

BGA TECHNICAL COMMITTEE

TECHNICAL NEWSHEET 7/8/96

PART 1 Airworthiness "AGGRO"

- 1.1. OLYMPIA 460 Series. The attached Tech.Note circulated to owners / Technical / Safety Officers, is self explanatory. The AAIB investigation will take some time.
- 1.2. Tost Weak Link Assemblies. The attached Tech/Note requires immediate action.
- 1.3. ASW20(F) Aileron Flutter, caused by incorrect application of sealing tape, requires action as detailed in Schleicher Tech Note No. 31 (herewith). (Report by Tim Macfadyen).
- 1.4. Bocian Trim Tab becomes disconnected causing elevator oscillation. Check for security at the tab. (Highland G.C.)
- 1.5. CRACKS in Rudder Pedals.(Pegasus/ASW19/ASW20) Photos illustrated the problem. (from Richard Kimberley).
- 1.6. Tost Release Cable Badly Frayed, adjacent to the hook. Fit Rubber strip? (Dorset G.C.).
- 1.7. KA13. Unsecured Energy Absorbing Cushion moved forward and obstructed the elevator control in the rear cockpit VALCRO or PRESS STUDS are essential. (Southdown G.C.)
- 1.8. HOAC/DIMONA H36 & HK38R Airworthiness Directive No. 85 (herewith) requires mandatory action to inspect ELEVATOR RIB FOR DAMAGE.
- 1.9. Cirrus Series as listed in Tech Note 278-28 (herewith) Extension of Service Life beyond 6000 hours to 12,000 hours - subject to inspection.
- 1.10. Grob Twin Astir Series as listed in A/D 92-190/2 herewith. Extension of Service Life to 12,000 hours, subject to inspections as detailed.
- 1.11. DG.500 - Increase of Service Time to 12,000 hours subject to Flight Manual revisions as detailed in Tech Note 843/7 (herewith).

1.12. STANDARD CIRRUS , as listed in A/D 75/031/3 (herewith).

Possible Fatigue fracture of Ball Joints on airbrake activating lever.
Action as required by this A/D. Schempp-Hirth Tech/Note 278-23 (1979) refers.

1.13. Bendix Magnetos, fitted to some SLMG's and Tugs. The following FAA A/D's are applicable to S.20 series Magnetos.

94-01-03 - Replace Coils and Rotary Magnets

96-12-07 - Inspect Riveted or Snap Ring.
Impulse coupling.

(copies herewith)

2.0. GENERAL INFORMATION

2.1. CAA Airworthiness Notices are now at Issue 118. Do you have a copy?

2.2. Pawnee Operators. There are now 31 Pawnees in Gliding Clubs. BGA are hoping to negotiate a concession on the bi-annual removal of wings to comply with A/D 95-12-01. Please report the findings of the NDT check on your Pawnee to the BGA office as soon as possible.

Dick Stratton
Chief Technical Officer



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

Secretary: Barry Rolfe

Kimberley House, Vaughan Way,
Leicester LE1 4SE
Telephone 0116 2531051
Facsimile 0116 2515939

British Gliding Association

TO ALL OLYMPIA 460 SERIES GLIDER OWNERS

cc: BGA Technical Officers/Safety Officers

BGA TECHNICAL COMMITTEE

REF BGA/TNS/7/8/96

IMMEDIATE ACTION

- 1) A fatal accident has been caused by the failure of a Spar about 6" outbound of the root joint, during a winch launch.
- 2) The Air Accident & Investigation Branch have begun their detailed investigation and analysis, to establish the exact mode of failure.
- 3) Already they have discovered significant exfoliation of the laminated plates where they are bonded to the wooden Spar. Such exfoliation may not be readily apparent without removing whatever protective finish that may have been applied ?
- 4) Olympia 460 Series Sailplanes should not be flown until the AAIB Report has been received and actioned as necessary.
- 5) In the meantime, detailed inspections of Spar Roots for any form of deterioration, should be reported to the BGA. Water penetration at any time may be damaging to the bonded joint ?
- 6) The BGA will keep you informed of the results of the AAIB investigation.

Dick Stratton
Chief Technical Officer

16/7/96

Patron
Vice Presidents

HRH The Duke of Edinburgh KG
Christopher R Simpson MA LLM
Roger Q Barrett
Tom Zealley BA PhD
Ben Watson MA FCA
Bill Walker MP



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British Gliding Association

TO: CFI's & SAFETY OFFICERS

19th July 1996

FROM: BGA TECHNICAL COMMITTEE

(TNS 7/8/96)

TOST WEAK-LINKS

1. Incorrect assembly of Tost Weak-Links will double their breaking load!
2. If you use two Tost weak-links one must have a slotted hole.
3. Never assemble two identical weak-links.
4. Do not overtighten the Shackle bolts.
5. In a recent fatal accident, the investigation discovered two identical weak-links in use. (The cause of this accident has not yet been determined by AAIB).
6. Pin a copy of this Notice to your Notice Boards!

