BGA TECHNICAL COMMITTEE

TECHNICAL NEWSHEET 01/02/00

PART 1 AIRWORTHINESS "AGGRO" Herewith the Millennium "GREEN" Issue of the BGA Compendium of Airworthiness Directives, Mandatory Modifications, Special Inspections and Check List of Defects.

Please refer to this document in respect of each type, at the time of Annual CofA renewal, if not more often!

1.1. SF25 B/C SLMG's LBA A/D 1999-34 & SB 653-73, requires inspection for cracks in the aileron steel pipe spar. (Repeated in full in TNS 11/12/99)

1.2. BLANIK A/D/T/112/1999 was mailed to owners on 22/11/99, and requires Non Destructive Testing (NDT) on tail fuselage attachments. Blanik Mandatory Bulletin L13/085a refers.

1.3. LS-I&F. A/D 1999-378 increases structural life to 6000 hrs, subject to multiple stage inspection.

1.4. DG 500M/MB. A/D 1993-383 (herewith) concerns DRIVE BELT TENSION on SOLO ENGINES. (T.Note 843/13).

1.5. DG 800 A&B With SOLO ENGINES A/D 1999-377 (herewith) concerns DRIVE BELT TENSION. Tech/Note 873/16 also refers.

1.6. VENTUS - bT & 2CM with SOLO ENGINE. A/D 1999-365 (herewith) requires modification.

1.7. STEMME S.10 & S10V and VT. A/D 1999-224/4 (herewith) concerns VARIABLE Pitch Propellers.

1.8. ASH 25E and 25M. A/D 1999-376 (herewith) requires Inspection and exchange of the Muffler of the powerplant.

1.9. NIMBUS 4M & 4DM A/D 1999-392 (herewith) requires modification if SOLO engine is installed.

1.10. KA6E CRACKS IN THE AIR BRAKE APERTURE. Sketch from David Masterson (Bowland Forest G.C.) is self explanatory.

1.11. ASTIR's If wire launched with adverse yaw, such that the cable passes down the STBD side, may have difficulty in releasing. The back release may not operate, and the pull-off release load may be very high. (Reported by CFI Bowland Forest G.C.).

1.12. VENTUS bT, CT and CM A/D 199-304 extends the Service Life to 12000 hours, subject to multi-stage inspection.

1.13. KA7 / KA13. Airbrake pivot bolts may migrate if not locked. (Report from KA7 in the Caribbean by Adrian Hatton).

1.14. TOST HOOKS are Maintained "ON CONDITION", subject to daily functioning check, annual inspection and replacement when found to be worn. (BGA Tech Committee policy statement).

2.0. GENRAL MATTERS

2.1. BULK FUEL INSTALLATION (AVGAS) contaminated by delivery of Diesel, into the WRONG Tank!

2.2. PAWNEE A/D 95-12-01 Wing Root Attachment NDT). Booker Air Services (01494 442501) have the jigs and have embodied the alternative welded cluster. BGA continues to lobby both FAA & CAA to extend the interval between NDT inspections.

2.3. WINCH GUILLOTINES - The Millennium gear is the year for compliance with Mandatory BGA Guillotine requirements.

2.4. GROB G-109B Use of Unleaded Fuel (If allowed by CAA)? S.B. 817-46 (herewith) gives advice.

2.5. ALL DG SINGLE SEATERS WITH SINGLE PIECE CANOPIES. Enclosed Tech Note offers improved Canopy Securing System.

2.6. TURBO GLIDERS - Performance checks should be made to show compliance with the Flight Manual performance (if any). (Correction to previous BGA requirement).

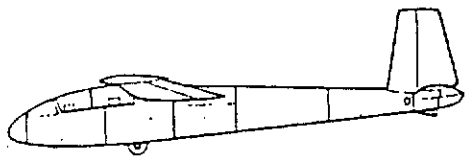
2.7. PIPER PA-25 (PAWNEE) The Type Certificate holder is :- LAVIASA, HANGAR 2, AEROPUERTO EL PLUMERILLO (SUR) LAS HERAS, MENDOZA. EL PLUMERILLO Tel: 0054 11 4742 6406 Fax: 0054 11 4742 8767

HAPPY NEW YEAR.

Dick Stratton
Chief Technical officer

10x

BLANIK AD/T/11299.
To owners 22/11/99.



MANDATORY BULLETIN

No. L13/085a

Concerning: L13, L13A sailplanes

Reason: On the L 13 BLANIK sailplane S/N 027226, the tail-fuselage attachment fitting P/N A 102 021 N made of 424253.11 material has been damaged in service.
The material of this component must be tested as instructed in this Bulletin.

To be accomplished not later than:	December 31, 1999
To be accomplished by:	The operator
Cost covered by:	The operator
Material availability:	----
Validity:	Upon the approval date.
Total number of sheets:	5

Ing. Pešák
.....
Manufacturer

Engineering data contained in this Bulletin is CAI Approved.

Date: November 17, 1999

LET, a.s., Kunovice 686 04, Czech Republic, tel.: +420 632 55 44 96, fax: +420 632 56 41 13, e-mail: ots@let.cz

A. WORK PROCEDURE

1. Remove the oval cover located on the LH side of the fuselage, under the horizontal stabilizer.

2. Test the material of the attachment fitting P/N A 102 021 N as follows:
   a) Conductivity measurement by means of eddy currents:
      - Recommended measurement frequency: 60 kHz
      - Probe diameter: not exceeding 15 mm
      - Measuring contact point: lower milled surface of the component, between the rivets (see Figs 1 and 2).

   Permissible range of measured values:

% IACS	MS/m
28.5 - 35.0	15.0 - 20.0

   Note: The surface protective coating of the component need not be removed.

   b) Hardness measurement by means of a portable digital hardness tester.
   Measuring method: depending on the type of the hardness tester used, i.e. dynamic, ultrasonic, and/or by means of a manual probe.
   Measuring point: lower milled surface of the component.
   Measured value: not lower than 100 HB.

   c) Any other measuring method must be approved by the sailplane manufacturer before it can be used.

3.1 If the values measured during the check are within the permissible limits specified above, make a record in the sailplane logbook (see section H of this Bulletin). The sailplane operation can be continued without any limitations.

3.2 If the values measured during the check are not within the permissible limits, the attachment fitting P/N A 102 021 N must be replaced before the sailplane operation can be continued.

4. If the attachment fitting P/N A 102 021 N is to be replaced, the operator shall place an order with the manufacturer, stating the sailplane Serial No., number of flight hours, registration mark , and number of its repairs and / or overhauls.

5. The manufacturer will send to the operator the material required for replacement, together with a bulletin providing the work procedure.

6. After the check, reinstall the inspection hole cover.

B. MATERIAL REQUIRED FOR MODIFICATION OF ONE SAILPLANE

None.

C. ILLUSTRATIONS

Figs 1 and 2.

