BRITISH GLIDING ASSOCIATION

BGA TECHNICAL COMMITTEE

TECHNICAL NEWSHEET TNS 11/12/92

PART 1 Airworthiness "AGGRO" Please refer to the BGA 1992 Red Pages.

1.1. Grob G.109's Carburettor Hot Air Controls should be checked periodically to ensure that both shutter valves are synchronised, and effectively shut off the hot air to each carburettor. (When hot air is not required). Power loss will result if one carburettor runs "HOT" and 1 "COLD" - ! (RAFGSA Bicester).

(FLIGHT MANUAL STATIC RPM should be 2700 100 RPM

1.2. MTV (Electric) Propellers with Govenor, as fitted to some Taifun 17E's. LBA A/D 92-367 (herewith) may have been sent by CAA to registered owners, for action.

1.3. Grob G.109B (S.No. 6200 up) - Drain Holes in Elevator and in TRIM TAB. LBA A/D 92-350 (herewith) re-enforces TM 817-35 notified in BGA TNS/9/10/92.

1.4. Grob G.103 Twin 3 (SLMG) Transmission Drive Pin failure. LBA A/D 92-354 (herewith) applies to SLMG version not yet seen in the UK!

also :-

LBA A/D 92-352 (herewith) refers to Drive Belt failure!

1.5. RF5 & RF5B Speed Brake Bolts damaged. LBA A/D 92-351 (herewith) refers.

1.6. G.109 / G.109B Exhaust System Leaks. TM 817-32 herewith refers, and recommends the introduction of "DEAD STOP" CO2 Detectors, available from Pilot Shops etc. CAA Airworthiness Notice No. 40 refers and the Light Aircraft Maintenance Schedule (LAMS) requires heat exchangers to be pressure tested.

1.7. ASTIR's (single/twin/all variants). TM 306/315/320/817 (herewith) requires inspection of AIRBRAKE STOPS.

1.8. G.109's Fuel Cock Seals. SB. TM 817-23/1 (herewith) requires replacement by a new seal to be supplied to all G109 customers. (This is the second replacement action).

1.9. Nimbus III (T), Discus, Ventus & Mini-Nimbus. Elevator actuating vertical drive tube failure due to corrosion in tubes manufactured without drain holes, in the lower end of the tube.
(Nimbus - 3T Rods To Be Replaced ref T/Note 831-8).
(Reported to the IGC Meeting in Poland Oct 92).

Vertical drive tubes without drain holes must be inspected as soon as possible, and modified or replaced. (Leaflet herewith).

1.10. Puchacz Asymmetrical Air Brake. Wing Root Gearbox failed.
(Reported by Coventry G.C.).

1.11. RF3 Series. Mandatory Inspections & Modifications.
The last issue of CAA Foreign A/D's is attached herewith.

1.12. Extracts from GASIL's (herewith) include:

1) Contaminated Fuel Bowser Installation. The Air Navigation Order Article 87 places a legal responsibility on "a person who has the Management of any aviation fuel installation on an aerodrome in the UK .....".
How frequently is the quality of your fuel supply checked, by whosoever is entrusted with its Management?

2) MOGAS - how clean is your supply?

3) Incidents reported on:
a) G.109B - Cyprus - Hole blown in cylinder.
b) IS 28M2A - Doncaster - damaged u/c.

4) G.P.S. - including installation Compass errors!

1.13. a) Elevator Disconnects, (KA7) , found disconnected after a normal landing. (RAFGSA).

b) LO100. Elevator not correctly connected, Pilot abandoned by Parachute - (Deeside G.C.).

BOTH THESE INCIDENTS RE-ENFORCE THE IMPORTANCE OF THOROUGH DAILY INSPECTIONS!

1.14. CAA Airworthiness Directive updates, for the following SLMG types are attached herewith, for action a.s.a.p.

a) SZD 45 OGAR.
b) MT Propellers.
c) RF3, 4, & RF5.
d) GROB G.109 Series.

1.15. PILOT PARACHUTE POTENTIAL (FATAL) FOUL UP!
Photograph from RAFGSA illustrates the problem. Please display on Club NOTICE BOARD!!

1.16. Aero-Tow Combinations are legally limited to 150 metres overall length, by Article 41 of the ANO. The longer the rope the less chance of a "Tug-Upset". Advice from John Gibson (Blackpool & Fylde G.C.).

PART 2 GENERAL MATTERS

2.1. COBRA CG Tow Hook modification has been developed by Anglia Sailplanes and approved by BGA.

2.2. CLUB TECHNICAL OFFICERS Please make BGA TNS's available for information to your Club members., to whom you have a responsibility to keep them informed of airworthiness related problems.

2.3. Inspector Renewals (£17.50) Positively the last chance to avoid ex communication from the 1993 list of renewals!

HAPPY XMAS and a More Prosperous New Year to all BGA Inspectors, Club Technical Officers, and all other customers of the BGA's unique Airworthiness system.

Dick Stratton
Chief Technical Officer

GROB LUFT- UND RAUMFAHRT	Service Bulletin TM 817-32	GROB G 109 G 109B

Subject: Inspection of the exhaust system

Concerned: G 109/ G 109B all S/N's

Urgency: Within the next 25 flight hours or by 31.12.1992

Procedure: After long service, some isolated leakage has been detected on G 109/ G 109B exhaust systems.

Actions: To prevent exhaust fumes leaking into the cockpit through the heating system an inspection is mandatory:

1. The exhaust system must be carefully checked and inspected visually, with the heat exchanger removed, for obvious leakage (cracks, corrosion, especially in the area of the welds, connections and fastenings) according to the above urgency.

