## **BGA TECHNICAL COMMITTEE**

## TECHNICAL NEWSHEET 9/10/99

## PART 1 AIRWORTHINESS "AGGRO" Please consult the BGA 1999 Red Pages.

- 1.1. <u>SF25C (SLMG) THROTTLE CABLE DISCONNECTED</u> on recently imported "used" aircraft. Check for security at Carburettor throttle arm. (Reported by Midland G.C.).
- 1.2. GLASER-DIRKS DG400/500/+800 SERIES SLMG's. Latest list of Airworthiness Directives herewith.
- 1.3. <u>STEMME S10 V & VT MOTOR GLIDERS</u> Propeller A/D 1999-224/3 requires action as indicated therein.
- 1.4. JANUS C & CM. A/D 1999-265 requires reduction in Vne, and modification to Elevator Mass Balance Mailed to owners 10/8/99.
- 1.5. ASW 27. A/D 1999-283 requires inspection for jamming of the Elevator control. Mailed to owners 31/8/99.
- 1.6. <u>DISCUS bT</u>. LBA 1999-305 extends the Service Life to 12,000 hours, subject to inspection.
- 1.7. <u>VENTUS C bT & CT.</u> A/D 1999-304 (as above)
- 1.8. ASH 26E. A/D 1999-311 requires action in respect of Exhaust Mufflers.
- 1.9. DG 101G UNDERCARRIAGE REMAINS unlocked if the Lever is incorrectly stowed. (Reported by Peter Philpot).
- 1.10. KA13 (also KA7/8/18) Elevator final drive levers supplied by London Sailplanes may have been manufactured in a "Soft" material, prone to bending under load. Inspect a.s.a.p. and replace if necessary. (Reported by Southdown G.C.).
- 1.11. ASW 20FL RUDDER PEDAL FAILURE IN FLIGHT. Sketch from Colin Short identifies the failure. Inspect a.s.a.p.

## 2.0. GENRAL MATTERS

2.1. CAA LIGHT AIRCRAFT MAINTENANCE SCHEDULE (LAMS 1999 issue) should have been issued by CAA to all Registered Owners. CofA Renewal submissions must now be made only using the LAMS 1999. Proforma Schedule- illustrated herein, and available from the BGA. NO OTHER FORM OF SUBMISSION IS ACCEPTABLE, as a record of the inspection process completed.

2.2. <u>LEAD FREE PETROL</u>. LIMBACH Technical Bulletins. 50 & 53 give advice.

However, CAA will issue Notice No. 98C in October 1999, which may (or may not) permit its use!

Dick Stratton
Chief Technical Officer

## AIRWORTHINESS DIRECTIVES VOLUME III



GLASER-DIRKS D Page 3	G–400, DG–500 AND DG–800 SERIES MOTOR GLIDERS	Issue 6 August 1999
LBA AD No.	Description	Applicability Compliance Requirement
97–011	Airbrake torque tube in the fuselage and airbrakes in the wings.	Applicable to all DG-400. Compliance required as detailed in Airworthiness Directive. DG Flugzeugbau Technical Notes 301/18, 323/9 and 826/34 also refer.
97–224	Powerplant system, cracks in the propeller mounting plate.	Applicable to all DG-500M. Compliance required as detailed in Airworthiness Directive. DG Flugzeugbau Technical Note 843/8 also refers.
1998–023	Pulley for C.o.G. – tow release cable and Maintenance Manual revisions.	Applicable to all DG-500M. Compliance requried as detailed in Airworthiness Directive. DG Flugzeugbau Technical Note 843/9 also refers.
1998–048	Pulley for C.o.G. – tow release cable, increase of service time and Maintenance Manual revisions.	Applicable to all DG-500/22 ELAN. Compliance required as detailed in Airworthiness Directive. DG Flugzeugbau Technical Note 348/9 also refers.
1999–167	Engine and revision of manual pages.	Applicable to all DG–800B motor gliders equipped with Solo engine. Compliance required as detailed in Airworthiness Directive. DG Flugzeugbau Technical Note 873/12 also refers.
1999–269	Powerplant and manual revisions.	Applicable to DG-800B motor gliders equipped with Solo engine. Compliance required as detailed in Airworthiness Directive. DG Flugzeugbau Technical Note 873/13 also refers.