D. DOCUMENTATION REQUIRED

None.

E. TOOLS REQUIRED

Material hardness testing equipment:

- Eddy current conductivity meter
- Hardness tester

F. SPARE PARTS IN OPERATION

The spare parts in stock, if any, must be tested as instructed in Section A, item 2 of this Bulletin.

G. SAILPLANE MASS

Not affected.

H. RECORD IN LOGBOOK AFTER BULLETIN IMPLEMENTATION L13/085a

Attachment fitting P/N A 102 021 N material hardness tested.
Measured values:
Sailplane cleared for operation.
Date:

Carried out by:
(legible signature of
authorized engineer)

I. ACCOMPANYING DOCUMENTATION

Not affected.

Contact Address: LET, a. s.
Product Support Dept.
686 04 Kunovice 1177
Czech Republic
tel 0632 / 55 44 96; fax 0632 / 56 41 13
E-mail: ots@let.cz

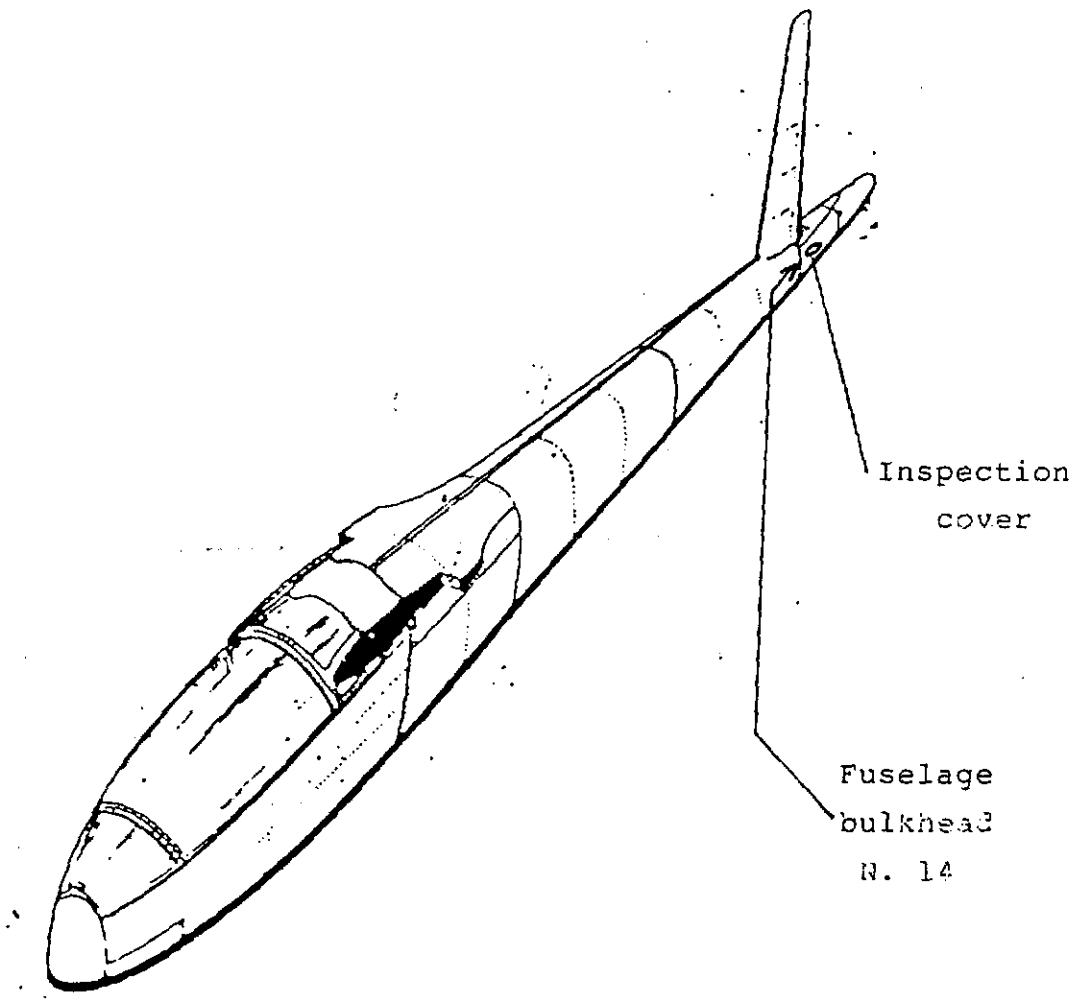
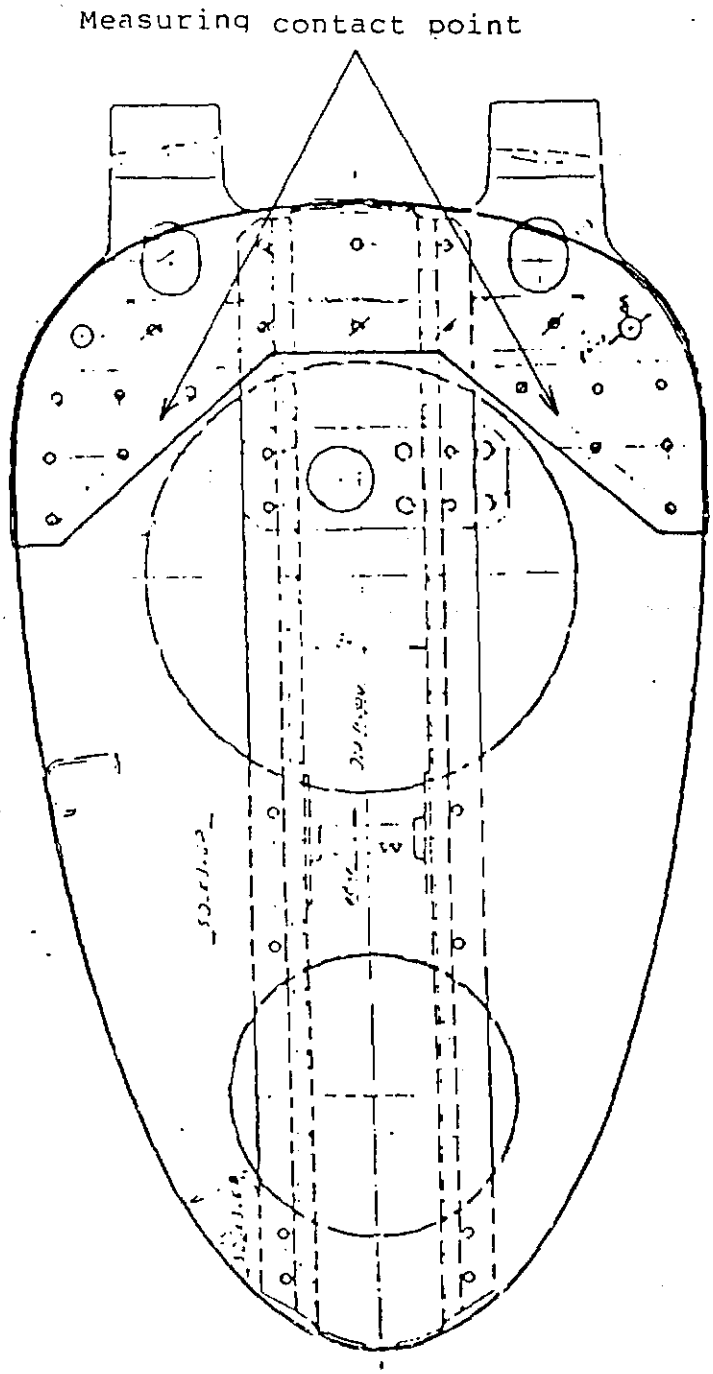