2. The inspection will become part of the "Periodic Inspections" and has to be repeated during each 100 flight hours inspection.
   If leaks caused are detected, the exhaust system must be replaced immediately.
   For possible repairs of minor corrosion damage contact GROB.

3. The concerned pages of the Maintenance Manual will be corrected during the next revision.

Weight and Balance: not affected

Remarks:

1. In general the installation of a carbon monoxide detector (e.g. DEAD STOP order no. 45.146, Friebe Flugbedarf company) in the cockpit is recommended.
2. The first inspection must be carried out by a competent person or an authorized aviation work shop and certified in the log book by an authorized inspector.
3. If you have sold your motorglider 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, 18 September 1992

LBA approved

This Service Bulletin was originally written in German and approved by the German LBA on the 29 September 1992 and is signed by Mr. U. Kopp. 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
18.09.1992		R.Vodermeier		1 of 1

TDS 14/12/92

AIRWORTHINESS DIRECTIVE

92-367 MT-Propeller

CORRECTION

Date of issue:
October 22, 1992

MTV Propellers.

TAIFUN ?

Affected propellers:
All powered gliders with electrical variable pitch MTV-propellers which have the automatic control unit P-120-A *and P-120-U* installed

Subiekt:
Emergency procedures !
Unintended pitch change into high pitch or feathering, excessive decrease in RPM or RPM-surging.

Reason:
At a limited number of powered gliders equipped with the above mentioned propeller- and governorsystem, failure or uncertain pitch change caused by damadged electrical pitch change motors occured.

Actions:
Change of emergency procedures for powered gliders

Preflight check must be completed and green lamp must be illuminated, otherwise no take-off is allowed.
Especially during take-off and inflight supervise RPM regularly.

> *If unnormal RPM-decrease or RPM-surging occurs, immediately pull circuit breaker for the control unit !*

The propeller then behaves like a fixed pitch propeller, pitch remaining in the position it had when pulling the circuit breaker. End flight as soon as possible and avoid probable propeller-overspeed. Before next operation the propeller must be inspected by MT-Propeller.

Compliance:
Befor the next take-off.

Technical publication of the manufacturer:
MT-Propeller Service Bulletin TM-Nr.: 6 dated October 15, 1992 which becomes herewith part of this AD and may be obtained from Messrs.

MT-Propeller Entwicklung GmbH
Airport Straubing-Wallmühle

D-8441 Atting
Federal Republic of Germany

Accomplishment:
Action to be accomplished by the pilot. After the circut breaker for the control unit was pulled entered it the glider's log. Befor next take-off the propeller must inspected by MT-Propeller.

TNS | 11|12|92

AIRWORTHINESS DIRECTIVE

92-351 Sportavia-Pützer

Date of issue:
October 26, 1992

R. F. 5./5B.

Affected powered gliders:
German Type Certificate No. 695

Fournier RF 5
and RF 5 B, Sperber
- all Serial-Nos.

Subjekt:
Damages on the plain bolts in the speed brake assembly especially the plain bolts of the speed brake locking device.

Reason:
During routine checks damages on the plain bolts A5 h11x14 DIN 1444 of the speed brake assy within the wing middle section behind the spar were recocnized.

Actions:
Disassemble all plain bolts of the speed brake assy within the wing middle section.
Check the parts with regard of the mentioned damages. Replace plain bolts if damages are visible.
Assemble all plain bolts to the speed brake assy and check correct operation of the downlock mechanism as well as the extension of the flaps.

Compliance:
During the next 5 h check and after max. 1000 landings

Technical publication of the manufacturer:
Aviostar Service Bulletin No. S-02-91 of November 28, 1991 which becomes herewith part of this AD and may be obtained from Messrs.

Aviostar Luftfahrtechnische Entwicklungen GmbH
Flugplatz
D-5377 Dahlem 1
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 glider's log by a licensed inspector.

TNs 11/12/92

AIRWORTHINESS DIRECTIVE

92-352 Grob

Date of issue:

26. Okt. 1992

GROB G. 103 SLMG.

Affected powered gliders:
German Type Certificate No. 869

Grob
G 103 C TWIN III SL
- Serial-No.: 35001 up to 35048

Subjekt:
Inspection of the upper pulley wheel

Reason:
During starting operation both propeller drive belts of a TWIN III SL failed.

Actions:
The diameter of the upper pully wheel should be measured. If the diameter of the pully wheel is 166,47 +0,1 mm, no further actions are required. If the diameter is greater than 166,6 mm the pully wheel must be exchanged according to the Maintenance Manual page 6.11.
Exchanged pully wheels must be sent to the manufacturer for evaluation.

Compliance:
Before the next flight.

Technical publication of the manufacturer:
Grob Service Bulletin TM 869-4 of August 05, 1992 which becomes herewith part of this AD and may be obtained from Messrs.

Burkhart Grob Luft- und Raumfahrt
D-8939 Mattsies
Federal Republic of Germany

Accomplishment and log book entry:
The check must be performed by a authorized person or an approved service station and to be checked and entered in the glider's log by a licensed inspector.
The exchange of the pully wheels must be performed by an approved service station and to be checked and entered in the glider's log by a licensed inspector.

TNS 11/12/92

AIRWORTHINESS DIRECTIVE

92-354 Grob

Date of issue:

28. Okt. 1992

G. 103 TWIN III. SL

Affected powered gliders:
German Type Certificate No. 869

Grob
G 103 C TWIN III SL
- S/No.: 35001 up to 35050

Subjekt:
Exchange of the spiral pin in the spindle drive.

