

# BGA TECHNICAL COMMITTEE

## TECHNICAL NEWSHEET 1/2/96

### PART 1     Airworthiness "AGGRO"

Herewith the 1996 Lilac Pages, a "Compendium of Airworthiness Directives, Mandatory Modifications, Special Inspections and Check List of Defects". Reference must be made to this document, when assessing the continuing Airworthiness of Sailplanes and S.L.M.G's, at any time. (Please notify errors & omissions to BGA office).

- 1.1.     T.61 Falke Series S.L.M.G.'s. On a T.61(F) "Venture", the fabric became detached at the spoiler box, in flight, due to deterioration of the adhesive. Inspect this area and rectify as required. (CAA Airworthiness Notice No. 20 refers the fabric replacement.
- 1.2.     T.21 Sedburgh - separation of the elevator drive at the elevator, in flight. AAIB Investigation defines the cause as failure of the rivets, in torsion, securing the end fitting to the drive tube, at the elevator probably in an unidentified prior incident. Previously reported in TNS 8/95. Inspect all elevator final drives a.s.a.p.
- 1.3.     Bocian - Aileron Controls Obstructed, in flight by £1 coin, lodged just in front of the stick! How proof are your gliders against f.o.d? (Bath & Wilts G.C.).
- 1.4.     SHK - Trim System cable frayed - difficult to operate. Inspection hole cut in inner G.R.P. skin to gain access. (see diagram). Reported by P. Wells - Southdown G.C.
- 1.5.     Puchacz Air Brake Paddle axis bolts unsecured. Bulletin BA/047/SC-3/94 introduces "obligatory" action to remedy this defect. Copy from Anglo Polish Sailplanes & reported by Roger Targett.
- 1.6.     Cirrus Series - all Serial No's, including those manufactured by Grob: Extension of Service Life to 12,000 hrs. LBA A/D 81-099/2 & T/Note 278-28 refer.
- 1.7.     DG - Motor Gliders Unleaded Mogas is not permitted, because of potential damage to fuel tanks. Service INFO 12-95 refers.
- 1.8.     ASW 19B - Tailplane detached on landing after two aerotowed flights. PIN HAD NOT BEEN INSERTED by the syndicate!

- 1.9. Reconstructions Using Parts From Other Gliders. Reference the T.21 incident, it is essential that detailed inspections are carried out in depth, on all components used in repairs and reconstructions.
- 1.10. Exhaust System Inspections. Extract from GASIL/6/95 gives good advice (herewith).
- 1.11. DG800A T/NOTE 873/5 (herewith) Revises the Flight Manual.

## **PART 2      GENERAL MATTERS**

- 2.1. CAA CofA Renewal Charges will be revised on 1/4/96 as follows:

For aircraft of less than 2730kg (M.T.O.W.) having Certificates of Airworthiness valid for 3 years, and renewable through an (M3) approved organisation (BGA), the rate will be revised from £52 per 500kg to £54 per 500kg, or part thereof. Typically the fee of £312 will be increased to £324 with effect from 1/4/96. (CAA Airworthiness Notice No. 25 will be re-issued).

**HAPPY NEW YEAR!**

Dick Stratton  
Chief Technical Officer



Luftfahrt-Bundesamt  
-AD-Department-

## Airworthiness Directive

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

TNS 1/96

### ■ 81-099/2 Schempp-Hirth / Grob

Date of issue: November 22, 1995

#### Affected sailplanes:

German Type Certificate No.: 278

- Schempp-Hirth / Grob
- Standard Cirrus \*
- Standard Cirrus B
- Standard Cirrus CS-11-75 L
- 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)

- and the following powered sailplanes which were rebuilt from a sailplane:

- German Type Certificate-No.: 865
- Standard Cirrus TOP and Standard Cirrus B TOP

#### Subject:

Extension of service life limit.

#### 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.

#### Action:

- Extension of service life - Amendments of the Service Manual

#### Compliance:

- Incorporate the Amendment of Service Manual before reaching a service life of 6000 Flight Hours , but not later than September 30, 1996.

#### Technical publication of the manufacturer:

- Schempp-Hirth Technical Note No. 278-28, dated September 26, 1995 and becomes herewith part of this AD and may be obtained from Messrs.