R.B. Stratton
Chief Technical Officer

Patron
Vice Presidents

HRH The Duke of Edinburgh KG
Christopher R Simpson MA LLM
Roger Q Barrett
Tom Zealley BA PhD
Ben Watson MA FCA
Bill Walker MP

FAX MESSAGE

TO

Name	R B Stratton
Organisation	BGA
Fax No.	0116 2515939

FROM

Name	Tim Macfadyen
Tel No.	0117 9795706
Date	1 July, 1996

AILERON "FLUTTER" INCIDENT REPORT

Glider : ASW 20F (half full of water)
Pilot : Richard Palmer
Date : 24 June 1996
Place : Near Nympsfield Gliding Site
Speed (IAS) : 120 Kts

Pilot's Comments :- "As I increased speed the stick suddenly started to oscillate severely, from side to side, to such an extent that I had difficulty holding onto it. I thought that I would have to bale out but the vibration stopped when I slowed down to below 100 Knots".

Severe aileron vibration at approximately 5 Hz is a known ASW 20 problem. It is normally associated with incorrectly sealed ailerons.

This glider was completely Mylar tape sealed but not as specified in the Schleicher ASW 20 maintenance manual and Technical Note number 31. There was no PTFE tape fitted to seal the aileron or flap hinge lines, which are vital parts of the sealing system.

To avoid further severely frightened pilots it is strongly recommended that if Mylar tape is fitted then the system described in the Schleicher manual and TN 31 is strictly followed.

Tim

Tim Macfadyen

TN 31 attached

Subject: Preventive measure against aileron flutter.

Serial number
Applicability:

All ASW 20 variants and serial nos.
20001 thru 20860; 20950 and 20951.

Compliance:

Immediately, prior to the next take-off.

Reason:

Recently two ASW 20s had aileron flutter in flap position 1 at a speed of about above 200 to 210 km/h. The said ASW 20s were improperly equipped with an elastic plastic tape to seal the gap between wing and flaps/ ailerons on the under sides; the used strips of tape which were insufficiently curved, and above all the teflon strip which has to lie underneath for sealing the gaps, was missing. Owing to this, air exchange between wing upper side and under side is possible which causes depending on the control surfaces' deflection - periodical separation of airflow and this unusual kind of aileron flutter. These latest findings also account for earlier flutter incidents which occurred mainly in countries with warm climate (see TN no.12). In those cases the gliders used insufficiently stiff plastic tape (partly even without fabric stiffening which softened under high temperatures and therefore could crease periodically inwards and outwards thus causing varying airflow separation on the control surfaces under side and thereby leading to aileron vibrations. But also the factory-standard TESA fabric-tape (which is adequately plastic-treated) gets worn out after some time and then it has no more sufficient stiffness and may lead to the above described flutter incidents.

Action:

1. Prior to the next take-off it must be checked whether the control surface gap on the wing under side is equipped with a sealing, i.e. either
 - 1.1 with the factory-standard, plastic-treated fabric-tape TESABAND 4651, white, 38 mm wide (see Fig.1); in that case the plastic coat on the fabric must not be damaged, discolored or even weather-worn; the tape must not tighten at full control surfaces deflections.
 - or
 - 1.2 with the pre-curved steel strip (0,07 mm thick) or the pre-curved plastic tape (MYLAR 0,25 mm thick) respectively; in that case check that both require absolutely Teflon sealing tape underneath for the purpose of sealing the gap and reducing the friction (see Fig. 2).

If 1.1 or 1.2 are positive, the ASW 20 can be continued in operation without any restrictions.
2. If 1.1 or 1.2 are negative, the ASW 20 must be operated temporarily no longer in flap position 1 and no longer above 200 km/h.
For this purpose, a red radial line must be fixed to the A.S.I. at the 200 km/h mark and in addition a placard showing "Vmax = 200 km/h. Furthermore, the foremost hole in the flap lever gate (flap position 1) must be covered by strong adhesive tape and a placard must be fixed in front of the flap lever stating "Flap position 1 suspended".

Ailerons:

5,4 m Teflon tape, self-adhesive, 30 mm wide.
2 x 2,7 m metal tape, 33 mm wide, pre-curved by 8 mm (Fig.3) and Pattex Spezial glue; or
2 x 2,7 m MYLAR tape, 37,5 mm wide, pre-curved by min. coated with a glue film of 14 mm width (see Fig.4).
2 x 2,7 m Tesafilm no.104, 25 mm wide, white (to cover front edge of the elastic lip).
Manual pages as per "Action Point 3." and Maintenance Instruction J, Issue III dated April 24, 1987.