LBA AD No.	Description	Applicability – Compliance – Requirement
1998–324	Flight Controls – Replacement of the flap drive rocker P/N 10SW–RMW.	Applicable to S10 aircraft serial numbers 10–03 up to 10–26 and converted aircraft from 14–012M up to 14–026M. Compliance required as detailed in AD. Stemme Service Bulletin A31–10–017 also refers.
1998–400	Engine Controls – Redesign of wastegate control and exchange of oil tubes.	Applicable to S10–VT aircraft serial numbers 11–004 up to 11–006 and 11–008 up to 11–013. Compliance required as detailed in AD. Stemme Service Bulletin A31–10–034 also refers.
1999–224/2	Variable pitch propeller – Propeller fork 10AP–V08 of propellers 10AP–V and 11AP–V/Project No. 14–006.	Applicable to S10–V and –VT aircraft. Compliance required as detailed in AD. Stemme Service Bulletin A31–10–051 also refers.



## Airworthiness Directive 1999-224/3

Luftfahrt-Bundesamt

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

#### Stemme

Effective Date: September 08, 1999

Affected:

Kind of aeronautical product:

Manufacturer:

Type:

Models affected:

Serial numbers affected:

German Type Certificate No.:

Powered Sailplanes Stemme, Berlin, Germany Stemme S 10

Stemme S 10-V and –VT All

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.

#### Action:

## S10-V and S10-VT:

The propeller forks must be replaced when reaching their service life. The new service life, determined by this AD, is:

- → 25h TSN for model S10-V, if modification in accordance with Service Bulletin has not been carried out or not in due time.
- → 50h TSN for model S10-V, if modification in accordance with Service Bulletin has been carried out in due time.
- → 50h TSN for model S10-VT.

An additional X-ray crack-testing of those propeller forks must be performed, which have not yet exceeded the permissible service life but had been exposed to ground contact of the propeller or a similar incident. The X-ray crack-testing may be carried out by the manufacturer only.

if unusual vibrations at the propeller/gearbox-unit are or have been ascertained, even if they have lasted some seconds only, the propeller forks must be replaced immediately and that incident has to be reported to the manufacturer.

## For S10-V only:

The spacer tubes 10AA-08 of the gearbox suspensions must be shortened by 5 mm (0.2 inch). The drawings of the modified suspension are enclosed in the Service Bulletin as annex A and B.

An extra dynamic propeller balancing must be performed according to the Procedural Instruction A17-10AP-V/2-E "Dynamic balancing of the Stemme S10 powered glider propeller in the S10-V and S10-VT". The dynamic balancing must be carry out at the complete system propeller/gearbox/gearbox suspensions, i.e., either at the powered sailplane itself or at the manufacturer's test bench. The result (position, mass of the balancing weights and resulting level of vibration (oscillation velocity)) must be entered in the report form contained in the Appendix to this Procedural Instruction and must be filed under Operation Documents in the Maintenance Manual.

The maximum permissible RPM of the engine will be limited to 3000 RPM. A corresponding "red line" must be marked on the tachometer. Pay attention to an extended take-off run up to extra 15% which may be caused by this means.

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!

On the occasion of the replacement of the propeller forks the gearbox suspensions (10AA) are to be sent to the manufacturer for check up with information about their locations (top right-hand, etc.).

#### Compliance:

#### Model S10-V (propeller 10AP-V):

Without the modification of the gearbox suspensions (see Service Bulletin) the propeller forks must be replaced not later than 25 h TSN.