Schempp-Hirth Flugzeugbau GmbH  
P.O. Box 14 43  
D-73222 Kirchheim unter Teck  
Federal Republic of Germany

#### Accomplishment and log book entry:

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

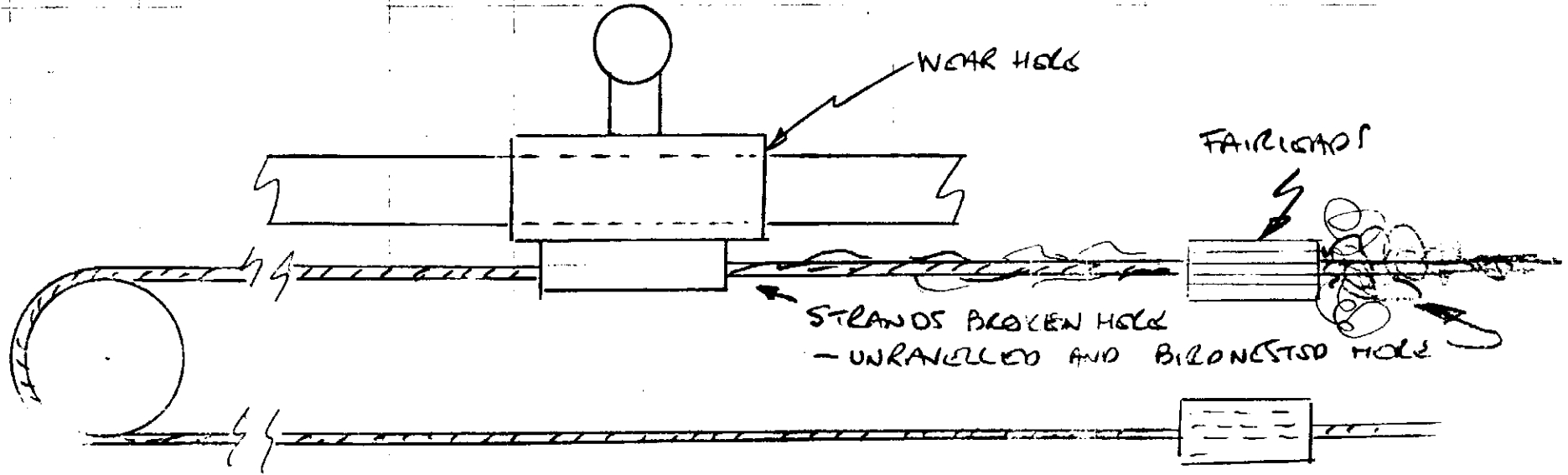
#### Note:

- This AD supersedes the LTA-Nr. 81-099, dated May 21, 1981.

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SHK TRIM CONTROL

TWO 



SHK TRIM CONTROL

*Wells*  
19.1.96  
SOUTHDOWN G.C.

*DG Powered Sailplanes*

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Service Info 12-95

**Unleaded automotive gasoline for DG-motorgliders?**

GFRP fuel tanks are installed in all DG- powered sailplanes to take advantage of all the space available in the fuselage. A tank with such complex geometry can't be produced from sheet metal.

Unleaded fuel contains up to 8% methyl alcohol. The leading manufacturers of resin systems advised us that Epoxy resin and also Polyester resin are not resistant against methyl alcohol. Even the 8% methyl alcohol in the unleaded fuel will cause swelling of the resin and particles of resin will be washed out and will clog the filter and the carburettor nozzles. With prolonged use the tank will start leaking.

Although engine and fuel lines can withstand unleaded fuel, the use of unleaded fuel is prohibited for DG-powered sailplanes.

Use according to the flight manual leaded Automotive-Super-gasoline or, if not available Avgas 100 LL.

Bruchsal, Nov. 14.1995

*Wilhelm Dirks*

Dipl.-Ing. W Dirks

SUBJECT : Manual revision

EFFECTIVITY : DG-800 A, all serial no's.

ACCOMPLISHMENT : March 31, 1996

REASON : 1. On several pages typing errors and other mistakes have been corrected.

2. The life times of 3 and 5 years for the exchange of the fuel lines don't match. As the critical lines near the engine have to be exchanged every 3 years an extension of the period for the other hoses from 5 to 6 years is acceptable.

INSTRUCTIONS : 1. Exchange the following pages of the flight and maintenance manual against the new pages dated Oct. 1995.

**Flight manual:**  
0.1, 0.3, 0.4, 0.5, 2.1, 2.6, 2.8, 2.10, 2.12, 4.2, 4.4, 4.8, 4.18, 4.21, 4.25, 4.26, 5.11, 6.3, 7.4, 7.12, 8.6

**Maintenance manual:**  
1, 2, 3, 5, 6, 10, 23, 47, 78, 79

2. When exchanging the hoses after 6 years, it is important that the hose from tank to drain valve is located so, that it does not lie directly on the fuselage shell. Otherwise it may **swell** if fuel remains in that area after a leakage. Therefore run this hose on top of the wire harness.

MATERIAL : manual pages see above

WEIGHT AND BALANCE : ./.

