British Gliding Association – Technical Committee

Technical News Sheet 11/12/00

Part 1 Airworthiness issues (all categories)

1.1 **All Glider Types** BGA 011/12/2000 issue 1
BGA Mandatory inspection. Use and maintenance of control tape. Inspection and replacement at annual C of A inspection.
Details enclosed.

1.2 **AVO 68 Samburo** For information only.
New type certificate holder: Aircraft Philipp Gmbh
Streichenweg 21
83246 Unterwessen
Germany

1.3 **DG800B** FM Amendment No 800-12-00
Optional production fit of aerotow only hook.

1.4 **Hoffmann VP Propeller** Various types
Reported by Peter Arthur following failure of control rod.
During propeller annual inspections pay particular attention to the pitch change control rods. These have been found failed at the clamping lock nuts. If any failures are found the propeller must be returned to a Hoffmann approved repair workshop for repair. Field replacement of these components is not allowed.
Possible contributory cause of premature failure are eccentricity of the pitch control mechanism. The Hoffmann agent in the UK is aware of the problem.

1.5 **Schleicher ASK 13 and ASK 18**
BGA 010/12/2000 issue 1
BGA Mandatory inspection of Elevator drive engagement. To be completed at next and every C of A inspection.
Details enclosed.

1.6 **Schleicher K8** Technical Note 24
Re distribution of Technical note 24, containing inspection guidance on Canopy retaining cords, Rudder pedals, Elevator control linkage, Fuselage tubes, FM amendment and specification of wing attachment pins.
Details enclosed.

1.7 **Schleicher Ka2,6,K7,89,11, ASK13 &18**
AD 72-7/3 Serial Nos. on AD
Re distribution of Airworthiness Directive to be completed every three years during C of A inspection.
Details enclosed.

1.8 **Stemme S10, S10V** LBA AD 2000-396 (Mandatory)
Sent to owners by CAA
Serial numbers as listed on AD.

Air brake eye bolt, air brake sheets, landing gear door hinges and door actuation. Details enclosed

1.9 **SZD 50-3 Puchacz** AD Nr. SP 0094-2000-A (Mandatory)
SB. BE-049/SZD-50-3/2000
Applicable to aircraft with cracked fuselage fittings found during BE-048/50-3/200 service bulletin inspection
Details enclosed
Note: This AD and SB only applies to aircraft that have had cracks identified in the previous inspection ref. SP 0059-2000-A.(none reported in the UK)

Part 2 Modifications

None this issue

Please note:
All alterations to an aircraft must be approved by submitting a modification. This includes small changes such as fitting a GPS bracket, fitting a non factory installed or approved accessory, parts substitution outside the parts catalogue alternatives, repairs outside the scope of the repair manual etc. The vast majority will be minor modifications that can usually be approved quite quickly. Some will have to be referred to the technical committee or experts in a particular field such as aerodynamics or structures. Modifications that very complex or require a flight manual change are normally considered as major mods. Mods to "G" reg. aircraft will have to have CAA approval.
Modification application forms are enclosed (see 3.6).

Part 3 General Matters

3.1 **Peel Ply**
There are several schools of thought on this matter: whether to use it or not, to sand or not, both, the type and grade etc.
Suffice to say and in order to finally close this item, you should follow the aircraft manufacturers repair instructions in conjunction with the repair manual. In the absence of manufacturers information follow the appropriate repair manual. Always use materials approved for the job and store them in the correct conditions to avoid contamination of any sort. And of course the workshop conditions could have a direct effect if contamination was present and have a detrimental effect on any repair.

To add to the list of approved materials;
Alexander Schleicher specify – A082HS0200 (DI. Ma. Strubel)
A082HS0300

3.2 **Self Sustainer Sailplanes (Turbos)**
Please ensure that when applying for a C of A renewal you complete a 267T form and submit with the normal 267. There is a copy in the Technical procedures manual or contact the BGA office. The flight test may be completed at the first

opportunity after the C of A is renewed. In this case another 267T should be submitted with just the flight information on it to complete the records.