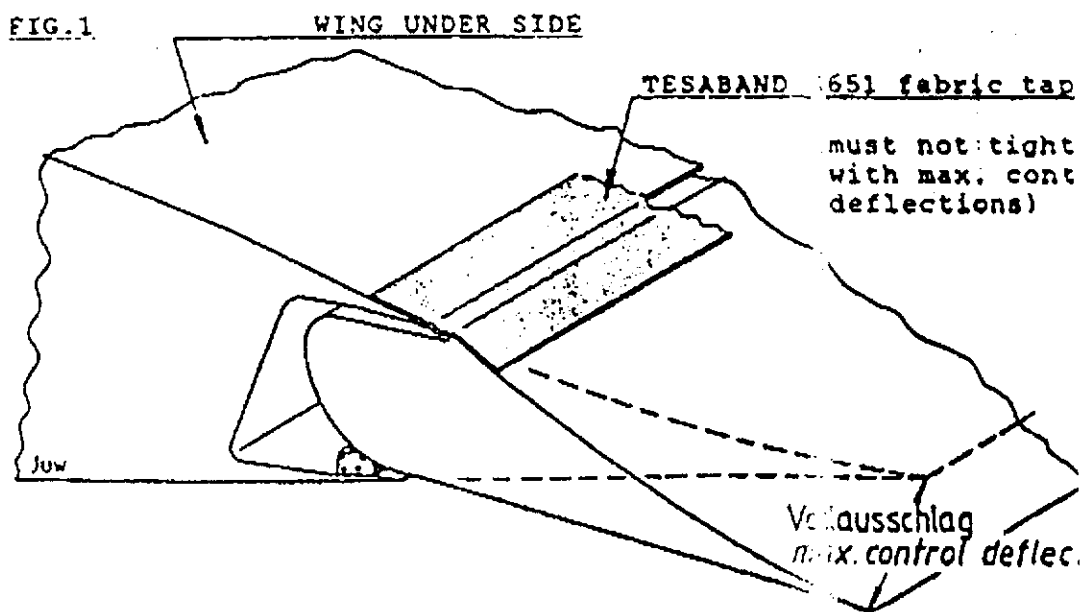
Mass and C.G.:

A redetermination of the mass and C.G. data is not necessary.

Notes:

1. We recommend the fixing of an elastic lip sealing on control surfaces gap, as both flight performance and flight characteristics are slightly improved by this.
2. The optional additional elastic lip sealing on the control surfaces gap does not require the sealing T-tape and so far no problems with this have been reported.
3. All actions under this TN can be accomplished by a competent person. The accomplishment of the "Action 3." must be certified by a licensed aviation inspector in the glider's inspection documents and in its logbook the latest during the next annual reinspection.
4. Maintenance Instruction J, Issue III, has been new revised for this TN and herewith becomes part of this TN.

FIG.1



This temporary action is permissible only till Aug. 1, 1987, at the very latest. By this date the relevant sealing must be renewed.

- 2.1 In case of the factory-standard fabric-tape TESA 4651, white, 38 mm wide, you have to regard the following in addition: if your glider is an ASW 20 or ASW 20 L you do not have to try to make a recess into the wing for the application of the TESA; just tape it onto the wing surface; according to the aerodynamics experts the relatively thick and wide fabric tape serves possibly also as a turbulator preventing laminar separation bubbles on the control surface under sides. But if your ASW 20 and ASW 20 L had already the fabric tape recessed into the wing contour, then you should apply a turbulator in addition (zig-zag or nap tape) which you have to fix directly in front of the fabric tape.

With the ASW 20 B, BL, C, CL pneumatic turbulator holes in the wing under side are factory-standard, together with the recess in the wing contour for the application of the fabric tape (or of the optional elastic lip sealing respectively); so when renewing the TESA tape on an ASW 20 B, BL, C, or CL you have to take care that the turbulator holes are not put out of operation. Anyhow, these turbulator holes must be checked for proper operation from time to time and cleaned if necessary.

- 2.2 In case of the elastic lip sealing: this has to be renewed as shown in Fig.2, following the Maintenance Instruction J, Issue III; alternatively, the elastic lip sealing can be new applied instead of the above TESA tape sealing.

3. The Maintenance Manual has to be amended in order to include notes with respect to the annual glider re-inspection covering the condition of the adhesive tape or the elastic lip sealing, including the blow turbulators. The following Maintenance Manual pages must be exchanged for pages with the entry "TW No.31 June 24, 1987" and the accomplishment of this action must be documented on the page "Amendments to the Manual" or "Index of Corrections" respectively.

ASW 20:	Pages 40 & 40 1.
ASW 20 L:	Pages 44 & 44 1.
ASW 20 B / BL / C / CL:	Pages 60, 70, & Maintenance Instruction J, Issue III.

Material & drawings:

For the sealing as per "Action Point 1.1":

TESABAND 4651, white, 38 mm wide.

For the sealing as per "Action Point 1.2":

Flaps:

9 m Teflon tape, self-adhesive, 30 mm wide.

2 x 4,5 m metal tape, 33 mm wide, pre-curved by 5 mm (see Fig.3) and Pattex Spezial glue; or

2 x 4,5 m MYLAR tape, 37.5 mm wide, pre-curved by min. 6 mm, coated with a glue film of 14 mm width (see Fig.4).

2 x 4,5 m Tesafilm no.104, 25 mm wide, white (to cover the front edge of the elastic lip).