Reason:
To prevent a loosening of the spiral pin in the spindle drive, the spiral pin must be exchanged and secured as a pre cautionary action.

Actions:
Installation of a new spiral pin and securing with punch-mark three times on each side.

Compliance:
Befor the next flight.

Technical publication of the manufacturer:
Grob Service Bulletin TM 869-5 of September 07, 1992 which becomes herewith part of this AD and may be obtained from Messrs.

Burkhart Grob Luft- und Raumfahrt
D-8939 Mattsies
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 glider's log by a licensed inspector.

TDS 9/10/92

AIRWORTHINESS DIRECTIVE

92-350 Grob

Date of issue:

26. Okt. 1992

GROB G.109B

Affected powered gliders:
German Type Certificate No. 817

Grob
G 109B
- Serial-No.: 6200 and up

Subjekt:
Inspection of drain holes in the elevator (including trim tab)

Reason:
Sufficient number of drain holes must be provided in the elevator including trim tab. Otherwise the laminate can be damaged by the water penetration, or weight and C.G. problems of the elevator may occur and cause at the worst flutter tendency

Actions:
Inspection of the elevator drain holes in accordance with SB TM 817-35

Compliance:
At latest on October 31, 1992

Technical publication of the manufacturer:
Grob Service Bulletin TM 817-35 of July 20, 1992 which becomes herewith part of this AD and may be obtained from Messrs.

Burkhart Grob Luft- und Raumfahrt
D-8939 Mattsies
Federal Republic of Germany

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

GROB LUFT- UND RAUMFAHRT	Service Bulletin TM 817-23/1 GROB 109's.	GROB G 109 G 109B

The Service Bulletin TM 817-23/1 is a new issue of the Service Bulletin TM 817-23 dated July 10, 1987.

(FUEL)

Subject: Exchange of the sealing piston in the fire cock

Concerning: G 109 all S/N's
G 109B all S/N's

Urgency: 31 December 1992 at the latest

Procedure: The Service Bulletin TM 817-23 already details the exchange of the sealing piston in the fire cock. Based on further improvements of the sealing material, a new sealing piston will be sent to all G 109/ G 109B customers. The exchange is mandatory as a precautionary action.

Actions: The exchange of the sealing piston must be performed according to the Installation Instructions No. 817-23/1.

Material: The sealing piston including the Installation Instructions will be sent with the Service Bulletin free of charge.

Weight and Balance: not affected

Remarks:

1. The action must be carried out by a competent person or an authorized aviation workshop and has to be certified in the logbook by an authorized inspector.
2. If you have sold your aircraft in the meantime, we kindly ask you, to pass this information immediately to the new owner and forward his address and aircraft s/n to us.

Mattsies, 01 September 1992

LBA approved
The German original of this Service Bulletin has been approved by the LBA on the 14. September 1992 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)

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ASTIR's

GROB LUFT- UND RAUMFAHRT	Service Bulletin TM 306-31 TM 315-49 TM 320-6 TM 817-36	GROB

Subject: Inspection of the airbrake stops

Concerning:

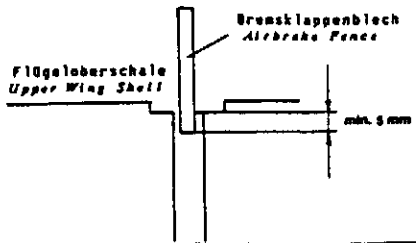
Model/Series	S/N's
ASTIR CS	1001 - 1536
ASTIR CS 77	1601 - 1844
ASTIR CS Jeans	2001 - 2248
Club Astir II	5001 - 5061 (suffix "C")
Standard Astir II	5001 - 5061 (suffix "S")
G 102 Club Astir III	as of 5501 (suffix "C")
G 102 Club Astir IIIb	as of 5501 (suffix "Cb")
G 102 Standard Astir III	as of 5502 (suffix "S")
SPEED ASTIR II	4001 - 4027
SPEED ASTIR IIB	4028 - 4107
TWIN ASTIR	3000 - 3291
TWIN ASTIR TRAINER	3088 - 3291 (suffix "T")
G 103 TWIN II	3501 - 3729 3730 - 3878 33879 - 34078
G 103A TWIN II ACRO	3544 - 34078 (suffix "K")
G 109	6001 - 6159
G 109B	as of 6200

Urgency: 31 December 1992 at the latest

Procedure: Excessive wear of the airbrake stops - undetected during periodic inspections - may allow the airbrakes to extend beyond their normal value and cause jamming of the airbrake fence on the upper shell of the wing.

Actions:

1. Inspection of the airbrake stops
   As a precautionary action, the airbrake stops (outboard edge of the airbrake boxes) must be inspected for condition and wear.
   Cracks in the gelcoat around the outboard end of the airbrake box may indicate damage to the GRP laminate underneath.
   With the airbrakes fully extended wear to the airbrake stops must be checked; assure that the outer airbrake swivel levers are in contact with the stops during this check:
   The lower edge of the airbrake fence must overlap the bottom of the airbrake cap recess in the upper wing shell by 5 mm min. (see drawing below)
   Normal wear is acceptable as long as the upper condition is fulfilled.



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AIRBRAKE STOPS.

GROB LUFT- UND RAUMFAHRT	Service Bulletin TM 306-31 TM 315-49 TM 320-6 TM 817-36	GROB

Note: With the aircraft fully assembled, some airbrake swivel arms may not contact their stops completely with the airbrake handle pulled aft. This could be due to variances in wheel brake adjustment, or due to variances in airbrake rigging between the left and right sides. The easiest method to perform the check is either with the wings disassembled or with the airbrakes temporarily disconnected in the fuselage.