Fig. 1



Fuselage bulkhead N. 14 with attachment fitting P/N A 102 021 N

Fig. 2

Airworthiness Directive

1999-383

Luftfahrt-Bundesamt
Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
Federal Republic of Germany

Glaser Dirks

Effective Date: December 16, 1999

Affected:

Kind of aeronautical product:	Powered Sailplane
Manufacturer:	DG-Flugzeugbau, Bruchsal, Germany
Type:	DG-500M
Model:	DG-500MB, equipped with SOLO-Engine 2625 02
Serial numbers affected:	all
German Type Certificate No.:	843

Subject:
Powerplant - Drive belt tension and revision of manual pages

Reason:
Service experience with SOLO 2625 02 engine have shown that a modification of the front crank shaft bearing is necessary.
The SOLO company has issued the Technical Note No. 4600-1 with maximum values for the drive belt tension. It is not possible to measure the tension directly at the powerplant and DG Flugzeugbau has developed a simple method to determine the tension. This measurement must be repeated whenever the drive belt is installed or refitted.
In the circuit of the DEI several power consuming devices are installed. Their power consumption differs from unit to unit due to tolerances in the manufacturing process. To avoid any unintended release of the circuit breaker a slightly stronger circuit breaker must be installed.
Revision of manual pages because the description of the circuit breaker functions and the wheel brake have been corrected.

Action:
1. Exchange of pages into the AFM and MM.
2. Remove the engine and perform a modification (the engine must be sent to SOLO to perform this modification)
3. Installation of additional access holes in the propellermount.
4. Reinstall the engine and adjust and measure the drive belt tension.
5. Perform a ground test run and check especially the position of the propeller in relation to the engine compression point.
6. Exchange of DEI circuit breaker.

The actions must be done in accordance with the Technical Note of the manufacturer.

Compliance:
The action must be done within the next 25 hours inspection, but not later than December 31, 1999.

Technical publication of the manufacturer:
DG-Flugzeugbau Technical Note No. 843/13 dated October 22, 1999 which becomes herewith part of this AD and may be obtained from Messrs.:

DG-Flugzeugbau
Postbox 41 20

D- 76625 Bruchsal
Federal Republic of Germany
Phone: ++ 49 7257 890
Fax: ++ 49 7257 8922

Accomplishment and log book entry:
Action to be accomplished by an approved service station (action 1also can be performed by the owner) and to be checked and entered in the log book by a licensed inspector.
Enquiries regarding this Airworthiness Directive should be referred to Mr.Olaf Schneider, Airworthiness Directive Section at the above address, fax-no. 0049 531/2355-720.Please note, that in case of any difficulty, reference should be made to the German issue!

Holders of affected aircraft registered in Germany have to observe the following:
As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

Instructions about Available Legal Remedies:
An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig.

DG Flugzeugbau GmbH
Postfach 4120 76625Bruchsal
Tel. 07257/890

Technical Note
No. 843/13

Subject : Powerplant , drive belt tension, manual revision

Effectivity : DG-500MB with engine SOLO 2625 02

Accomplishment : With the next 25 h service, at latest by Dec. 31. 1999

Reason :

a) Service experience with the engine SOLO 2 625 02 showed that a modification of the front crank shaft bearing was necessary. To accomplish this the engine must be modified by the manufacturer SOLO.

b) The SOLO company has issued the technical note 4600-1 which gives max. values for the drive belt tension. As it is not possible to measure the tension directly at the powerplant, we have developed a simple method to determine the tension. This measurement must be repeated whenever the drive belt is installed or refitted.

c) In the circuit of the DEI several power consuming devices are installed. Their power consumption differs from unit to unit due to tolerances in the manufacturing process. To avoid any unintended release of the circuit breaker a slightly stronger circuit breaker will be installed.

d) Manual revision: The description of the circuit breaker functions and of the wheel brake have been corrected.

Instructions :

1. Exchange the following manual pages:
   flight manual: 0.1, 0.5, 7.8
   maintenance manual: 1, 2, 3, 4, 34, 57, 63, 64, 93 and file drawing W57 to the manual enclosures
2. Remove the engine from the propellermount according to the procedure given in the maintenance manual in section 4.16. Ship the engine to the engine manufacturer SOLO for modification according to the SOLO TN 4600-1.
3. Install additional access holes in the propellermount according to drawing 5M102.
4. Reinstall the engine to the propellermount according to the procedures given in the maintenance manual in section 4.16. Adjust the drive belt tension according to section 4.11a), measure the drive belt tension according to the newly edited section 4.11g). Regard section 4.8 concerning the securing with Loctite. Check if the position of the propeller in relation to the engine compression point is within the limits given in section 4.11f).
5. After the reinstallation of the propeller mount to the fuselage a ground test run must be done. Check especially if the position of the propeller in relation to the engine compression point has changed (see section 4.11f)). If this has happened, the drive belt has slipped due to too a low tension. If the tolerances for the tension are not sufficient to prevent a slipping belt, contact the manufacturer.
6. Exchange of the DEI-circuit breaker: Turn the master switch "off". Loosen the four fixing bolts from the fuse plate and remove the plate. Pull off the plugs from the DEI-circuit breaker. Loosen the counternut on the front face and remove the circuit breaker. Install the new 5A circuit breaker in the reverse order, taking care that the connectors are tightly pushed on. Reinstall the fuse plate and secure the bolts with Loctite 238.

Material :

- Manual pages see instruction 1, issued October 1999, TN 843/13
- Drawing 5M102
- Tool W57 (may be produced according to the drawing)
- Spring scale min. 100N (10kg, 22lbs)
- 5A circuit breaker Klixon 7277-2-5A
- Loctite 238

Weight and balance : No influence

Remarks : Instructions No. 2 - 6 are to be executed by the manufacturer or by a licensed workshop and to be inspected and entered in the aircraft logs by a licensed inspector.