Fig. 2

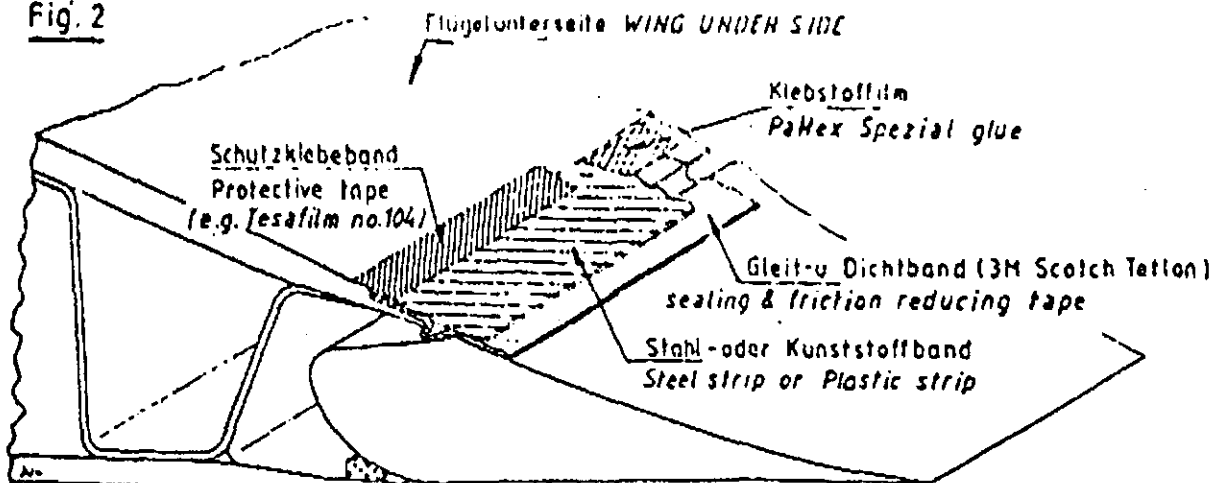


Fig. 3

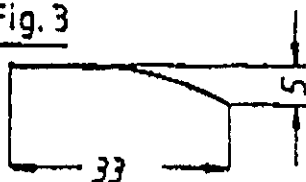


Fig. 4

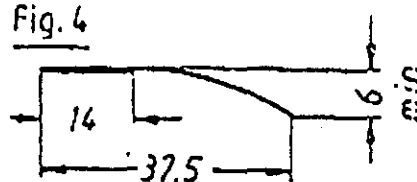


Fig. 5

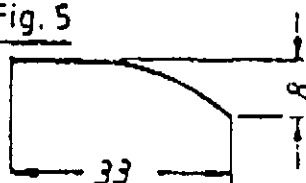
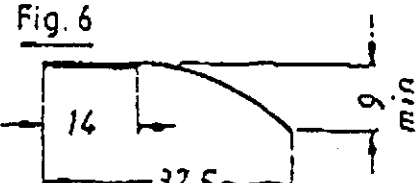


Fig. 6



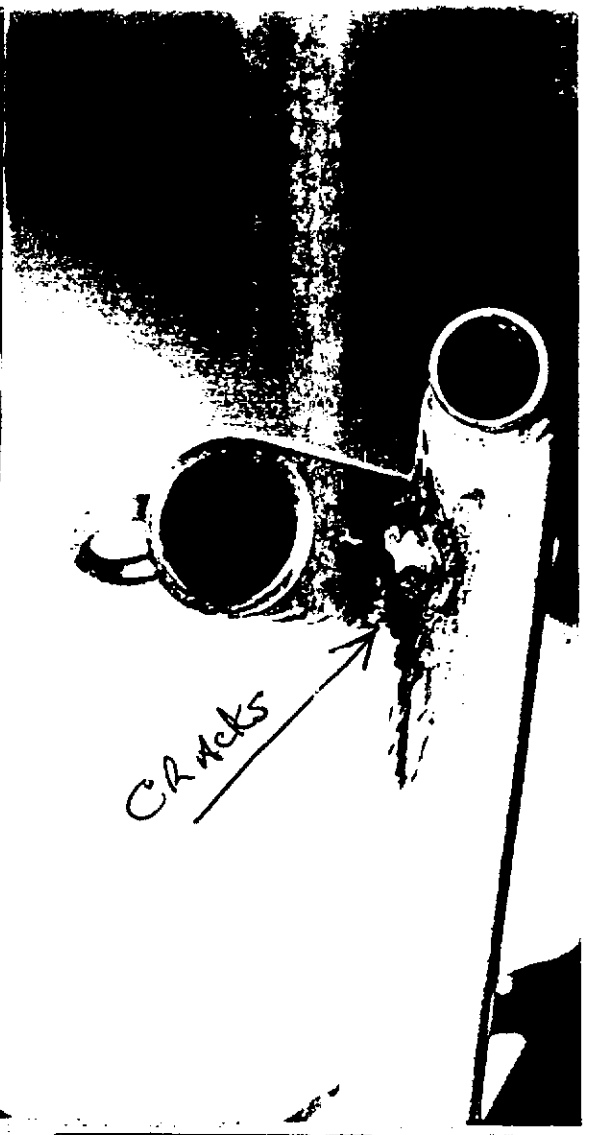
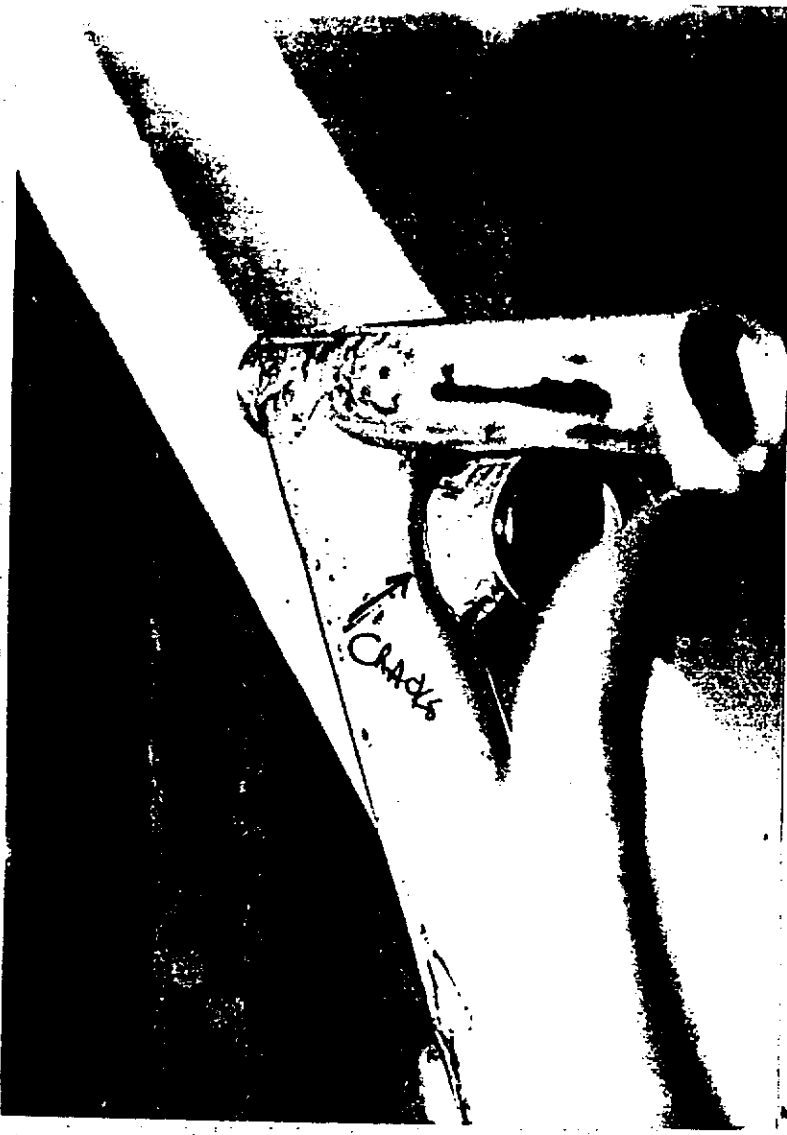
Poppenhausen, June 24, 1987

