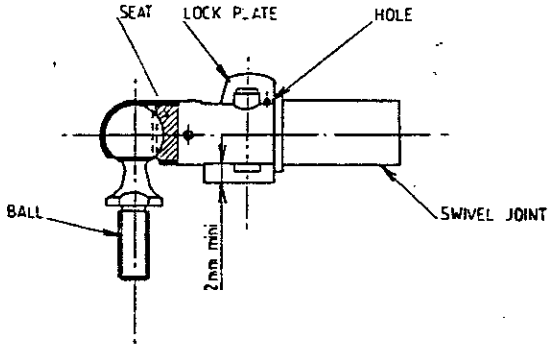


FIG.1

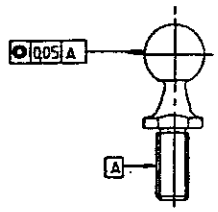
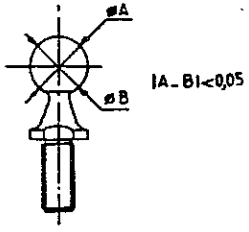


FIG.2



Date

Rev.

Louis L'HOTELLIER S.A.
10, Rue de l'Abbé Glatz - 92270 Bois-Colombes FRANCE
Tél. 42.42.13.94

GROB LUFT- UND RAUMFAHRT	**Service Bulletin TM 315-53**	**GROB G103C**

Subject: · **Installation of a manual control for the rudder**
· **Installation of a gate-stop device for the airbrake operating lever**

Concerned: G 103 C TWIN III ACRO, all S/N's
G 103 C TWIN III, S/N 36001 - 36014

Urgency: optional

Procedure: The optional installation of a manual control for the rudder and of an airbrake operating lever gate-stop device is offered, to make it possible for disabled pilots to fly the G 103 C TWIN III ACRO and the G 103 C TWIN III.

Actions:
1. The modification must be performed in accordance with the following drawings:
   · No. 103C-2000: "Fuselage"
   · No. 103C-4750: "Controls in the fuselage"
   For the G 103 C TWIN III ACRO, S/N 34101 - 34170, also the Service Bulletin TM 315-48, Action 1 (Modification of the rudder pivoting) is a mandatory action.
2. An additional placard must be installed in the front cockpit (refer to the MM TWIN III ACRO page 9.7, No. 22 or TWIN III page 9.6, No. 21)
3. In the Manuals has to be included:
   · **TWIN III ACRO:**
   - Flight Manual Revision 4 (4/ 14.01.93), including Supplement No. 1
   - Maintenance Manual Revision 4 (4/ 14.01.93)
   · **TWIN III:**
   - Flight Manual Revision 1 (1/ 14.01.93), including Supplement No.1
   - Maintenance Manual Revision 2 (2/ 14.01.93)

Material:
1. The pages of the Manuals are supplied with this Service Bulletin.
2. The material for the modification is supplied by GROB.

Weight and Balance: After the modification the Empty Weight and the Center of Gravity must be determined.

Remarks:
1. The installation will be performed only by GROB and has to be certified in the logbook by an authorized inspector.
2. Both versions must be included into production acceptance or annual inspections. A corresponding note has to be included into the inspection certificate.
3. If you have sold your sailplane in the meantime, would you kindly pass this information on to the new owner and forward his name and address and aircraft S/N to us.

Mattsies, 14 January 1993

LBA approved:

This Service Bulletin is originally written in German and approved by the German LBA on the 11 February 1993 and is signed by Mr. A. Skov.
The translation has been accomplished to the best of our knowledge and judgement. In case of doubt, the German original is authoritative.

Dipl.Ing. J. Altmann
(Airworthiness engineer certification staff)

DATUM / DATE	ERSETZT AUSGABE / ISSUE EDITION	BEARBEITET / PREPARED BY	MUSTERGEPRÜFT / APPROVED BY	SEITE / PAGE
14.01.1993		R. Vodermeier		1 of 1

GROB LUFT- UND RAUMFAHRT	Service Bulletin TM 315-52	GROB G 103C TWIN III ACRO

Subject: **Installation of canards for spin training**

Concerned: G 103 C TWIN III ACRO, all S/N's

Urgency: optional

Procedure: At forward to middle flight weight C.G. positions the sailplane cannot be spun through more than 1 or 2 turns, even though the deflection of the control surfaces are fully in the spin direction. To perform spin training, a nose up moment must be created. This can be achieved by installing the canards.