REMARKS : Instructions may be executed by the owner himself.

Bruchsal 4, Oct.31,1995

LBA - approved:

Author: *W. D.*

The German original of this TN has been approved by the LBA under the date **19. Nov. 1995** and is signed by Mr. Fendt. The translation into English has been done by best knowledge and judgement.

Type certification inspector:

*A. Lang*

BULLETIN No BA-047/50-3/94 "BUCHACZ"

Note: The case of loosening the screw fastening the distance sleeve on which the air brake plate arm rotates.

Way of adjustment: collimator when this bulletin is obtained.

Prepared by PPS-IXS, Aug. 29<sup>th</sup>, 1994.

Director of "PUSHACZ"  
PPSS "PUSHACZ", Warsaw

(Puchacz)

This is the translation of the original Polish text approved by Polish Airworthiness Authority.

Translated by

Włodzisław Świątek, D.Sc., Ph.D., Eng.

B-047/50-3/94 "Puchacz"

Widok "B" - "B" VIEW

Fig. 3

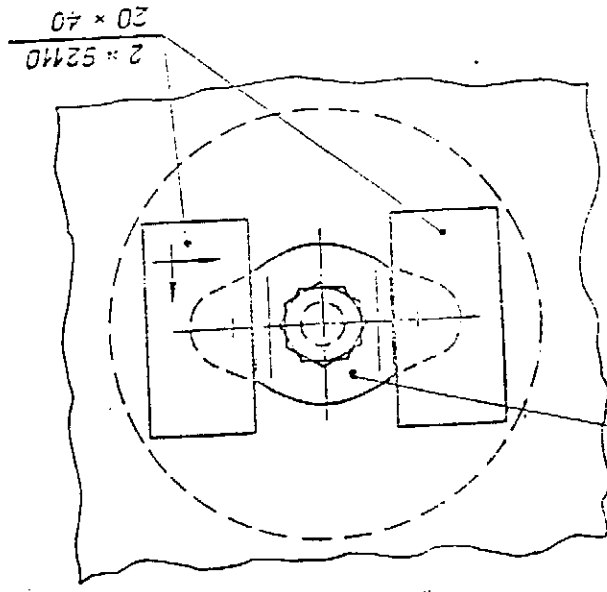


Fig. 4





- 5.5. Glue-up onto the air brake boxes the degreased securing metal pads acc. to Fig. 3.
- 5.6. Cut the ring of  $\varnothing$  110 mm of 30-60 / 55 mm foam, cover with a composition with aerosil, glue the 2 x 92110 fabrics on these rings, glue into the coverings with a composition with aerosil, than press down till it is cured.
- 5.7. Sand-off the resin surplus.

6. FINAL STATEMENTS  
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The producer delivers together with this Bulletin:

- 6.1. Four pieces of securing pads.
- 6.2. The changes is to be performed by the user himself and on his own cost.
- 6.3. The changes introduced should be recorded in glider technical documents with Bulletin No included.