ALEXANDER SCHLEICHER
GABR & Co.

Gerhard Warbel

The German original of this Technical Note has been approved by the LBA under the date of July 13, 1987 (signature: Volnsciuc). The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.

PEGASUS / ASW 19 / ASW 20 Rubber Pumps.





Release Hook Cable Frayed!

Dorset CC

SAFETY REGULATION GROUP



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Our ref 9/97/CtAw/119

13 June 1996

**AUSTRO CONTROL AIRWORTHINESS DIRECTIVE NO.85
HOAC/DIAMOND AIRCRAFT H 36 DIMONA AND HK 36 R SUPER DIMONA AIRCRAFT
INSPECTION OF ELEVATOR RIB FOR DAMAGE**

This letter transmits a copy of the above referenced Airworthiness Directive for your attention.

The provisions of Article 9(7) of the Air Navigation Order (1995) as amended, are such that a Certificate of Airworthiness in respect of an aircraft registered in the United Kingdom will cease to be in force until any modification or inspection, being a modification or inspection required by the CAA is completed.

In accordance with Article 9(7) and Airworthiness Notice No. 36 the modification or inspection required by this Airworthiness Directive is mandatory for applicable aircraft on the UK Register.

IT IS RECOMMENDED THAT YOU FORWARD A COPY OF THIS AIRWORTHINESS DIRECTIVE TO THE ORGANISATION THAT MAINTAINS YOUR AIRCRAFT.

A handwritten signature in cursive script, appearing to read 'D J V Lewis'.

D J V LEWIS
Aircraft Maintenance Approvals

austro CONTROL Österreichische Gesellschaft für Zivilluftfahrt mbH	Airworthiness Directive Nr. 85	Office-No.: FL 454-1/6 -96	
	Rib of the elevator on powered gliders HOAC/DAI H 36, HK 36, H 36 VT, HK 36 R and HK 36 TS	Nationality mark: OE- -----	
		Page No. - 1 -	Pag - 1 -
<p>1. Affect:</p> <p>H 36 "Dimona": all serial numbers</p> <p>H 36 VT "Dimona": S/N 36.275</p> <p>HK 36 "Super Dimona", HK 36 R "Super Dimona": S/N 36.301 up to S/N 36.414</p> <p>HK 36 TS: S/N 36.415 and 36.416</p> <p>2. Subject / Reason:</p> <p>In some cases the rib of the elevator was damaged or loose due to humidity.</p> <p>A detailed inspection and modification is required.</p> <p>3. Measures:</p> <p>a. Inspection of the elevator</p> <p>b. Exchange of rib</p> <p>c. Protection of the elevator</p> <p>4. Time of compliance:</p> <p>a. Within 20 hours of operation, at the latest 30 June 1996</p> <p>b. If damage is found immediately, otherwise not later than the 3000 Hours Inspection</p> <p>c. If unprotected areas found, preserve immediately</p> <p>5. Implementation:</p> <p>In accordance with Service Bulletin No. 51, issued by Diamond Aircraft Industries GmbH, 2700 Wr. Neustadt, N. A. Ottostraße 5.</p>			
Bearbeiter: Ing. Winkler	Date: 29 May 1996		

Subject : Extension of service life

Affected : Sailplanes model

- Standard Cirrus, manufactured by Schempp-Hirth or , if S/N is followed by a "G", by Grob
- Standard Cirrus B
- Standard Cirrus CS-11-75 L
- Standard Cirrus G

FRG
ATC
NO.
278

Urgency : Before reaching a service life of 6000 hours, but not later than September 30, 1996

Reason : The results of fatigue tests subsequently carried out on wing spar sections have demonstrated that the service time of GFRP/CFRP sailplanes and powered sailplanes may be extended to 12000 hours, if for each individual aircraft (in addition to the obligatory annual inspections) the airworthiness is demonstrated according to a special multi-step inspection program, particularly with regard to the service life.