Bruchsal, date: 22.10.99

Author:
Dipl. Ing. Swen Lehner

LBA – approved:

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

Type certification inspector:
Dipl. Ing. Wilhelm Dirks

Airworthiness Directive

1999-377

Luftfahrt-Bundesamt
Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
Federal Republic of Germany

Glaser Dirks / DG-Flugzeugbau

Effective Date: December 02, 1999

Affected:

Kind of aeronautical product:	Powered Sailplane
Manufacturer:	DG-Flugzeugbau, Bruchsal, Germany
Type:	DG-800 A
Model:	DG-800 B, equipped with SOLO-Engine 2625 01
Serial numbers affected:	all
German Type Certificate No.:	873

Subject:
Powerplant - Drive belt tension and revision of AFM and MM pages

Reason:
The SOLO company has issued the Technical Note No. 4600-1 with maximum values for the drive belt tension. It is not possible to measure the tension directly at the powerplant and DG Flugzeugbau has developed a simple method to determine the tension. If the tension is too high, it must be lowered. The description of the DEI and Generator fuse is not correct and must be corrected.

Action:
Measure the drive belt tension, and if necessary correct the tension.
Exchange of Aircraft Flight Manual and Maintenance Manual pages.
The actions must be done in accordance with the Technical Note of the manufacturer.

Compliance:
The action must be done within the next 25 hours inspection, but not later than December 31, 1999.

Technical publication of the manufacturer:
DG-Flugzeugbau Technical Note No. 873/16 dated October 25, 1999 which becomes herewith part of this AD and may be obtained from Messrs.:

DG-Flugzeugbau
Postbox 41 20

D- 76625 Bruchsal
Federal Republic of Germany
Phone: ++ 49 7257 890
Fax: ++ 49 7257 8922

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

Holders of affected aircraft registered in Germany have to observe the following:
As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

Instructions about Available Legal Remedies:
An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig.

Enquiries regarding this Airworthiness Directive should be referred to Mr.Olaf Schneider, AirworthinessDirective Section at the above address, fax-no. 0049 531/2355-720. Please note, that in case of any difficulty, reference should be made to the German issue!

SAFETY REGULATION GROUP

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Gatwick Airport South
West Sussex
RH6 0YR
UNITED KINGDOM

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Direct Fax +44(0)1293 573993

Switchboard +44(0)1293 567171
Fax +44(0)1293 573999
Telex 878753
Internet Email ad.unit@srg.caa.co.uk

CIVIL AVIATION AUTHORITY

Our ref 9/97/CtAw/99

26 November 1999

LBA AIRWORTHINESS DIRECTIVE 1999-377
DG-FLUGZEUGBAU DG-800B MOTOR GLIDERS
POWERPLANT - DRIVE BELT TENSION AND REVISION OF AFM AND MM PAGES

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

The provisions of Article 9(7) of the Air Navigation (No.2) 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.

R J TEW
Applications and Certification Section

DG Flugzeugbau GmbH
Postfach 4120 76625 Bruchsal
Tel. 07257/890

Technical Note
No. 873/16

Subject : Powerplant:, drive belt tension, manual revision

Effectivity : DG-800B with engine SOLO 2625 01

Accomplishment : With the next 25 h service, at latest by Dec. 31. 1999

Reason :
1. The SOLO company has issued the technical note 4600-1 which gives max. values for the drive belt tension.
   As it is not possible to measure the tension directly at the powerplant, we have developed a simple method to determine the tension.
   If the tension is too high it must be lowered.
2. The description of the DEI and generator fuse was faulty and has been corrected

Instructions :
1. Exchange the following manual pages:
   flight manual: 0.1, 0.5, 7.8
   maintenance manual: 1, 2, 3, 4a, 30, 31, 57 and 58 and file drawing W57 to the manual enclosures.
2. Measure the drive belt tension according to section 4.11g) of the DG-800B maintenance manual.
3. If the tension is too high it must be lowered according to section 4.11a). Regard section 4.8 concerning the securing with Loctite. Check if the position of the propeller in relation to the engine compression point is within the limits see section 4.11f).
4. If the drive belt tension had to be reduced, execute a ground test run. Check especially if the position of the propeller in relation to the engine compression point has changed. If this has happened, the drive belt has slipped due to too a low tension. If the tolerances for the tension are not sufficient to prevent a slipping belt, contact the manufacturer.

Material :
Manual pages see instruction 1. issued September 1999 TN873/16
Tool W57 (may be produced according to the drawing)
Spring scale min. 100N (10kg)
If the belt tension has to be adjusted:
Two component metal glue (e.g. UHU Plus 300)
Loctite 243
Loctite 18895
Loctite 7063

Weight and balance : No influence

Remarks : Instructions No. 2 - 4 are to be executed by the manufacturer or by a licensed workshop and to be inspected and entered in the aircraft logs by a licensed inspector.

Bruchsal, date:
October 25. 1999

Author:
Dipl. Ing. Wilhelm Dirks

LBA – approved: 01. Nov. 1999

The German original of this TN has been approved by the LBA under the date of and is signed by Mr. ~~Walter~~ Frenck. The translation into English has been done by best knowledge and judgement.

Type certification inspector:
Dipl. Ing. Swen Lehner

DG Info for TN 873/16 2.November 1999

Concerning: DG-800B powerplant with engine SOLO 2625 01

Dear DG-800B owner,

Please find enclosed the technical note 873/16 for your DG-800B which we had to issue on the basis of technical note 4600/1 issued by the SOLO company.

There had been some engine failures with the SOLO 2625 engines in the past (also with gliders from other manufacturers). The investigations of the SOLO company suggest that the failures have been caused by excessively high drive belt tension. Because of this the SOLO company has now specified a max. value for the drive belt tension in their installation instructions.

The results of our tests proved, that operation of the powerplant within these limits is possible. It is necessary however, to adjust the belt tension more precisely than with the method presently described in the maintenance manual.
With this in mind we have developed a simple method to measure the belt tension, see the revised page 58 of the maintenance manual.

We suppose, that most DG-800B's are operating within the limits and that only a few owners have to lower the tension.

If it was necessary to reduce the drive belt tension, please send back the attached form for our information.

Note: If the tension is reduced too much, the drive belt may slip by one or more teeth at the small pulley. This means that the position of the propeller versus the engine compression point is changed and stopping the propeller in the position for retraction might not be possible. A landing with engine extended will be necessary. This is not dangerous, as we have detected slipping of a loose drive belt only during engine start on the ground, never in the air. So one can expect such a problem only after the first power on climb and flying back to the airfield should be no problem.

With best regards

Wilhelm Dirks

Dipl. Ing. Wilhelm Dirks

✂----------

DG-Flugzeugbau GmbH
Postfach 4120

D-76625 Bruchsal
Germany

Sender: : .....
.....
.....

Customer-No.....

Type: DG-800 B Serial-no.: Registration:

The drive belt of my DG-800B could be pressed in by ..... mm when applying a force of 10kg .
After adjustment the value is ..... mm.
☐ There is no problem with slipping of the belt.
☐ There is a problem with slipping of the belt. Please contact me, Tel. .....