If the gearbox suspensions has been modified (see Service Bulletin) within the first 5 operation hours of the propeller forks, the propeller forks must be replaced not later than 50 h TSN.

An extra dynamic propeller balancing (see Service Bulletin) must be performed before the next flight if not already has been done. It must be repeated after each maintenance work at rotating parts.

The new maximum RPM limit (see Service Bulletin) must be marked on the tachometer before the next flight.

A check up of the gearbox suspensions (see Service Bulletin) must be carried out by the manufacturer at the time of the replacement of the propeller forks.

If an X-ray crack-testing (see Service Bulletin) is necessary it must be performed before the next flight if not already has been done.

If unusual vibrations have been or are ascertained, the propeller forks will have to be replaced before the next flight (see Service Bulletin) if not already has been done.

#### Model S10-VT (propeller 11AP-V):

The propeller forks must be replaced not later than 50 h TSN.

If an X-ray crack-testing (see Service Bulletin) is necessary it must be performed before the next flight if not already has been done.

If unusual vibrations have been or are ascertained, the propeller forks will have to be replaced before the next flight if not already has been done.

#### Technical publication of the manufacturer:

Stemme Service Bulletin No. A 31-10-051, Amendment-Index 04.a dated August 31, 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

#### 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.

### Note:

This AD supersedes the AD-No. 1999-224/2 dated August 05, 1999.

#### 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.



Schempp-Hirth

**Airworthiness** Directive 1999-265

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

Effective Date: July 06, 1999

TO OWNER, 10/8/99.

Affected:

Kind of aeronautical product:

Manufacturer

Type:

č

Models affected.

Serial numbers affected

Sailplane / Powered Sailplane

Schempp-Hirth, Kirchheim/Teck, Germany

Janus C and Janua CM

Janus C, Janus CM and Janus CT

Janus C - 87 up to 252 and 254 up to 267 Janus CM - 1, 3 up to 24 and 26 up to 36

Janus CT - 1 up to 6, 8 and 9

Note:

Not affected are those serial numbers, if a repair of the horizontal tail unit fin

has been done in accordance with the drawing-number HM 05-30.050

295 and 809 German Type Certificate No:

Subject:

Horizontal Stabilizer - Mass balance on the elevator

Reason:

During high-speed flights it came to a flutter of the horizontal tail unit and the horizontal tail unit fin was strongly damaged.

Action: ( & KINGTS).

Reduce the maximum speed to V<sub>max</sub> = 160 km/h by installing a placard and install a mass balance weight to the elevator in accordance with the Technical Note.

Compliance:

Install the placard "Vmex = 160 km/h" before the next flight.

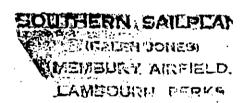
The mass balance weight most be installed until December 31, 1999.

Technical publication of the manufacturer:

Schempp-Hirth Technical Note No. 295-27 and 809-15 both dated June 30, 1999 which becomes herewith part of this AD and may be obtained from Messrs.:

> Schempp-Hirth Flugzeugbau GmbH Krebenstraße 25

D- 73230 Kirchheim / Teck Federal Republic of Germany Phone: ++ 49 7021 7298-0 Fax ++ 49 7021 7298-199



Accomplisishment 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 sircust 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

Enquires regarding this Airworthheas Directive should be referred to Mr.Otal Schneider, Airworthiness Directive Section at the above address, fax-no. 0049 53172355 720. Please note, that in case of any difficulty, reference should be made to the German issue!



10 theres 31/8/94 Airworthiness

Directive 1999-283 9 (10144.

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

Effective Date: September 09, 1999

## Alexander Schleicher

Affected:

Kind of aeronautical product:

Sailplane Alexander Schleicher, Poppenhausen, Germany

Manufacturer:

Type:

**ASW 27** 

Models affected: Serial numbers affected:

ΑII 27002 up to 27104

German Type Certificate No.:

389

Subject:

Check of control circuit clearance inside the fuselage tall boom to fin intersection

Reason:

One ASW 27 owner reported slight jamming in one flight and abandoned the take-off. Rubbing of the 90° lever with its attached mass balance lead weights and connecting bolt against the cut-out of the lower fin rib has been determined as the only likely cause.