Warning: 1. Assure that the airbrakes are connected before flight.
2. Never lower these stops using a file or a similar tool with the intention to increase the airbrake effectivity.

2. Repair of the airbrake stops
   If, during the inspection according to action 1, an excessive wear of these stops is found, a repair according to the Repair Instructions must be performed prior to the next take-off.

3. A periodic inspection of the airbrake system according to action 1 is very important.
   Therefore add the folling items by hand
   - to the Flight Manual section "Rigging of the the airplane": a statement about check for damage of the airbrake stops (refer to action 1)
   - to the Maintenance Manual chapter about periodic inspections: in section "Wing" the following item

   ☐ Airbrake Stops
   Airbrake Fence/Airbrake Box Overlap 5 mm min.

   A print of the affected manual pages will be performed within the next manual revisions.

Material: refer to Repair Instructions

Weight and Balance: not effected

Remarks: The actions must be carried out by a competent person or an approved aviation workshop and must be certified in the logbook by an authorized inspector.

Mattsies, 14 Sept. 1992

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

LBA approved
The German original of this Service Bulletin has been approved by the LBA on the 29. Sept. 1992 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.

P.S.: If you have sold your glider/motorglider 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.

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TNS 11/12/92

BREAKAGE OF A VERTICAL ELEVATOR CONNECTING TUBE AT ITS LOWER END WHERE NO ~~CONTROL~~ FROM OUTSIDE IS POSSIBLE

INSPECTION

SAILPLANE: Nimbus 3T, HB-2144, year of construction 1985, Fotos 1, 2 Hans Nietlispach

SHORT DESCRIPTION: Thursday, July 30th, 1992, Pilot B. made a training flight on his Nimbus 3 T starting and landing "on rough grass strip" of Rieti airport, Italy. Next mornings preflight check showed the total failure of the elevator function: The vertical tube acting on the elevator was broken on its lower end showing heavy rust. Fortunately a fatal accident was avoided. The possibility of "a very singular case" was refuted by the following facts:

A. This report gave rise to an endoscopic control of the same tube of Ventus bT HB-2169, year of construction 1985. Result: heavy rust inside the tube. Fotos 3, 4 Max Bachmann.

B. After replacement of the tube in the representatives shop, an other endoscopic control of the new tube delivered by the factory showed up inside rust spots.

C. The same test on an other 1985 delivered Ventus did not show rust inside the same tube, all was metallic clear.

D. In all the fuselage and wing tubes of the wreck of Mini-Nimbus HB-1424, accident at July, 26th 1992, was found rust.

E. Results of additional investigations: Since 1987 - after revealing the rust problem ? - the vertical tube was provided at its lower end with a 6 mm Ø drainhole and the little screw controlhole at the upper end was closed. No warning or recall was adressed to earlier customers. Also, later rust water flow out of the vertical rear tube, when the fuselage was turned in upside down position, had no sufficient warning effect.

Corrosion in tubes seems to be a general problem not only to be reserved to a singular glider factory.

This is demonstrated by other cases, for instance by the sailplane losing flight control by an abruptly removed inside corroded stick and landed out of pilots control by lucky chance on a glacier.

Fotos, Text: Hans Nietlispach, Delegate of Swiss Aero-Club at the FAI-International Gliding Commission, Max Bachmann, Alternate Delegate for OSTIV Sailplanes Developement Panel and for OSTIV Training and Savety Panel. CC Dr. Manfred Reinhardt, OSTIV President. HN September, 2nd 1992.

PTO →

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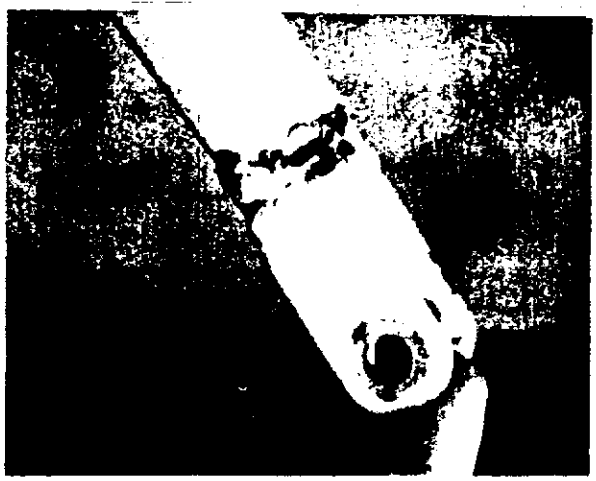

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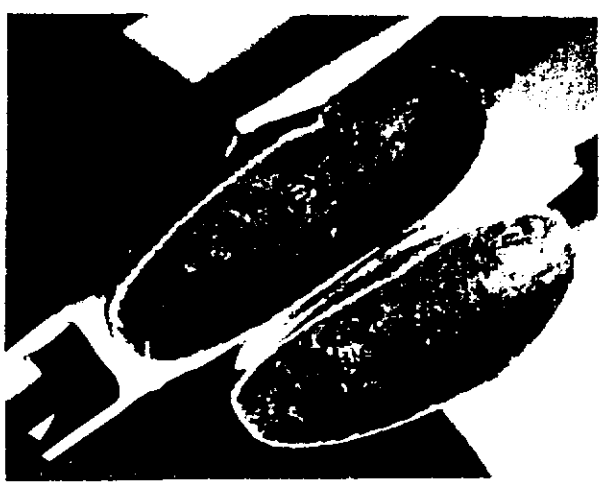