Date Signature

Airworthiness Directive

1999-365

Luftfahrt-Bundesamt
Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
Federal Republic of Germany

Schempp-Hirth

Effective Date: December 02, 1999

Affected:

Kind of aeronautical product:	Powered Sailplane
Manufacturer:	Schempp-Hirth, Kirchheim/Teck, Germany
Type:	Ventus-bT
Models affected:	Ventus-2cM (if equipped with SOLO engine type 2625-01 pursuant Modification Bulletin No. 825-27)
Serial numbers affected:	44 and 46 up to 73
German Type Certificate No.:	825

Subject:
Modification of engine and components - 1) Toothed belt torsion, 2) Spindle-to-pylon attachment bracket, 3) Mechanical spindle drive overload safety device, 4) Limit switch „pylon retracted", 5) Propeller brake system, 6) Rectifier regulator, 7) Fuel reserve quantity, 8), 9) and 10) Flight, Maintenance and Engine Manual

Reason:
1. Toothed belt tension
a) Limitation of the maximum static belt tension in accordance with Technical Note No. 4600-1 issued by Messrs SOLO Kleinmotoren GmbH.
b) Note: An additional crankshaft support at the small belt pulley is only required for some serial numbers.

2. Spindle –to– pylon attachment
Incorporation of an angled spindle –to– pylon attachment bracket, to achieve a stiffer spindle mounting structure.

3. Mechanical spindle overload safety device
Incorporation of a mechanical overload safety device to avoid a failure of the spindle drive or its mounting in the case of a defective limit switch "pylon extended".

4. Limit switch "pylon retracted"
Relocation of the limit switch into engine bay to allow a more precise setting of the extreme position "pylon retracted". Additionally, the electrical wiring is to be altered so that on retracting the pylon via the emergency switch the spindle drive is also cut off.

5. Propeller brake system
Installation of an end sleeve to the cable actuating the propeller brake arm. Additionally a thin lock nut is to be fitted to the countersunk screw on the brake operating lever in the cockpit to avoid loosening of the clamp screw.

6. Rectifier regulator
Installation of a different rectifier regulator to achieve a constant reading of the fuel quantity indicator (because in some cases a jumping reading rendered the indicator useless when power was on).

7. Fuel reserve quantity
Improvement of the fuel / range management when using the wing tank(s) by setting the fuel reserve quantity to be at 8 Litre.

8., 9. and 10. Revised pages for the Flight Manual, the Maintenance Manual and the Engine Manual

Action:
1. Toothed belt tension
a) The belt tension is to be adjusted in accordance with the revised Maintenance Manual. If the proper tension cannot be achieved by turning the eccentric hub of the larger belt pulley then the manufacturer should be consulted.
b) If the adjustment of the belt tension as given in section 1a) does not warrant a safe operation, an additional external crankshaft support at the small belt pulley must be installed.

Enquiries regarding this Airworthiness Directive should be referred to Mr.Olaf Schneider, Airworthiness Directive Section at the above address, fax-no. 0049 531/2355-720. Please note, that in case of any difficulty, reference should be made to the German issue!

2. Spindle –to- pylon attachment bracket
This reinforcement is to be installed.
On aircraft requiring the accomplishment of action 1b), a spindle attachment bracket must be installed:

3. Mechanical spindle overload safety device
This device protecting the spindle from overloads on extension of the pylon is to be installed.

4. Limit switch "pylon retracted"
The rear limit switch cutting off the spindle drive with the pylon in retracted position is to be removed and a new limit switch is to be installed inside the engine bay. The wiring is then to be altered so that when retracting the pylon via the emergency switch the spindle drive is also cut off on reaching the extreme position.

5. Propeller brake system
On aircraft having the propeller cable secured at the top of the pylon by a screw on end: It is required to replace the cable in accordance with section 5 of the Maintenance Manual and to fit a new endsleeve. Furthermore the countersunk screw on the brake actuating lever in the cockpit is to be secured by an additional thin lock nut.

6. Rectifier regulator
Should the fuel quantity indicator be rendered useless, a new rectifier regulator type GR3 is to be installed in accordance with the instructions of the manufacturer and item 4 of the wiring diagram.

7. Fuel reserve quantity
For replacing an EPROM either the engine control unit must be returned to the manufacturer or the EPROM is replaced in accordance with instructions of the manufacturer.

8. Revisions of the Flight Manual
Insert revised pages pages dated September 1999 into the Flight Manual.

9. Revisions and supplements to the Maintenance Manual
Insert revised pages dated September 1999 into the Maintenance Manual

10. Revised pages for the Engine Manual
Insert revised pages into the Engine Manual.

The actions must be done in accordance with the Technical Note of the manufacturer.

Compliance:
Action 1a, 9 and 10 must be done not later than December 31, 1999
Action 1b and 2 until 8 must be done not later than March 31, 2000

Technical publication of the manufacturer:
Schempp-Hirth Technical Note No. 825-22 dated October 15, 1999 which becomes herewith part of this AD and may be obtained from Messrs.:

Schempp-Hirth
Flugzeugbau GmbH
Postfach 14 43

D- 73222 Kirchheim / Teck
Federal Republic of Germany
Phone: ++ 49 7021 7298-0
Fax: ++ 49 7021 7298-199

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

Holders of affected aircraft registered in Germany have to observe the following:
As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

Instructions about Available Legal Remedies:
An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig.

Airworthiness Directive

1999-224/4

Luftfahrt-Bundesamt
Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
Federal Republic of Germany

Stemme

Effective Date: December 10, 1999

Affected:

Kind of aeronautical product:	Powered Sailplanes
Manufacturer:	Stemme, Berlin, Germany
Type:	Stemme S 10
Models affected:	Stemme S 10-V and –VT
Serial numbers affected:	All
German Type Certificate No.:	846

Subject:
Variable Pitch Propeller – Propeller fork 10AP-V08 of propellers 10AP-V and 11AP-V / Project-No. 14-006

Reason:
Loss of one propeller blade including propeller fork during flight operation due to a fracture of the propeller fork at the end of its threaded fastening pin.

That fracture of the propeller fork may be caused by the stress which occurred during a ground contact of the propeller or a similar incident such as impact stop.

Putting out of operation of the propeller forks P/N 10AP-V08 on the occasion of the conversion of the propellers 10AP-V and 11AP-V to the design with the new forks P/N 10AP-V88.

Action:
The propellers 10AP-V and 11AP-V must be converted to the design with the new forks P/N 10AP-V88 (for both propellers).
Modification of the gearbox suspensions of the propeller 10AP-V and spacer tubes of the gearbox suspensions.
Perform an extra dynamic propeller balancing.

Compliance:
The actions must be done before the next flight.