3.3 **Torque Loading**

Reported by L. McKelvie after DG400 CHT probe failure.
Please be careful when torquing up fasteners or special components like sensors or probes. Always refer to the maintenance manual. Some components are tightened to a very low torque and if not tightened correctly could shear off or come loose if the correct procedure is not followed. This could cause the loss of control in flight or engine malfunction.

3.4 **Heavy landing Inspections**

The case of a Burn Gliding Club PW5 applies to all aircraft.
During a heavy/hard landing inspection especially if side loads are suspected, pay very careful attention to all areas of the landing gear. Any damage may not be apparent with the aircraft rigged or later on it's side or inverted. It is recommended that the inspections commence with the aircraft in its normal attitude, supported, with the weight off the landing gear.

3.5 **Ballast weights**

Reported by Ian Evans, ballast found during repairs.
Please ensure that if you install a ballast weight, especially if it is concealed that it is properly recorded and plackarded in the cockpit if appropriate.
We have had instances of unrecorded ballast weights fitted and the glider flown with the centre of gravity outside the safe limits. A relatively small weight in the tail can have a dramatic effect. So please check if your weight calculations seem to have changed or they seem odd.

3.6 **Work sheets, unrecorded work and general forms**

As you are aware all work carried out on aircraft must be recorded.
Enclosed you will find some new forms:

BGA 204	General inspection report
BGA 205	Rectification worksheet
BGA 207	Flight under "A" conditions ("G" registration only)
BGA 220	Personal experience record
BGA 261	Minor modification
BGA 282	Major modification
BGA 1022	Engineers report (MOR)

These forms are examples you may use. You may have additional requirements or alternative arrangements and its OK to continue to use them provided they contain the recording and certification requirements, but if you haven't got any the new forms should be used. We plan to put airworthiness forms on the web site so that they can be down loaded.
Please keep as "master" copies.
More updates in the pipeline, watch this space.

Jim Hammerton
Chief Technical Officer

British Gliding Association
Aircraft Inspection

Mandatory

Number:	Issue:
011/12/2000	1

Date: 12th December 2000

Subject: Flying control surface tape and seals.

Applicability: All gliders using fabric or Mylar control tape or seals.

Accomplishment: At next and every C of A inspection

Reason: Use of incorrect type or poor condition control tape or seals can cause aerodynamic control problems.

Instructions:

1/ Inspect the condition of any tape fitted. Any tape found of the incorrect type or in a poor condition, brittle or with fraying edges must be replaced.
2/ It is recommended that "Tessa" fabric tape is used, and it is replaced annually as a matter of course. Or if appropriate use Mylar tape, refer to manufacturers information.
3/ Ensure that any tape fitted does not restrict the travel of the control surface.
4/ Aircraft fitted with Mylar seals should be inspected to ensure that the seals are in good condition and attached throughout the entire length and any temporary repairs are replaced. Refer to manufacturers information for replacement of Mylar seals.

Optional inspection - inspect condition of control tape and seals at each DI.

Approved By
Jim Hammerton, Chief Technical Officer

Issued by - The British Gliding Association Ltd, Kimberley House, Vaughan Way, Leicester, LE1 4SE, U.K.
Note: Mandatory inspections must be recorded in the aircraft log book, unless specified, and certified by an appropriately rated BGA inspector.
Optional inspections should be entered into the D.I. book or log book as appropriate. Optional inspections may be certified by a BGA Pilot instructor.

British Gliding Association
Aircraft Inspection

Mandatory

Number:	Issue:
010/12/2000	1

Date: 11th December 2000

Subject: ASK 13 and ASK 18 Elevator Engagement

Applicability: Schleicher ASK 13 and ASK 18

Accomplishment: At next and subsequent C of A inspections and during inspections of rear fuselage.

Reason: Incorrect positioning of elevator linkage pivots or damage during rigging or following accident damage causing misalignment of elevator control arm ball bearing in drive rod and possible disconnection in extreme conditions.