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BRUCH HÖHENRUDER - ANTRIEBSSTANGE UNTEN IM SEITENRUDER - STABILO, DORT NICHT KONTROLLIERBAR BEIM VON AUSSEN UNZUGÄNGLICHEN UMLENKHEBEL

SEGELFLUGZEUG: Nimbus 3T, HB-2144, Baujahr 1985, Fotos 1,2 Ni

KURZBESCHREIBUNG DES VORGANGS:
Am Donnerstag, 30. Juli 1992, startete auf dem Flugplatz Rieti, Italien, der Pilot H.Binder "auf holpriger Graspiste" zu einem Trainingsflug. Vor dem Start am nächsten Morgen stellte der Pilot bei der Kontrolle den Ausfall der Höhensteuerfunktion fest: Bruch der senkrechten, zum Höhensteuer führenden Antriebsstange: Damit kein, ev. fataler Unfall. Die Möglichkeit, "dies sei ein Einzelfall" wird durch Folgendes widerlegt:

A. Durch Obiges veranlasst, wurde die gleiche Stange am Ventus bT HB-2169, Baujahr 1985, endoskopiert: Innen starker Rost. Fotos 3,4 Ba
B. Nach Wechsel beim Vertreter Überprüfung der neuen Stange mit Boroscope: Innen Rostansätze.
C. Boroscopetest an einem anderen Ventus Baujahr 1985: In der vertikalen Stange keine Korrosion, alles metallisch klar.
D. Am Wrack des Mini-Nimbus HB-1424, Unfall am 26.7.92, fand man Rostspuren nicht nur in der senkrechten, sondern auch in den horizontalen Höhen- und Seitenruderstangen und einer weiteren Betätigungsstange.
E. Erkundigungen ergeben: Seit 1987 wird - ev. nach Erkennen des Rostproblems ? - an der senkrechten Heckstange unten ein 6 mm Ø Abflussloch gebohrt und zuoberst das kleine Gewindekontrolloch verschlossen. Keine Warnung od. Rückruf erfolgte an Käufer von vorher ausgelieferten Flugzeugen, auch später noch festgestellter Rostwasserfluss aus einer Heckstange bei umgekehrtem Rumpf zeitigte nur ungenügende Warnwirkung.

Korrosionsschutz aller Betätigungsstangen scheint generell ein grundlegendes Problem zu sein,
z.B. auch für jenes Segelflugzeug, das nach lebensbedrohlichem Abbrechen des von innen durchkorrodierten Steuerknüppels auf einem Gletscher zufallslandete.
Fotos, Text: Hans Nietlispach, Internaticnale Segelflugkommission, Max Bachmann, Stellvertreter, zuhanden OSTIV, Sailplanes Developement Panel, und OSTIV Training and Savety Panel. CC Dr. M. Reinhardt, Präsident OSTIV. 2.9.1992

Issue 10
November 1992

GROB G109 SERIES MOTOR GLIDERS

PART 1 – LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
83–6	Flight Manual – Correction of pages.	Applicable to all Serial Nos. Exchange pages 4, 11, 31, 37, 41 and 43 of the Flight Manual dated 14–12–1982 on or before 31 March 1983 for new ones. Grob Technical Note No. 817–8 refers.
83–104	Gravity Range – Correction of Flight Manual and procedure for spin recovery.	Applicable to all Serial Nos. Action to be accomplished in accordance with Grob Technical Note No. 817–10 not later than 15 July 1983.
85–132	Main Landing Gear – Fractures of the undercarriage legs.	Applicable to G109 and G109B Serial Nos. as detailed in AD. Compliance required as detailed in AD. Grob Technical Information TM 817–19 also refers.
85–218/2	Flight Controls – Aileron flutter at speeds above 190 km/h.	Applicable to G109B Serial Nos. as detailed in AD. Compliance required as detailed in AD. Grob Technical Note No. 817–20 also refers.
86–219	Flight and Maintenance Manuals – Replacement of pages.	Applicable to all G109 motor gliders. Compliance required as detailed in AD. Grob Technical Information TM 817–22 also refers.
87–142	Fuel – Inspection and replacement of the lower sealing ring in the fuel shut-off valve.	Applicable to G109 and G109B Serial Nos. as detailed in AD. Compliance required as detailed in AD. Grob Technical Note No. 817–23 also refers.
88–50	Inspection and replacement of the two inner elevator hinges.	Applicable to Grob G109B Serial Nos. 6200 to 6445 inclusive. Compliance required as detailed in AD. Grob Technical Note TM 817–25 also refers.
90–315	Fuselage – Inspection of studs in the root rib stud plate.	Applicable to G109B Serial Nos. 6200 through 6362. Compliance required as detailed in AD. Grob Service Bulletin G109B, TM 817–29 also refers.

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
92–189	Ignition – Inspection of the Bendix magnetos at the Grob 2500 engine.	Applicable to G109B Serial Nos. 6200 and subsequent. Compliance required as detailed in AD. Grob Service Bulletin TM 817–34/2 also refers.
92–198	Extension of service life.	Applicable to G109 and G109B all Serial Nos. Compliance required as detailed in AD. Grob Service Bulletin TM 817–28/1 also refers.
92–350	Flight Controls – Inspection of drain holes in the elevator (including trim tab).	Applicable to G109B Serial Nos. 6200 and subsequent. Compliance required as detailed in AD. Grob Service Bulletin TM 817–35 also refers.
92–356	Flight Controls – Inspection of the airbrake stops.	Applicable to G109 Serial Nos. 6001 up to 6159 and G109B Serial Nos. 6200 and subsequent. Compliance required as detailed in AD. Grob Service Bulletin TM 817–36 also refers.