Actions:

1. The mounting support of the canards has to be installed according to drawing No.103B-7201/ 7202 "Entenflügel links/ rechts".
2. The Supplement No. 2 has to be included into the Flight Manual, Section 9.

Material:

1. The material for installation of the canards can be ordered from GROB.
2. The pages of the Flight Manual are supplied with the Service Bulletin.

Weight and Balance: The payload must be reduced by the weight of the canards and of the attachment parts (approx. 2.5 kg). Further weighing and determination of the C.G. must be performed without canards.

Remarks:

1. The installation of the canards can be performed by a competent person or an authorized aviation work shop and has to be certified in the logbook by an authorized inspector.
2. If you have sold your sailplane in the meantime, would you kindly pass this information on to the new owner and forward his name and address and aircraft S/N to us.

Mattsies, 14 January 1993

LBA approved:

This Service Bulletin is originally written in German and approved by the German LBA on the 25 January 1993 and is signed by Mr. A. Skov. The translation has been accomplished to the best of our knowledge and judgement. In case of doubt, the German original is authoritative.

Dipl.Ing. J. Altmann
(Airworthiness engineer certification staff)

DATUM / DATE	ERSETZT AUSGABE / ISSUE EDITION	BEARBEITET / PREPARED BY	MUSTERGEPRÜFT / APPROVED BY	SEITE / PAGE
14.01.1993		R. Vodermeier		1 of 1

TR & SLMG FLIGHT MANUALS

AIRCRAFT FLIGHT MANUAL OR ALTERNATIVE DOCUMENT **APPENDIX TO FORM AD 200**

Section A and B should be completed by the applicant at the time the application for renewal is made.

It is essential that Section A be completed in full as this Appendix will be detached from the body of form AD 200.

When the applicant is satisfied that the Flight Manual/Owners Manual/Pilots Operating Handbook is complete and correct the declaration in Section C should be signed.

he document Reference and Revision standard will be checked against the CAA records, if the document is acceptable, eceipt will be acknowledged and no further action by the applicant will be required.

If there are any additional requirements the Appendix will be returned to the applicant with details annotated in Section E. The corrective action should be taken and arrangements made for the Appendix and Flight Manual Document to be checked by the Surveyor at renewal of the Certificate of Airworthiness.

This Appendix should be submitted with the application, if possible. However, if the Flight Manual is not available the Appendix may be submitted at a later date, but we would point out that this may result in a delay in the renewal procedure.

SECTION A Applicant's Name		Tel No:	
Aircraft Type/Designation	Series	Registration Mark	Serial No.
SECTION B Flight Manual/Owners Manual/P.O.H. Document Reference:			
General Amendments/Revisions			
Particular Amendments/Supplements/Appendices/Change Sheets (Please insert date and/or Revision Standard)			
Advance Amendment Bulletins/Temporary Revisions			

SECTION C

It is the Applicant's responsibility to ensure that, not only is the document and revision standard correct, but also that it has been page checked to ensure its completeness.

DECLARATION

I declare that to the best of my knowledge and belief the subject Flight Manual represents the type and modification standard of the above aeroplane at this time.

Date ..... Signature of Applicant .....

YOUR ATTENTION IS DRAWN TO SECTION D OVERLEAF

SECTION D FOR CAA USE ONLY

The Flight Manual/Owners Manual/Pilots Operating Handbook as defined in Section B conforms/does not conform to the Approved Master Document and is therefore acceptable/not acceptable to the Civil Aviation Authority.

Date Signature Tel. No.

Records Actioned	
SECTION E FOR CAA USE ONLY The Flight Manual/Owners Manual/Pilots Operating Handbook for this aircraft as defined overleaf is incorrect. The correct document should be: The correct revision standard for this document is:	
The Flight Manual/Owners Manual/Pilots Operating Handbook defined in Section B is incomplete in respect of the following amendments etc. These must be obtained and embodied before renewal of the Certificate of Airworthiness.	
The following Amendments/CAA Change Sheets/CAA Supplements are included for embodiment in the above Flight Manual/Owners Manual/Pilots Operating Handbook:	
The following documents are not CAA approved and your attention is drawn to the requirement to provide the CAA with five copies as specified in BCARs for consideration towards approval	
SURVEYOR AT RENEWAL The corrective action * 1 is being taken by the company/owner. 2 has been taken. **delete as appropriate*	Surveyor ..... CAA Area Office ..... Date ..... Please return completed form to A & C Section