### Action:

- 1. Check the distance left and right of the mass balance weights.
- 2. If necessary, increase the distance of the mass balance and
- 3. Check / adjust the elevator deflections.

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

#### Compliance:

The actions must be done not later than October 31, 1999.

## Technical publication of the manufacturer:

Alexander Schleicher Technical Note No. 5 dated July 16, 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

Accomplisishment 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.

Note: Action 1, can be done by the owner himself

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

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 Issuel



## **Airworthiness** Directive 1999-305

## Luftfahrt-Bundesamt Airworthiness Directive Section

Hermann-Blenk-Str. 26 38108 Braunschweig Federal Republic of Germany



## Schempp-Hirth

Effective Date: September 23, 1999

Affected:

Kind of aeronautical product:

Manufacturer:

Type:

Models affected:

German Type Certificate No.:

Serial numbers affected:

Schempp-Hirth, Kirchheim/Teck, Germany Discus-bT

Powered Sailplane

Discus-bT all

863

Subject:

Extension of the service life

Reason:

The results of fatique tests (subsequently carried out on wing spar sections) have demonstrated that the time in service of GFRP/CFRP sailplanes and powered sailplanes may be extended to 12000 hours, provided the airworthiness of each individual aircraft is evidenced by a special multi-stage inspection program, which is then to be incorporated into the Maintenance Manual.

Action:

Exchange of pages into the Maintenance Manual.

Compliance:

Action must be done when reaching a service life of 6000 flight hours, but not later than December 31, 1999.

Technical publication of the manufacturer:

Schempp-Hirth Technical Note No. 863-5 dated July 05, 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

Accomplisishment 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, 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 issuel



## Airworthiness Directive 1999-304

## Luftfahrt-Bundesamt

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

## Schempp-Hirth

Effective Date: September 23, 1999

Affected:

Kind of aeronautical product:

Manufacturer:

Type:

Models affected:

Serial numbers affected:
German Type Certificate No.:

Powered Sailplane

Schempp-Hirth, Kirchheim/Teck, Germany

Ventus-bT

Ventus-cT and Ventus-cM

all 825

Subject:

Extension of the service life

Reason:

The results of fatique tests (subsequently carried out on wing spar sections) have demonstrated that the time in service of GFRP/CFRP sailplanes and powered sailplanes may be extended to 12000 hours, provided the airworthiness of each individual aircraft is evidenced by a special multi-stage inspection program, which is then to be incorporated into the Maintenance Manual.

Action:

Exchange of pages into the Maintenance Manual.

Compliance:

Action must be done when reaching a service life of 6000 flight hours, but not later than December 31, 1999.

Technical publication of the manufacturer:

Schempp-Hirth Technical Note No. 825-21 dated June 14, 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

Accomplisishment 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 outwelghing 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, 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 Issuel



## Airworthiness Directive 1999-311

## Luftfahrt-Bundesamt

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

## Alexander Schleicher

Effective Date: September 08, 1999

Affected:

Kind of aeronautical product:

Manufacturer:

Type:

Models affected:

Serial numbers affected: German Type Certificate No.: Powered Sailplane

Alexander Schleicher, Poppenhausen, Germany

ASH 26 E

all

883

## 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.

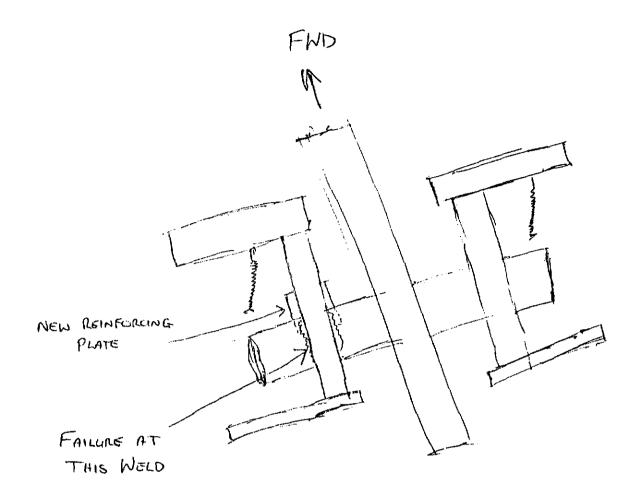
#### Technical publication of the manufacturer:

Alexander Schleicher ASH 26 E Technical Note No. 8 dated August 23, 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!

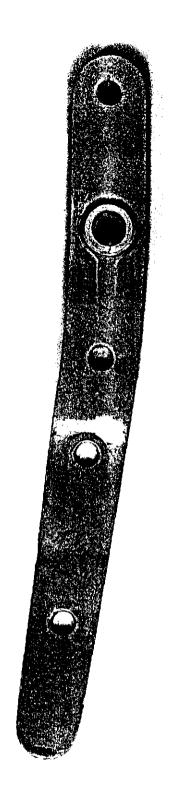


DEFINITELY NOT TO SCALE!

ASW 20 FL

Rudder Padal Failure.

(Cohin SHORT)



ELEVOTOR DRIVE LEVER
(K8/KA18/K7/K13)

MAY HAVE BEEN MANUFACTURED IN "SOFT" MATERIAL.

SUPPLIED BY LONDON SAILPLANES



## **CAP 411**

## LIGHT AIRCRAFT MAINTENANCE SCHEDULE AEROPLANES

CAA/LAMS/A/1999 Issue 1

Operators Schedule Ref:

Aeroplane Type/Model:

Engine Type:

Propeller Type:

Registration(s):

AOC No:

Operator's Name and Address:

CIVIL AVIATION AUTHORITY, LONDON, JANUARY 1999

## **SECTION 8 - SCHEDULED MAINTENANCE WORKSHEETS**

COFIES FROM BEA OFFICE				
	CorlEs	FROM	1364	OFFICE.

Maintenance Organisation Name:	-		Page 1 of		<del></del>
Site where maintenance was acco	omplished:		Note: Enter total pages iss	sued	
A/C Reg: G-	A/C Type:	Serial No:	Workpack Ref:		<del></del>
	Engine Type:	Serial No(s) [Single]:	[L/H]:	[R/H]:	
	Propeller Type:	Serial No(s) [Single]:	[L/H]:	[R/H]:	
A/C Total Hours:		Check Start Date:	Operator:		
Check Type: [50 FH/6 Months]	[150 FH] [Annual]	[Annual + Star Inspection]		<del></del>	· <del>····································</del>
Note:- Delete checks which are no	ot being carried out and ident	tify any not applicable worksheet ta	asks as N/A		

Maintenance Manual Reference	Issue/Revision No.	Date
Airframe:		
Engine:		
Propeller:		· · · · · · · · · · · · · · · · · · ·

## FINAL CHECKS (INCLUDE WITH ALL CHECKS)

## Ground Run:

Task No	Task Description	Task Nature	Task Interval	in	sp	Mainte	ifying enance ineer
				LH	RH	LH	RH
1	Powerplant installation, liquid, air and gas systems for leaks during and following ground run	INSP	All Checks				
2	All systems and services	OP/C	All Checks	<u> </u>			<del> </del>
3	Following ground run, ensure all cowlings, access panels and doors are secure	СНК	All Checks				



## **Technical Bulletin**

53.1

Subject:

Unleaded fuel

Affected engine

models:

All engine models:

L 1700

L 2000

L 2400

Background

information:

Production stop of leaded automotive fuel.