This revised inspection program must be incorporated in the Service Manual of the above sailplane models.

Actions : Amendments of the Service Manual

(Date of revised pages is September 1995)

Model Standard Cirrus, Standard Cirrus B and
Standard Cirrus CS 11-75 L:

Page 32 : Inspection process for the extension
Page 33 : of service life

Model Standard Cirrus G:

Page 35 : Inspection process for the extension
Page 36 : of service life

Weight,
C/G position,
Material

: Not affected

Note : The proper accomplishment of the action is to be entered in the sailplane's log book by a licensed inspector.

- THIS ISSUE SUPERSEDES THE ISSUE DATED APRIL 16, 1981 -

Kirchheim/Teck, September 26, 1995

Issued: ... *H. Treiber* ...
(H. Treiber)

LBA-approved:

The German original of this Technical Note has been approved by the LBA under the date of . 06. Okt. 1995 and is signed by Mr. *SKOV*. The translation into English has been done by best knowledge and judgement.

SUBJECT : Increase of service time,
Manual revision

EFFECTIVITY : DG-500 M all serial No's.

ACCOMPLISHMENT : At the next annual inspection, at the latest

REASON : 1. The results of fatigue tests have demonstrated that the service life can be extended to 12.000 h flight hours.
The access holes necessary for the inspections have been installed already during production.
2. In some countries the TBO's recommended by Rotax are regarded only as recommendations and are not mandatory. Therefore the TBO data will be taken out of the DG-500 M maintenance manual.
3. Manual revision
4. Special pages requested by the FAA are incorporated in this revision.

INSTRUCTIONS : Exchange the following manual pages against the new pages dated Febr. 1996, marked TN 843/7.
Flight manual:
0.1, 0.3, 0.4, 0.5, 2.6, 2.8, 2.10, 4.12, 4.13, 5.9, 6.5, 6.9, 7.17, 7.18, 8.2, 8.6.
Maintenance manual:
1, 2, 3, 4, 5, 6, 24, 25, 26, 32, 37, 37a - 37d, 38, 40, 42, 49, 50, 52, 59, 77, 85, 85a-b, 88, 89, 90, 92, diagram 6,8,13, drawing 5E1

MATERIAL : Manual pages see above

REMARKS : Instructions may be executed by the owner himself. They are to be inspected and entered in the aircraft logs by a licensed inspector with the next annual inspection.

Bruchsal 4, date Febr.19,96

W. Dirks

Author: W. Dirks

LBA - approved:

The German original of this TN has been approved by the LBA under the date of 9. April 1996 and is signed by Mr. Fendt. The translation into English has been done by best knowledge and judgement.

A. Lange

Type certification inspector: A. Lange



Luftfahrt-Bundesamt
-AD-Department-

Airworthiness Directive

*In case of any difficulty, reference should be made
to the German original issue*

92-190/2 Grob

Effektive Date: July 04, 1996

Affected sailplanes:

German Type Certificate No.: 315

Grob

TWIN ASTIR	S/N: 3000 - 3291
TWIN ASITR TRAINER	S/N: 3000 - 3291 (with "T")
G 103 TWIN II	S/N: 3501 - 3729 3730 - 3878 33879 - 34078
G 103A TWIN II ACRO	S/N: 3544 - 34078 (with "K")
G 103C TWIN III ACRO	S/N: as of 34101
G 103C TWIN III	S/N: 36001 - 36014

Subject:

Extension of service life

Reason:

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:

- 1) Exchange revisions into the Maintenance Manual
- 2) Installation of an inspection hole
- 3) Exchange of the elevator lever
- 4) Exchange of the airbrake over-centre lever
- 5) Inspection according the Inspection Record "Extension of Life Time"
- 6) Inspections

Compliance:

1. Action 1 : immediately
2. Before reaching a service life time of 3000 flight hours: actions 2, 3 & 4 (only TWIN ASTIR and TWIN ASTIR TRAINER)
3. Before reaching 3000, 6000, 7000, 8000, 9000, 10000 and 11000 flight hours: action 5
4. Before reaching 9500, 10500 and 11500 flight hours: action 5

Technical publication of the manufacturer:

Grob G 103 Service Bulletin 315-45/2 dated December 21, 1995 which becomes herewith part of this AD and may be obtained from Messrs.

Burkhart Grob Luft- und Raumfahrt

D-86874 Mattsies
Federal Republic of Germany

Accomplishment and log book entry:

Action to be accomplished by an approved service station or the holder of the aircraft and to be checked and entered in the log by a licensed inspector.

Note:

This AD supersedes the LTA-Nr. 92-190 dated March 16, 1992.