Issue 9
October 1992

FOURNIER RF3 SERIES MOTOR GLIDERS AND FOURNIER RF6 SERIES AIRCRAFT

PART 1 – DIRECTION GENERALE DE L'AVIATION CIVILE AIRWORTHINESS DIRECTIVES

DGAC AD No.	*Description*	*Applicability – Compliance – Requirement*
67–39–1	Wing Skin – Inspection for cracks and deterioration of glued joints.	Applicable to all RF3 Series aircraft. INSPECT the critical zone every 30 flight hours until modified in accordance with Service Bulletin Alpavia No 2.
79–234	Fuselage – Modification to the fireproof bulkhead – Inspection of a seal supporting plate.	Applicable to all RF6B–100 aircraft. Compliance required as detailed in AD. Fournier Aviation Service Bulletin No 3 also refers.
79–235	Flight Controls – Inspection and replacement of aileron control coupling rod.	Applicable to all RF6B–100 aircraft. Compliance required as detailed in AD. Fournier Aviation Service Bulletin No 2 also refers.
86–031 R1	Structure and Flight Controls – Inspection for corrosion of metal parts.	Applicable to all RF6B–100 and RF6B–120 aircraft. Compliance required as detailed in AD. Fournier circular dated 10.01.1986 also refers.
75–76	Operating Limitations – Normal category certification only.	Applicable to all RF3 Series aircraft. Install a plate in the cockpit on the wheel well with the following notice no later than 15 May 1975: U category operation and spins prohibited.

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SPORTAVIA-PUTZER RF4 AND RF5 SERIES MOTOR GLIDERS

PART 1 – LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
72–24	Remove ground handling bar from the fuselage and inspect for grinding marks in longitudinal direction of the fuselage centre-line.	Applicable to all RF5 aircraft. Compliance required as detailed in Airworthiness Directive.
72–25	Replacement of propeller boss bolts and centering bushings.	Applicable to all RF5 aircraft. Compliance required at next 100 hour inspection. Working Instruction A–04–72 and Service Letter S–02–72 refer.
83–15	Inspection/repair of aft fuselage and vertical fin spar.	Applicable to all RF4, RF4D, RF5 and RF5B aircraft. Compliance required as detailed in Airworthiness Directive. Technical Note S–02–82 also refers.
85–207	Inspection/replacement of the rear stabiliser mounts.	Applicable to all RF4D and RF5 aircraft. Compliance required as detailed in Airworthiness Directive. Technical Note S–01–85/1 also refers.
92–351	Inspection/replacement of the plain bolts in the speed brake assembly.	Applicable to RF5 and RF5B aircraft all Serial Nos. Compliance required as detailed in Airworthiness Directive. Aviostar Service Bulletin S–02–91 also refers.

GASIL

P/E

10. CONTAMINATED FUEL BOWSER INSTALLATION

Aircraft type : Piper PA28 Warrior
Date : September 1992

The pilot reported a loss of power and a rough running engine.

Engineering examination showed the fuel filter to be contaminated with a silicon based sealant. After much investigation, this was traced to a new bowser installation. The sealant was used to seal the stainless steel pipe joint between the outlet of the fuel filter and the metering unit inlet. The aircraft's fuel system was flushed, filters cleaned and engine runs carried out on all aircraft based at the airfield.

The aerodrome manager advises that all visiting aircraft that had uplifted fuel from the new bowser have been contacted.

CAA COMMENT:

This is not the first report that CAA have had of this problem, GASIL 10/91, E3 detailed a similar occurrence. Remember, bowsers are often assembled by outside contractors who would be unaware of such problems.

GASIL

P

11. MOGAS

The Head of Section's wife has a Peugeot 309, which recently started to run roughly, lose power and would not run at idle. The usual checks were made, plugs, leads, distributor cap, rotor arm, electronic ignition unit etc. After two visits, a Crypton Tune specialist finally discovered the problem. DIRT IN THE FUEL. A small quantity of fine black powder was discovered in the carburettor which had intermittently affected its operation. The car did not have a filter in the fuel line. It does now!

Mogas users should ensure they either filter their fuel or that an effective filter is fitted to the fuel supply line. These will need to be checked and changed at regular intervals. A blocked fuel filter (because it has done its job and collected all the muck) will cause fuel starvation. I speak from experience, this has happened to me!

Safety Sense Leaflet No 4A 'Use of Mogas' covers contamination, see in paragraphs 2d and 3c.

GROB G109 *GROB 2500* *CLIMB* *CYPRUS* *6 OCT 92* *9204225B*

BANG HEARD FROM ENGINE, SMOKE OBSERVED. ENGINE SHUTDOWN. LANDED SAFELY. RH FRONT CYLINDER HEAD FOUND HOLED.
FIRST FLIGHT FOR 5 MONTHS. 50HR INSPN WITH GROUND RUNS HAD BEEN CARRIED OUT ON A/C THE PREVIOUS DAY.

IS 28 M2A *LIMBACH* *TAKE OFF* *DONCASTER* *15 OCT 92* *9204300C*

UK REPORTABLE ACCIDENT : WEATHER-COCKED ON TAKE OFF IN CROSSWIND, LH MLG STRUCK EARTH BANK . MLG COLLAPSED ON FORCED LANDING. SUBST DAMAGE. NO INJ.