Priority:

None

Compliance:

Series L 1700 and L 2400:

Engines of this series may be operated with immediate effect with unleaded fuel Super Plus unleaded, according to DIN EN 228. Other unleaded fuels may be used as long as they have a minimum octane rating of RON 98 and MON 88.

Series L 2000:

Engines of this series may be operated with immediate effect with unleaded fuel Super Plus unleaded according to DIN EN 228. Other unleaded fuels may be used as long as

- . they have a minimum octane rating of RON 98 and MON 88 and
- the engines of this series have been adapted pursuant to Technical Bulletin 42.

#### General Remarks (all engine models):

The following should be taken into account:

- 1. The engine's fuel lines must be suited for unleaded fuel. On this, please check Technical Bulletin 50.
- 2. The airplane's fuel lines and tank must be suited for unleaded fuel. On this matter, please contact the airplane manufacturer or follow his instructions in this context.
- Use brand name fresh fuel only. Storage of unleaded fuel is limited. Prolonged storage of fuel in open tanks may cause evaporation of light volatile components and a change in the fuel's properties. On addition, fuel properties are affected by seasonal changes.
- 4. The engine's temperature should be kept at the lowest possible level, Ideal is less than 180 °C in a climb. In this context see Technical Bulletin 44.
- 5.- Use of additional additives is not permitted.
- 6. Mixing of lead and unleaded fuels is not advisable.
- 7. References in the manuals are to be added in handwriting.

Note:

Technical Bulletin 40 is herewith invalid.

Remarks:

This document has been translated to the best of our knowledge. In case of doubt however only the German original shall be considered authoritative.

Approval:

This Technical Bulletin is approved in accordance with the procedures of the LBA approved development organization I-EC 27.

Bearb.: Stolinski	Replaces Edition from: 02.10.96	Page: 1 of	1 Pages
Gepr. + Freig.:	Edition: 28.05.98	Reg,-Nr.: 036	Datei: TB53-1,DOC



## **Technical Bulletin**

50

Subject:

Fuel hoses

Affected engi-

ne models:

All engines models

L 1700 L 2000 L 2400

Background

information:

The fuel hoses used to date are unsuitable for unleaded fuels

Priority:

When using leaded fuels, none; when using unleaded fuels, at the next 50-hour check.

Compliance:

The fuel hoses mounted by the manufacturer are supplied as of now in a quality which permits the use of unleaded fuels. Already supplied fuel hoses on engines which are operated with a mixture of AVGAS 100 LL and unleaded fuels must be replaced. In the case of engines which are operated exclusively with leaded fuels, a change in the fuel lines is not necessary. In addition, we recommend that information is obtained from the manufacturer of the airframe regarding suitability of the fuel hoses installed for unleaded fuel.

Remarks:

The new hoses can be recognized externally by a crimped sleve (between hose and fire-protecting hose) at both ends of the hose.

This document has been translated to the best of our knowledge. In case of doubt however only the German original shall be considered authoritative.

The german original of this Technical Bulletin has been authorized by the german aviation authority (LBA) on August 08,1995

Bearb.: Stolinski

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# British Gliding Association Charges for 1999/2000

## Certificates

A Endorsement	£ 10.00
A Pin Badge	£ 2.50
B Endorsement	£ 6.00
B Pin Badge	£ 2.50
Bronze Endorsement	£ 8.00
Bronze Pin Badge	£ 2.50
Cross Country Endorsement	£ 8.00
Silver, Gold, Diamond per leg	£ 8.00
Silver Pin Badge	£ 2.50
Gold Pin Badge	£ 2.50
UK Cross Country Diploma – each part	£ 8.00
If applying simultaneously	£ 15.00

## **Certificate of Airworthiness**

Glider – new/renewal per year	£ 45.00
Duplicate	£ 10.00
Motor Glider – renewal (3 years)	£348.00

## Other

£ 12.50
£ 12.50
£ 15.00
£ 25.00
£ 20.00
£ 20.00
£ 7.50
£ 20.00
£ 19.50