- THE END -

Fig. 1

Skrzydło prawe - widok z dołu  
 Right wing - bottom view

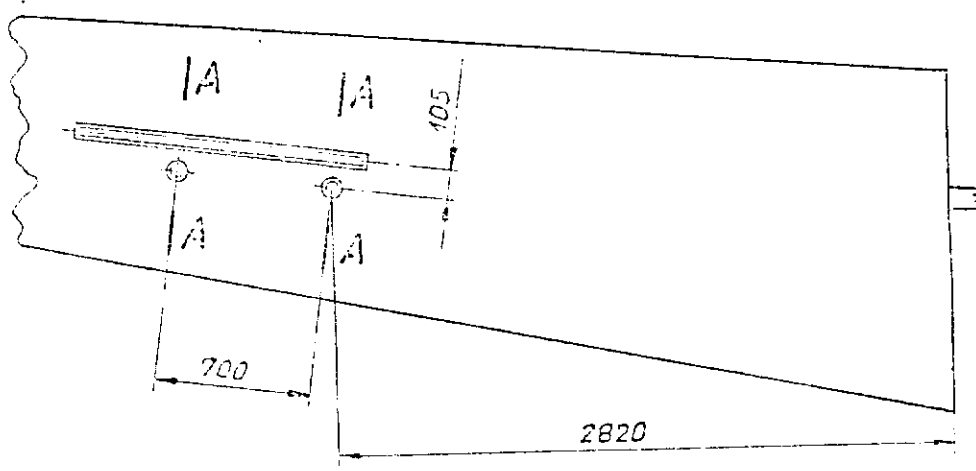


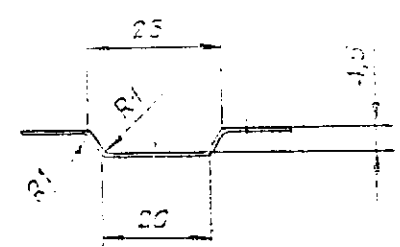
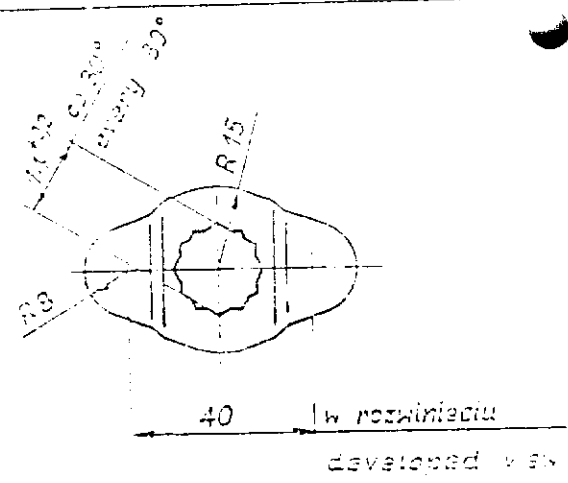
Fig. 4

4 szt. / szybowiec  
 4 pcs. / glider

material : stal  
 material : steel

36 x 30 x 55

polypod ENF-01  
 paint with epoxy primer



## E4. EXHAUST SYSTEM CHECK LIST

GASIL is grateful to FAA Airworthiness Alerts for the following exhaust system checklist which is reprinted in full.

(Compiled by the Wall Colmonoy Corporation.)

*First, remove all muffler and stack shrouds and shields to permit full inspection.*

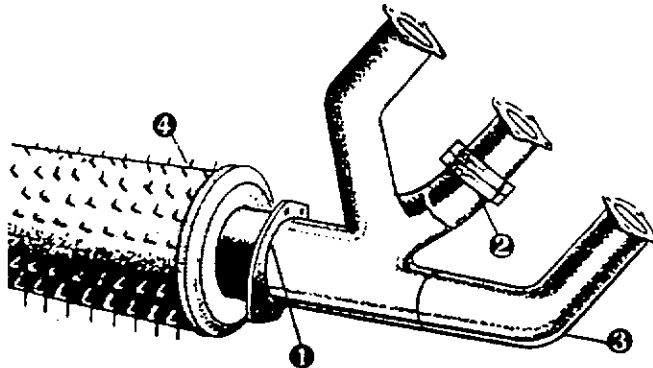
### LOOK FOR LEAKS

Examine surfaces adjacent to exhaust system components for telltale signs of exhaust soot. They reflect leakage points.

Look for gray, red or black gas stains at welds, clamps, flanges, etc. ❶

Check that no part of the system is being chaffed by cowling, cables or other parts.

**TIP** To verify a suspected leak, connect the exhaust outlet of a vacuum cleaner to the tailpipe. Seal around with duct tape. Apply soapy water or talcum powder.



### LOOSE CONNECTIONS

Check for loose connections or binding of slip joints. ❷

### INTERNAL EROSION

Examine bends and low spots for thinning and pitting. ❸

**TIP** Use an ice pick or awl to probe for weak spots.

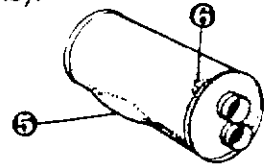
### PINS AND FINS

Look for missing or damaged heat transfer pins or fins - they can create a hole. ❹

### METAL FATIGUE

Inspect all surfaces for bulging and distortion ❺, and for patches of small cracks. ❻

**TIP** DO NOT mark any surfaces with lead pencils or any carbon-containing markers (they will cause cracks).



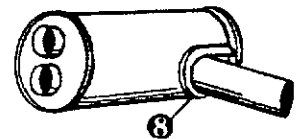
### BAFFLE BREAKDOWN

Look inside mufflers for broken baffles and tubes. ❽ They can restrict the outlet causing power loss.

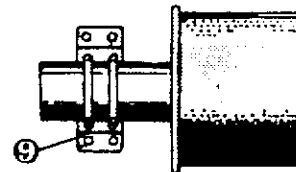


### HIDDEN DAMAGE

Inspect carefully all internal surfaces that lie hidden under external gussets or stiffeners ❾



**TIP** Run a borescope into the tailpipe or overboard to inspect internal conditions.



### INSTALLATION TIPS

Install only correct parts and don't force-fit.

Do not reuse gaskets.

Properly align connecting parts. ❿

Tighten nuts evenly to proper torque value (per OEM specs).