15. THEFTS - AGAIN! (FUEL)! (GASIL) P/E

Aircraft type : Low Wing Single
Date : September 1992

(The following is an extract from a report passed to GASIL)

On a recent Saturday morning, I arrived to mow the grass runways on our small private strip in SE England and found a gate, normally kept locked, lifted from its hinges and lying on the ground. The gate, like two others, is adjacent to a busy road and is secured overnight with a padlock and chain. In order to separate the gate from its hinges a ¼" AN nut and bolt has to be removed. This requires a couple of good spanners and would not have been the work of someone only interested in 'magic mushrooms'. Wheel tracks were clearly visible heading toward, but stopping short, of the hangar and two parked light aircraft. A careful inspection failed to reveal anything missing, such as an aircraft radio or vehicle battery. No doors or windows were forced and no attempt had been made to gain entry to the horse rider's tack room, a good source of stock for weekend 'car boot' sales. The police arrived promptly and promised to keep a close eye on the place in case this was a recce for worse things to come, and I replaced and re-secured the gate.

Later the same day, I spotted that the fuel caps of a low-wing single-engined aeroplane were unlocked and both tanks were empty.

A pilot in haste, knowing the fuel state the evening before and foolishly failing to check it again, could have jumped in and taken off with disastrous consequences.

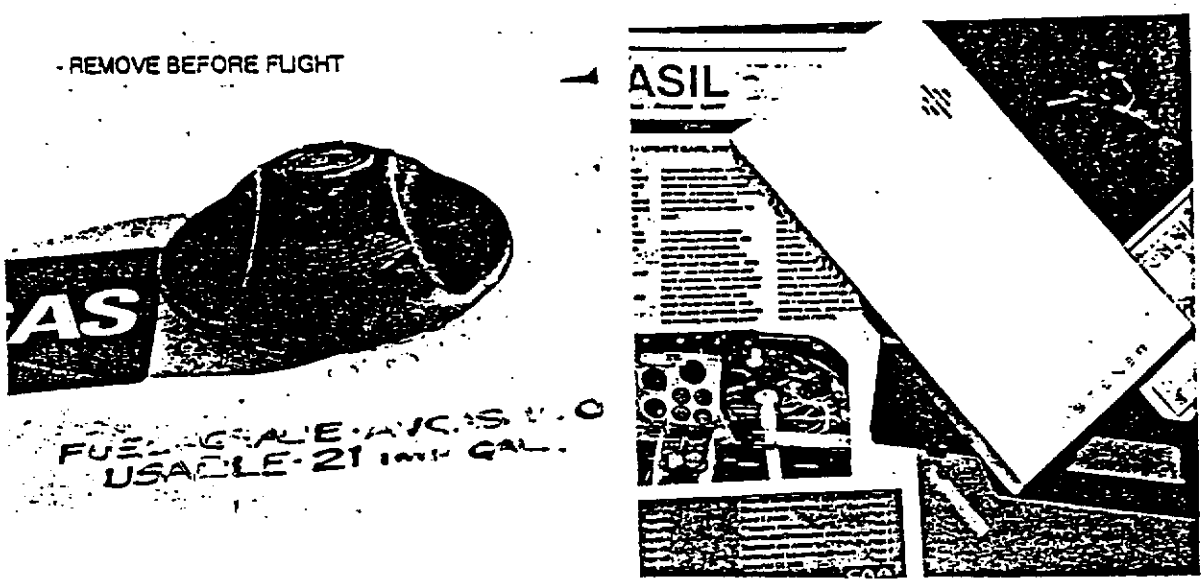
I wonder if this possibility even entered the skull of the thief who stole the fuel.

CAA COMMENT:

Shortly after receiving this item, a report was received from the aerodrome manager of Shobdon in Herefordshire, stating that fuel is regularly being stolen from aircraft being left out in the open at Shobdon. In many cases, it is clear that this is removed by siphoning, possibly with a length of hose-pipe, and several large cans must be involved since the amount of fuel stolen from an average aircraft is between 20 and 30 gallons.

It is therefore clear that owners of aircraft and aerodrome operators must be particularly vigilant to stop thefts of radios, instruments, equipment and fuel. Prevention is clearly better than cure and readers may consider that the time has now come to hangar their aircraft, if possible, in order to keep people away from them. If hangarage is not available, then many lockable fuel caps from cars will also comfortably fit aircraft fuel tanks for the periods when the aircraft is left outside.

HOWEVER, THESE MUST BE REPLACED BY THE PROPER AIRCRAFT FUEL CAPS BE-



FORE FLIGHT. THERE IS NO EXCEPTION TO THIS RULE.

In addition, GASIL has recently heard of a steel-cased portable alarm system, which can be used in an aircraft and the act of windows, or in some cases even standing on the walkways, will activate this alarm. Since it is totally self-contained, no modification to the aircraft is necessary and GASIL can confirm that the sound levels admitted by this pain to an intruder's eardrums.

Clearly, vigilance by all is essential to minimise and hopefully prevent this very unpleasant development of thefts from aircraft.

4. GLOBAL POSITIONING SYSTEM (GPS) [P]

The Global Positioning System (GPS) is tomorrow's navigation aid which is available today. The ready availability of 'cheap' receivers, providing solutions to the problems of safely negotiating crowded airspace, is an attractive proposition. However, putting aside any technical details, there are some limitations to the use of GPS which may have a bearing on the accuracy of the information given by the system.

To date, the network does not possess all 24 satellites, so the area of coverage is not continuous and 'gaps' may appear. The system is still under development and is controlled by the US Department of Defence. The DOD 'experiments' with its control procedures and has no requirement to inform users of what action is being taken. For example, sometimes Selective Availability (S/A) is imposed, sometimes not, and every now and again, some satellites are 'disabled'. Both these events occurred recently, and as a result, the availability and accuracy of the navigation information may have suffered. Only the user, in a particular place at a particular time, would have noticed the difference.