* * *



Luftfahrt-Bundesamt
-AD-Department-

Airworthiness Directive

*In case of any difficulty, reference should be made
to the German original issue*

75-051/3 Schempp-Hirth

Effective Date: July 04, 1996

Affected sail- and powered sailplanes:

BALL JOINTS.

German Type Certificate No.: 278

Standard Cirrus

Standard Cirrus B

Standard Cirrus CS 11-75L

Standard Cirrus G

- S/No's.: all (* also S/No.'s having at their end the suffix "G", which is marked, when the sailplane was manufactured by Grob)

German Type Certificate No.: 865

Standard Cirrus TOP

Standard Cirrus B TOP

- S/No's.: all (* also S/No.'s having at their end the suffix "G", which is marked, when the sailplane was manufactured by Grob)

Subject:

Ball joints on airbrake actuating lever inside the fuselage

- possibility of fatigue fractures
- Modification of the lever facing flank

Reason:

On several sail- and powered sailplanes with a great number of flying hours a fatigue fracture of a ball joint on the air brake drive lever in the fuselage occurred. The thread on ball joints from current production (by Messrs. L'Hotellier) is slightly shorter and starts only 2.5 mm (0.10 in.) below the collar. Connecting the swivel joints is no longer possible unless a minor alternation of the airbrake actuating lever is carried out.

Actions:

- 1) Exchange of ball joints
- 2) Adding some pages into the AFM
- 3) Modification of airbrake actuating lever

Compliance:

Action 1 & 2:

- at latest when reaching 500 hours time in service
- Sailplanes and powered Sailplanes with more than 500 hours time in service during the next annual inspection, but not later than August 31, 1996.

Action 3:

On the next periodical exchange of the ball joints.

Bendix S-20 MAGNETOS

BW 95-13

**TELEDYNE CONTINENTAL MOTORS
AIRWORTHINESS DIRECTIVE
APPLIANCE
SMALL AIRCRAFT & ROTORCRAFT**

Bendix 95-13

94-01-03 R2 Teledyne Continental Motors: Amendment 39-9271. Docket 93-ANE-44. Revises AD 94-01-03 R1, Amendment 39-9006.

Applicability: Teledyne Continental Motors (TCM), formerly Bendix magnetos:

S-20, S-200, and S-600 series magnetos with red or black Bendix (not TCM) data plates having serial numbers (S/N's): lower than 2000000 without any letter prefix; or S/N's lower than A16058 having the letter "A" prefix.

S-20, S-200, and S-600 series magnetos with blue Bendix (not TCM) data plates marked "REMANUFACTURED" having S/N's lower than 901001.

S-1200 series magnetos with red Bendix (not TCM) data plates having S/N's: lower than 2000000 without any letter prefix; or S/N's lower than A132844 having the letter "A" prefix.

S-1200 series magnetos with blue Bendix (not TCM) data plates marked "REMANUFACTURED" having S/N's lower than 901001.

These magnetos are installed on but not limited to reciprocating engine powered aircraft manufactured by Beech, Cessna, Maule, Mooney, and Piper.

NOTE 1: The FAA has received reports of some confusion as to what is meant by S-20, S-200, S-600, and S-1200 series magnetos as referenced in TCM Mandatory Service Bulletin (MSB) No. MSB644, dated April 4, 1994, and this AD. A typical example is S6RN-25, where the S designates single type ignition unit, the 6 designates the number of engine cylinders, the R designates right hand rotation, the N is the manufacturer designator (this did not change when TCM purchased the Bendix magneto product line), and the number after the dash indicates the series (a -25 is a S-20 series magneto, while a -1225 is a S-1200 series magneto).

NOTE 2: This AD applies to each magneto identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For magnetos that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (k) to request approval from the FAA. This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any magneto from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent magneto failure and subsequent engine failure, accomplish the following:

(a) No action is required for those magnetos in compliance with AD 94-01-03 or 94-01-03 R1.

(b) An optional method of compliance with this AD is to replace the Bendix magnetos with Slick magnetos where FAA approval has been granted for that application.

(c) If a Bendix magneto data plate has been replaced with an overhaul facility's data plate, this AD is still applicable to that magneto since the magneto is a Bendix magneto.

(d) Yellow Bendix or TCM service spare data plates may have been installed during a field overhaul; use model and S/N to determine applicability.

(e) Magnetos built by Bendix in Jacksonville, Florida, and Magnetos built by TCM in Atlanta, Georgia, as indicated on the data plate, are not affected by this AD.

(f) The paint on some early data plates may have been obliterated and the data plate will appear silver in color; use model and serial number to determine applicability.

(g) For Bendix S-20 and S-200 series magnetos, replace Bendix ignition coils and rotating magnets identified in the Detailed Instructions of TCM MSB No. MSB644, dated April 4, 1994, with serviceable TCM or Parts Manufacturer Approval (PMA) ignition coils and rotating magnets at the next 100 hour inspection, the next annual inspection, the next progressive inspection, or the next 100 hours time in service (TIS) after the effective date of this AD, whichever occurs first.

BENDIX S26 MAGNETO

BW 96-13

**TELEDYNE CONTINENTAL
AIRWORTHINESS DIRECTIVE
APPLIANCE
SMALL AIRCRAFT & ROTORCRAFT**

Bendix

642 TNS 17/8/92

96-12-07 Teledyne Continental Motors: Amendment 39-9649. Docket 93-ANE-07. Supersedes AD 78-09-07 R3, Amendment 39-4538.