Note:
For the purpose of the accomplishment of this AD one (1) ferry flight will be permitted; for this ferry flight the following conditions have to be met:

1. Proper condition and unrestricted functioning of the components concerned.
2. The ferry flight may be conducted only under visual flight conditions and with the minimum flight crew required for this flight.
3. Passengers, company staff members not required to conduct the flight and goods may not be carried.
4. The aircraft may not be flown over congested areas and assemblies of persons.
5. Prior to the flight, the pilot is zu be informed about this exemption.
6. The conduct of the ferry flight is to be reported in writing to the Luftfahrt-Bundesamt stating a) the name of the pilot, b) the date of the flight, c) the time of departure and arrival and the AD number.

Technical publication of the manufacturer:
Stemme Service Bulletin No. A 31-10-051, Amendment-Index 05.a dated December 06, 1999 which becomes herewith part of this AD and may be obtained from Messrs.

Stemme GmbH & Co. KG
Flugplatzstraße 2, Nr. 7

D-15344 Strausberg
Federal Republic of Germany

Enquiries regarding this Airworthiness Directive should be referred to Mr. Olaf Schneider, AirworthinessDirective Section at the above address, fax-no. 0049 531/2355-720. Please note, that in case of any difficulty, reference should be made to the German issue!

SAFETY REGULATION GROUP

Aviation House
Gatwick Airport South
West Sussex
RH6 0YR
UNITED KINGDOM

Direct Dial +44(0)1293 573149
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CIVIL AVIATION AUTHORITY

Our ref 9/97/CtAw/182

10 December 1999

LBA AIRWORTHINESS DIRECTIVE 1999-224/4
STEMME S 10-V AND -VT MOTOR GLIDERS
VARIABLE PITCH PROPELLER - PROPELLER FORK 10AP-V08 OF PROPELLERS 10AP-V AND 11AP-V / PROJECT-NO 14-006

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

The provisions of Article 9(7) of the Air Navigation (No.2) 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.

R J TEW
Applications and Certification Section

NIMBUS 4M/ADM. TNS 1/2/2000

Airworthiness Directive 1999-392

Luftfahrt-Bundesamt
Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
Federal Republic of Germany

Schempp-Hirth

Effective Date: December 16, 1999

Affected:

Kind of aeronautical product:	Powered Sailplane
Manufacturer:	Schempp-Hirth, Kirchheim/Teck, Germany
Type:	Nimbus-4M
Models affected:	Nimbus-4DM (if equipped with SOLO engine type 2625-02 pursuant Modification Bulletin No. 868-9)
Serial numbers affected:	30 up to 37
German Type Certificate No.:	868

Subject:
Modification of engine and components - 1) Toothed belt torsion and crankshaft bearing, 2) Spindle-to-pylon attachment strut, 3) Mechanical spindle drive overload safety device, 4) Limit switch „pylon retracted", 5) Propeller brake system, 6) Fuel reserve quantity, 7), 8) and 9) Flight, Maintenance and Engine Manual

Reason:
1. Toothed belt tension
a) Limitation of the maximum static belt tension in accordance with Technical Note No. 4600-1 issued by Messrs SOLO Kleinmotoren GmbH.
b) Note: An additional crankshaft support at the small belt pulley is required

2. Spindle –to– pylon attachment
Incorporation of an angled spindle –to– pylon attachment bracket, to achieve a stiffer spindle mounting structure.

3. Mechanical spindle overload safety device
Incorporation of a mechanical overload safety device to avoid a failure of the spindle drive or its mounting in the case of a defective limit switch "pylon extended".

4. Limit switch "pylon retracted"
Relocation of the limit switch into engine bay to allow a more precise setting of the extreme position "pylon retracted". Additionally, the electrical wiring is to be altered so that on retracting the pylon via the emergency switch the spindle drive is also cut off.

5. Propeller brake system
Installation of an end sleeve to the cable actuating the propeller brake arm. Additionally a thin lock nut is to be fitted to the countersunk screw on the brake operating lever in the cockpit to avoid loosening of the clamp screw.

6. Fuel reserve quantity
Improvement of the fuel / range management when using the wing tank(s) by setting the fuel reserve quantity to be at 8 Litre.

7., 8. and 9. Revised pages for the Flight Manual, the Maintenance Manual and the Engine Manual

Action:
1. Toothed belt tension
a) The belt tension is to be adjusted in accordance with the revised Maintenance Manual. If the proper tension cannot be achieved by turning the eccentric hub of the larger belt pulley then the manufacturer should be consulted.
b) Installation of an additional external crankshaft support at the small belt pulley.

2. Spindle –to- pylon attachment bracket
This reinforcement is to be installed.

3. Mechanical spindle overload safety device
This device protecting the spindle from overloads on extension of the pylon is to be installed.

Enquiries regarding this Airworthiness Directive should be referred to Mr.Olaf Schneider, Airworthiness Directive Section at the above address, fax-no. 0049 531/2355-720. Please note, that in case of any difficulty, reference should be made to the German issue!

4. Limit switch "pylon retracted"
The rear limit switch cutting off the spindle drive with the pylon in retracted position is to be removed and a new limit switch is to be installed inside the engine bay. The wiring is then to be altered so that when retracting the pylon via the emergency switch the spindle drive is also cut off on reaching the extreme position.

5. Propeller brake system
On aircraft having the propeller cable secured at the top of the pylon by a screw on end: It is required to replace the cable in accordance with section 5 of the Maintenance Manual and to fit a new end sleeve. Furthermore the countersunk screw on the brake actuating lever in the cockpit is to be secured by an additional thin lock nut.

6. Fuel reserve quantity
For replacing an EPROM either the engine control unit must be returned to the manufacturer or the EPROM is replaced.

7. Revisions of the Flight Manual
Insert revised pages pages dated October 1999 into the Flight Manual.

8. Revisions and supplements to the Maintenance Manual
Insert revised pages dated October 1999 into the Maintenance Manual

9. Revised pages for the Engine Manual
Insert revised pages into the Engine Manual.

The actions must be done in accordance with the Technical Note of the manufacturer.

Compliance:
Action 1, 8 and 9 must be done not later than January 31, 2000
Action 2 until 7 must be done not later than March 31, 2000

Technical publication of the manufacturer:
Schempp-Hirth Technical Note No. 868-3 dated November 08, 1999 which becomes herewith part of this AD and may be obtained from Messrs.:

Schempp-Hirth
Flugzeugbau GmbH
Postfach 14 43

D- 73222 Kirchheim / Teck
Federal Republic of Germany
Phone: ++ 49 7021 7298-0
Fax: ++ 49 7021 7298-199

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

Holders of affected aircraft registered in Germany have to observe the following:
As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

Instructions about Available Legal Remedies:
An appeal to this notice may be raised within a period of one month following notification. Appeals must be submitted in writing or registered at the Luftfahrt-Bundesamt, Hermann-Blenk-Str. 26, 38108 Braunschweig.