Remember, GPS is a military system not yet declared operational and not yet certificated as a sole source navigation aid. Certainly make use of it, but be aware that nothing and nobody tells the truth all of the time.

The METFAX service provides a weekly update, issued every Friday on the status of the GPS system. This is available on 0336 400599, but beware it takes over 5 minutes to receive. The index, on 0336 400501, gives details of this and all the other METFAX services.

GPS must not replace a poor navigator but it will serve you well as long as you respect its limitations and do not neglect "LOOK-OUT" whilst using the equipment.

STOP PRESS..... GASIL has just heard from a flying instructor that a student mounted a GPS receiver, using Velcro, on the top of the instrument panel next to the magnetic compass. (This apparently was the only position where the antenna could be vertical enough to operate successfully.)

The instructor continues "Apart from restricting my view from the right-hand seat, my immediate concern was its effect on the accuracy of the magnetic compass. When questioned about this, the student quickly replied that the compass read 5° out and proceeded to demonstrate by removing the GPS.

The student did not seem to appreciate that this error may not be the same on different headings, so I left the GPS in place during taxi to experiment with it. After turning the aircraft through 90° from West to North, I removed the GPS again. The compass deviation was now IN EXCESS OF 20°."

YOU HAVE BEEN WARNED.

CHECK FOR COMPASS ERRORS.

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ANGLO POLISH SAILPLANES SZD45A OGAR SELF-LAUNCHING MOTOR GLIDER

PART TWO – CAA ADDITIONAL AIRWORTHINESS DIRECTIVES

CAA AD No.	*Description*	*Applicability – Compliance – Requirement*
0837 PRE 78	GLASS-FIBRE FUEL TANK Electrical Bonding check of the glass-fibre fuel tank.	Compliance required every 50 hours.

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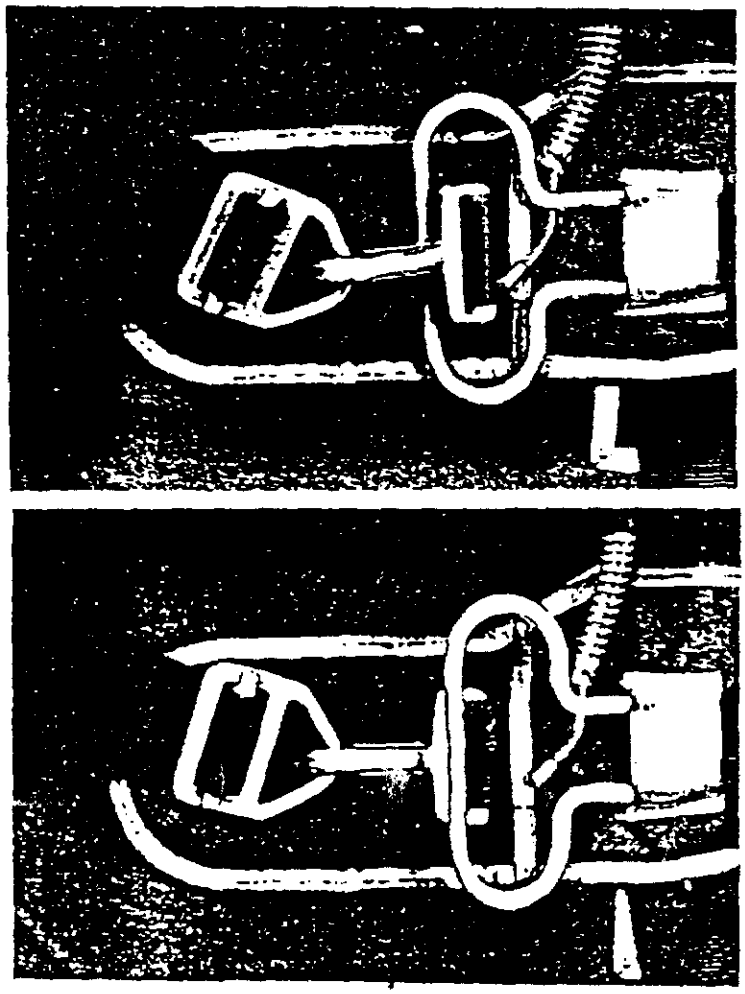
MT PROPELLERS

PART 1 – LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES

LBA AD No.	*Description*	*Applicability – Compliance – Requirement*
90–214	Possible loss of a propeller blade.	Applicable to MTV-6-C/LD152-07 propellers with more than 400 hrs total (TNS) and Serial No. below 90024. Compliance required as detailed in AD. MT-Propeller Service Bulletin TM No. 4 also refers.
92–367	Change of emergency procedures for powered gliders.	Applicable to MTV-Propellers which have the automatic control unit P–120–A or P–120–U installed. Compliance required as detailed in AD. MT-Propeller Service Bulletin TM No. 6 also refers.

SPOT THE DIFFERENCE CHRISTMAS COMPETITION



This was discovered after the student stepped out of the glider.

This topic is associated with parachutes with a chest fastening near to the 'D' ring. It is possible to pass the clip through the 'D' ring before clipping to the buckle. The implications if you had to bail out are almost certainly fatal.

The Basic Training Record Card has a block on the front, 'Use of Parachutes', this is exactly the time to stress the importance of correct fastening and routing of straps and buckles.

AEIs this lesson will probably be covered by you. Take note and ensure you do it properly.

It is not until an incident is reported and you discuss it with others that you realise how many times it has occurred in the past. This shows the importance of reporting all incidents no matter how insignificant you might think they are.

(RAES A).