Instructions: It may be necessary to remove one half of the elevator to accomplish this inspection.
Inspect the engagement of the elevator control arm ball bearing into the elevator control rod drive "U".
The engagement of the bearing must be at or slightly below the centreline of the "U" during all positions of elevator travel.
To correct an out of tolerance condition replace any worn or incorrect parts with genuine Schleicher items if condition still exists replace or modify link upper aft bracket. The K8 "Automatic Elevator Connection" drawing may be used as a guide.

Approved By
Jim Hammerton, Chief Technical Officer

Issued by - The British Gliding Association Ltd, Kimberley House, Vaughan Way, Leicester, LE1 4SE, U.K.
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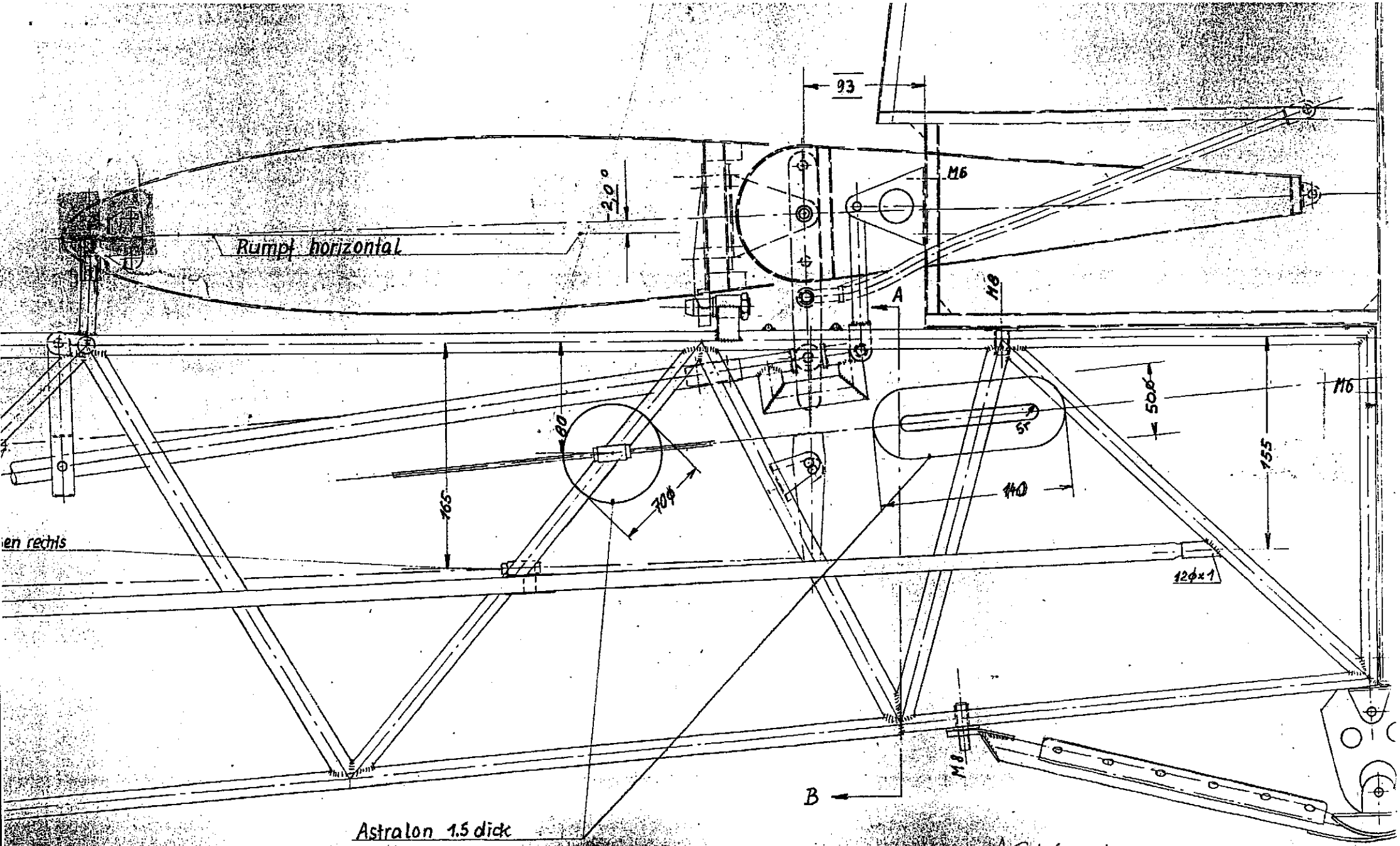