LBA

Airworthiness Directive

1999-376

Luftfahrt-Bundesamt
Airworthiness Directive Section
Hermann-Blenk-Str. 26
38108 Braunschweig
Federal Republic of Germany

Alexander Schleicher

ASH 25E

Effective Date: December 02, 1999

Affected:

Kind of aeronautical product:	Powered Sailplane
Manufacturer:	Alexander Schleicher, Poppenhausen, Germany
Type:	ASH 25 E
Models affected:	ASH 25 M
Serial numbers affected:	all
German Type Certificate No.:	858

Subject:
Inspection and exchange of the muffler of the power plant. Amendment and corrections of pages into the manual.

Reason:
The high grade steel plate of the muffler unfortunately turned out to be insufficiently resistant for the inner areas. In one case a muffler showed cracks in the inner area after 45 hours operating time. After 1996 a superior material for the inner parts of the muffler is used. These upgraded mufflers were marked with an „X" at the front plate.

As an additional offer the used CFRP fairing may now be exchanged for an improved version.

Action/Compliance:
Before the next flight an inspection must be done, to see which version of muffler is installed. Upgraded mufflers were marked with the letter „X".

If there is a muffler without „X" marking installed and the operating time of the muffler is less than 40 hours, the CFRP-fairing of the muffler must be inspected before the next flight for overheat traces.
If the operating time of the muffler exceeds 40 hours, the front side of the muffler behind the cover plate must be inspected additionally. If no discoloration has been found, the engine could be operate for further 2 hours and must be inspected every 2 hours up to a maximum of 60 hours operating time of the muffler.
If damages or discoloration has been found during any of this inspection, the muffler must be exchanged before the next flight.

In case of powered sailplanes which use already the muffler version marked with an „X", the muffler must be returned for an inspection to Messrs. Schleicher upon reaching 100 hours engine operating time but at latest within the next 12 month after the effective date of this AD. On all affected powered sailplanes the manual pages must be exchanged after the installation of the new muffler at latest.

Inspection and exchange of muffler and pages into the manuals must be done in accordance with the Technical Note of the manufacturer.

Technical publication of the manufacturer:
Alexander Schleicher ASH 25 M Technical Note No. 15 dated September 09, 1999 which becomes herewith part of this AD and may be obtained from Messrs.:

Alexander Schleicher
GmbH & Co.
Segelflugzeugbau

D- 36163 Poppenhausen
Federal Republic of Germany
Phone: ++ 49 6658 89-0
Fax: ++ 49 6658 89-40

Enquiries regarding this Airworthiness Directive should be referred to Mr Olaf Schneider, Airworthiness Directive Section at the above address, fax-no 0049 531/2355-720. Please note, that in case of any difficulty, reference should be made to the German issue!

LTA's, LAD's and Technical Notes are published on the internet at http://www.[illegible]

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

Holders of affected aircraft registered in Germany have to observe the following:
As a result of the a.m. deficiencies, the airworthiness of the aircraft is affected to such an extent that after the expiry of the a.m. dates the aircraft may be operated only after proper accomplishment of the prescribed actions. In the interest of aviation safety outweighing the interest of the receiver in a postponement of the prescribed actions, the immediate compliance with this AD is to be directed

Instructions about Available Legal Remedies:
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K6E

TN3 002/02/000

David Masterson,
28 Westcliffe,
Gt Harwood,
Blackburn. BB6 7PH
Tel 0254 888085

K.6E. BGA No 1351.
TOTAL HRS FLOWN. 1805.
TOTAL LAUNCHES. 1442.
BUILT 1966.

DEFECT REPORT.

12 November 1999

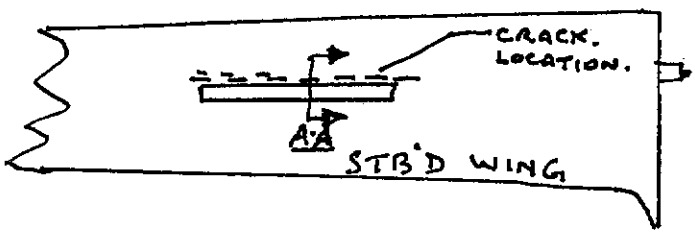
During the course of inspecting the above glider , it was observed that the port top airbrake paddle was approx: 1/4" below the top skin profile. Closer examination revealed a splitting of the top mainspar boom over a length of 30 inches immediately ahead of the airbrake slot under the D-box skin. A thin blade could be inserted 1/2" to3/4" without resistance along the length of the separation in the spar boom.

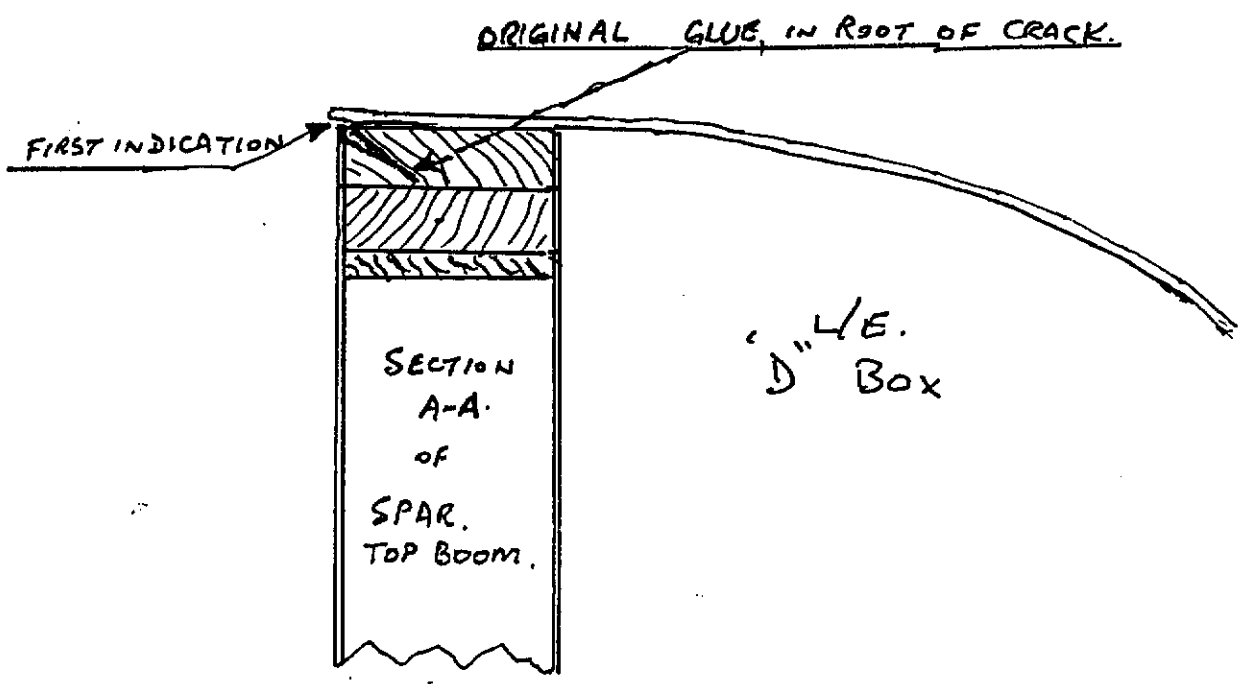
The glider has not been involved in a heavy landing or in any aerobatics.It has been owned by the same syndicate for a long period. When flown at other gliding sites it has been left rigged on occasions.