Applicability: Teledyne Continental Motors (TCM) (formerly Bendix) S-20, S-1200, D-2000, and D-3000 series magnetos equipped with impulse couplings, installed on but not limited to reciprocating engine powered aircraft manufactured by Beech, Cessna, Mooney, and Piper.

NOTE 1: This airworthiness directive (AD) applies to each magneto identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For magnetos that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (c) to request approval from the Federal Aviation Administration (FAA). This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any magneto from the applicability of this AD.

NOTE 2: The FAA has received reports of some confusion as to what is meant by S-20, S-1200, D-2000, and D-3000 series magnetos as referenced in TCM Mandatory Service Bulletin (MSB) No. MSB645, dated April 4, 1994, and this airworthiness directive (AD). A typical example is S6RN-25, where the S designates single type ignition unit (a D designates a dual ignition unit), the 6 designates the number of cylinders, the R designates right hand rotation, the N is the manufacturer designation (this did not change when TCM purchased the Bendix magneto product line), and the number after the dash indicates the series (a -25 is a S-20 series magneto while a -3200 is a D-3000 series magneto, etc.).

Compliance: Required as indicated, unless accomplished previously.

To prevent magneto failure and subsequent engine failure, accomplish the following:

(a) For magnetos with riveted or snap ring impulse coupling assemblies, having less than 450 hours time in service (TIS) since new, or overhaul, or since last inspection, on the effective date of this AD, accomplish the following:

(1) Prior to the accumulation of 500 hours TIS since new, or overhaul, or since last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(2) Thereafter, at intervals not to exceed 500 hours TIS since the last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(b) For magnetos with riveted or snap ring impulse coupling assemblies, having 450 or more hours TIS since new, or overhaul, or since last inspection, on the effective date of this AD, or an unknown TIS on the effective date of this AD, accomplish the following:

(1) Within the next 50 hours TIS after the effective date of this AD, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies in accordance with the Detailed Instructions of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.

(2) Thereafter, at intervals not to exceed 500 hours TIS since the last inspection, inspect riveted or snap ring impulse coupling assemblies for wear, and replace, if necessary, prior to further flight, with serviceable riveted or snap ring impulse coupling assemblies, in accordance with the Detailed Instruction of TCM MSB No. MSB645, dated April 4, 1994, and TCM SB No. 639, dated March 1993.



Atlanta Aircraft Certification Office

To: Dick Stratton**Company:** British Gliding Association**Phone:** 0116 2531051**Fax:** 0116 2515939**From:** Christina Marsh**Company:** FAA - Atlanta ACO**Phone:** (404) 305-7362**Fax:** (404) 305-7348**Date:** 7-19-96**Pages:** 2

Subject: AD 95-12-01 - Piper PA25 - Pawnee

This is in response to your letter dated May 28, 1996, requesting consideration of an adjustment to the repetitive inspection interval (24 calendar months) specified in AD 95-12-01 for PA25s used exclusively for glider towing. Prior to the issuance of AD 95-12-01, a Supplemental Notice of Proposed Rulemaking solicited comments on the proposed AD. Listed below is a summary of the commenters' recommendations relating to your request:

Four of the commenters recommended a more frequent inspection interval for those aircraft in agricultural use versus those aircraft in non-agricultural use. Two of these commenters recommended maintaining the two year interval for those operating in agricultural operations and a longer interval for those operating in non-agricultural operations (glider towing, banner towing, etc.). One commenter indicated that the evidence of corrosion in the steel tubing on those aircraft used in glider towing is much lower than on those used in ag use. In addition, those aircraft used for glider towing, typically, have all of the spray/dust equipment removed in order to enhance towing performance; operate at a lower gross weights; may be certified under Normal category; and operate in an environment without corrosive chemicals. Six commenters recommended a ten year repetitive inspection interval; one commenter recommended a five year interval; one commenter recommended a three to five year interval for those in non-agricultural use; one commenter recommended a five year interval for those in Normal category; one commenter recommended a five year or 2000 hour time-in-service (TIS), whichever occurs first, interval; and one commenter recommended a 2000 hour TIS interval.

Consideration was given to all of the commenters recommendations and based on the information available at the time of AD issuance, no correlation could be established between the type of operation (non-ag, Normal category, etc.) and a repetitive inspection interval.

As you are aware, AD 95-12-01 does include a reporting requirement to require owners/operators report to the FAA the results of the inspections. The repetitive interval may be adjusted if sufficient data is presented to warrant a change. At this time, we are still receiving data from the initial inspections and are unable to forecast if an adjustment to the repetitive interval is justified.

Should you have any questions regarding this issue, feel free to contact me at (404) 305-7362, by facsimile at (404) 305-7348, or at our new address:

Atlanta Aircraft Certification Office
Campus Building
1701 Columbia Avenue, Suite 2-160
College Park, GA 30337

Regards-

Christina Marsh

BRA Note Detail Required

a). Registration. _____

b). Serial No. _____

c). Date of Manufacture _____

d). Total Hours Flown _____

e). Report on NDT Inspection _____

f). Club Contact person. _____

" " " Telephone _____