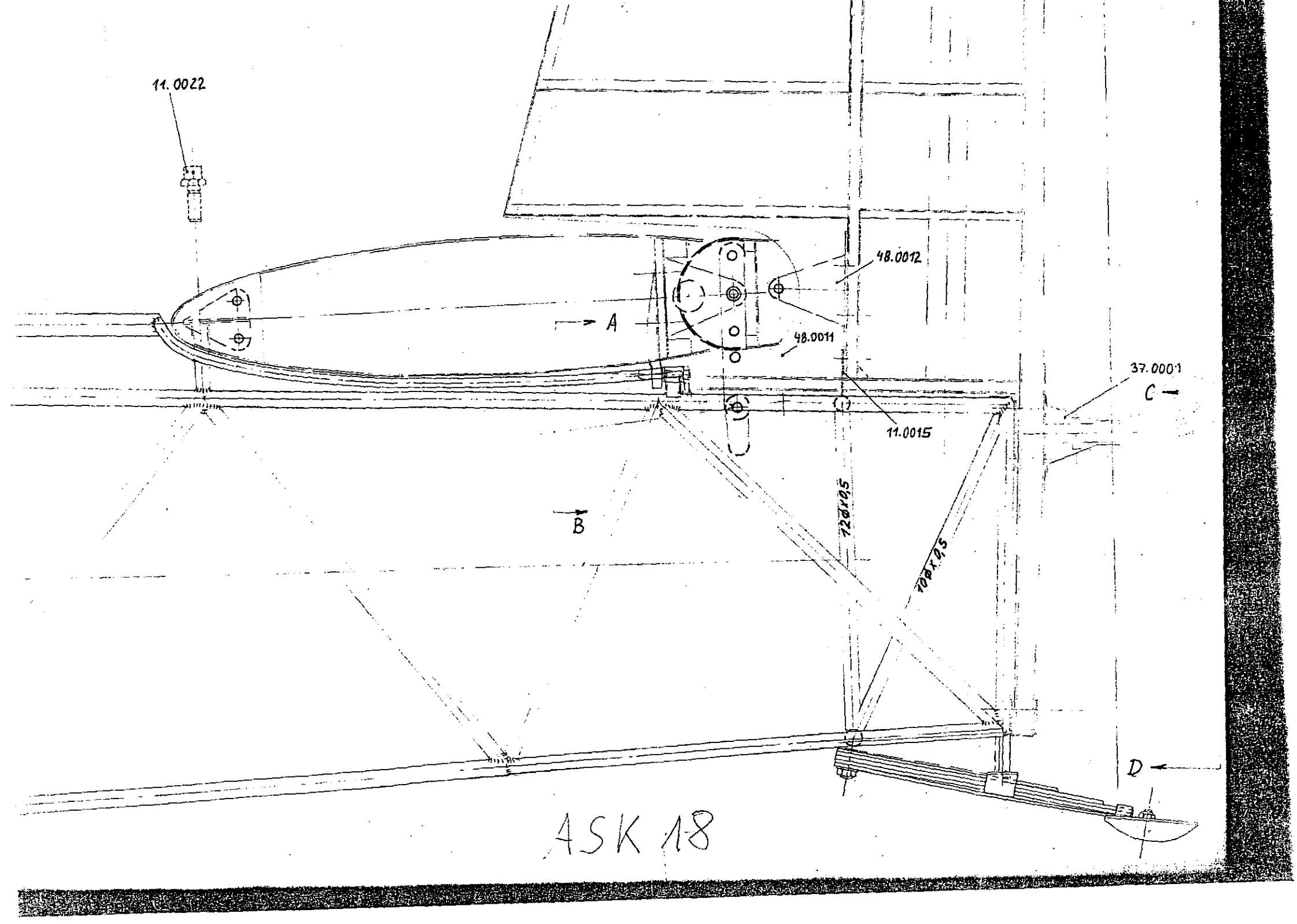
Astralon 1.5 dick

innen an Bespannung

kleben; beids.