Over the 10 years I have known the glider, it has been cared for and not abused. The starboard spar does not show any evidence of a defect Inspection of a younger K6 E for any defect in the same area showed no problem.

There was some aerodux glue in the root of the crack ,[see sketch] .This supports the possibility that the crack may have been there since manufacture. Ingress of water and consequent drying out or aging may then have precipitated the eventual opening up of the crack..

D Masterson. I/C 355 ME.
Bowland Forest G.C Chipping.





Subject: **Use of unleaded fuel**

Concerned:

Motorglider Model:	TCDS No. 817
G 109B	all S/N's with aircraft engine GROB 2500

Urgency: optional

Procedure: For a short time no leaded fuel is obtainable at many service stations. Therefore GROB offers the optional modification of the aircraft engine GROB 2500 for the use of unleaded fuel (unleaded Super fuel, minimum Octane number ROZ 96). During the general overhaul all engines are modified for the use with unleaded fuel in principle. After the modification the engine also may be operated further using AVGAS or leaded fuel.

Actions:

1. The following modifications must be performed at the aircraft engine or at the aircraft:

- replacement of the cylinder heads
  (marking by manufacturer i.e. **G 7 11 001**)

  thereby means:

G	=	GROB
7	=	year of manufacturing 199 **7**
11	=	month of manufacturing 11 = November
001	=	current number 1

- installation of fuel hoses according to **DIN 73379**, at engine and fuselage (only for S/N's 6200 up to 6445, as of S/N 6500 PTFE hoses are installed)

- installation of carburettor diaphragms, resistant for unleaded fuel

2. Installation of a return hose into the fuel system according to Installation Instructions No. 817-46

3. In the Flight Manuals the following revisions must be performed:

German Issue:	Revision 5, dated 09.03.98
English Issue:	Revision 5, dated 09.03.98

4. In the Maintenance Manuals the following revisions must be performed:

German Issue:	Revision 7, dated 09.03.98
English Issue:	Revision 7, dated 09.03.98

5. At the fuel filler neck at the L/H fuselage the following new placard must be attached:

FUEL
100 Ltr.
- AVGAS 100 LL
- min. ROZ 96,0 octane
- SUPER UNLEADED

Working instruction No. 1 for TN 301/21
Installation of the canopy securing system

D E. SINGLES
TNS 01/02/00

A Installation of the securing system

Installation is according to drawing R92

1. Remove the canopy from the fuselage.
2. Mark a hole according to drawing R 92 cross section C and view D drill with 9 mm diameter and 15mm deep. Be careful not to drill too deep. Check if bush R93/4 can be inserted completely into the hole. If the hole is not covered completely by FRP material, roughen this area from the outside and fill with resin/hardener thickened with cottonflocks.
3. Enlarge the cut out in the canopy frame beside the canopy lock. Use drawing R92 view D as pattern.
4. Screw bolt R93/1 into bush R93/4. Glue the bush into the hole with resin/hardener thickened with cottonflocks and position the bolt according to the drawing. The bolt should point a little bit rearwards. Allow to cure at room temperature.
5. Mark the hole for part R93/2 at the fuselage. Use drawing R92 view A as pattern. Drill a 6 mm diameter hole and countersink to 10mm dia.. Roughen this area at the rearside (inside the fuselage)
6. Grind a cut out into the fuselage for the spring. Use drawing R92 view B as pattern..
7. Adjust the fuselage for part R93/2 (with spring installed) so that the dimension 6mm will be possible. If the GFRP fixation at the canopy lock is too thick grind away a little, but not more than necessary! Fix the block provisionally with the bolt M6x25 DIN7991.
8. Assemble the canopy to the fuselage.
9. Close the canopy slowly. Check that bolt R93/1 enters the spring in the centre and engages fully. If necessary adjust the position of the block by enlarging the hole in the required direction.
10. Remove the canopy.
11. Roughen part R93/2 at its face to the fuselage and install with resin/hardener thickened with cottonflocks and fix with a bolt M6x25 DIN7991.
    Make sure that the spring is installed horizontally (in spanwise direction) and allow to cure.

B Installation of an additional canopy handle

Installation of the handle at the left hand side canopy frame according to drawing R94

1. Mark and drill the 7mm dia. hole according to the drawing.
2. Rivet a pop rivet nut 5 TP 30 to the hole.
3. Screw the knob (with threaded pin) into the nut, secure with Loctite 243.

C Function check

1. Assemble the canopy to the fuselage.
2. Close the canopy slowly. Check that bolt R93/2 enters the spring in the centre and engages fully. If necessary bend the spring as required. Further check that the canopy frame doesn't touch the spring. If necessary enlarge the cut out in the frame see item A 3..
3. Open and close the canopy several times. The position and function of the spring must not change.
4. Close the canopy and pull the emergency release, lift the canopy at the front. The bolt must slide forwards in the spring and must be retained by the front end of the spring. Don't lift the canopy further.

TN 02/02 000

DG Flugzeugbau GmbH
Postfach 4120 76625 Bruchsal
Tel. 07257/890

Technical Note

No. 301/21 DG-100
323/11 DG-200
359/19 DG-300
826/39 DG-400
370/7 DG-600
866/8 DG-600M

Subject	:	Canopy securing system similar to a "Röger hook"
Effectivity	:	All DG single seaters with single piece canopies which don't have a "Röger hook", optional
Accomplishment	:	None
Reason	:	A canopy securing system has been developed, which has the same effect as a so called "Röger hook" which is mandatory with new sailplane designs. With such a device the canopy will rotate around its rear point when released. Without such a device the canopy may fly away in an uncontrolled manner and may hit the pilot.. As the securing system will increase the force to open the canopy an additional canopy handle must be installed to the left hand canopy frame, to facilitate the opening procedure.
Instructions	:	Installation of the canopy securing system and the additional canopy handle according to working instruction No. 1 for TN 301/21.
Material	:	Working instruction No. 1 for TN 301/21 Material see parts list in working instruction No. 1 for TN 301/21
Weight and balance	:	influence negligible
Remarks	:	The instruction is to be executed by the manufacturer or by a licensed workshop and to be inspected and entered in the aircraft logs by a licensed inspector.

Bruchsal, date:
Oct. 25. 1999

Author:
Dipl. Ing. Wilhelm Dirks

Wilhelm Dirks

Type certification inspector:
Dipl. Ing. Swen Lehner

Swen Lehner

LBA – approved: 01. Nov. 1999

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