ASK 13

Ah Holenflosse anpassen

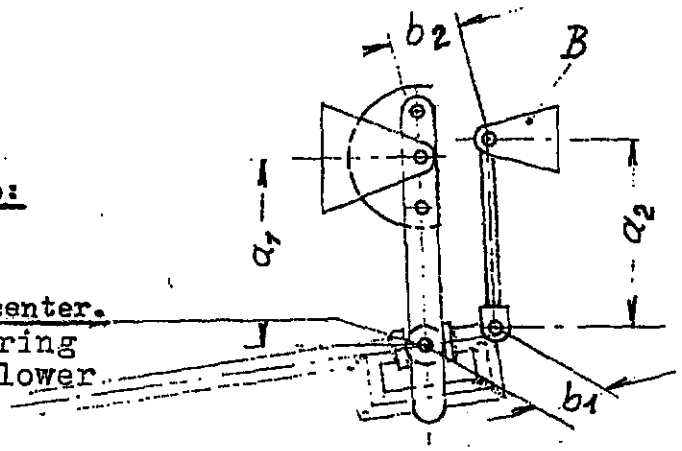

11.0022
48.0012
A
48.0011
37.0001
C
11.0015
B
12ørøs
10øx0,5
D
ASK 18

Ka 2 and Ka 2B, Ka 6, K 7 and K 8.	Automatic elevator connection.	Flugzeugbau A. Schleicher Poppenhausen /Rhön

Possible sources of mistakes in the automatically elevator connection of the types Schleicher Ka 2 and Ka 2B, Ka 6, K 7 and K 8. (US 7G1, 7G3, 7G4)

This point should be given special attent at the inspections.

1. Correct make:



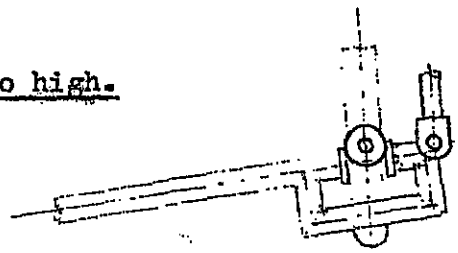
$a_1 = a_2$

$b_1 = b_2$

Must be in center.
or ballbearing
some what lower.

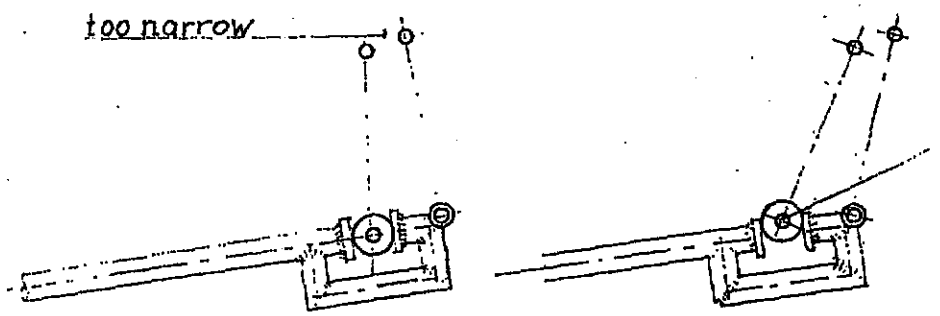
b2 may be wider until 4 mm, in no case smaller. Check it with a pair of compasses. There fore disassembl one half of elevator.

2. Ball bearing too high.



A new bearing suppor "B" is to be made wi adjusted measures i the above dimensions are not correct.

3. Parallelogramm gearing not correct:



goes out at deflection "push".

The inverse case can be, but is not so serious.

4. The stop of the elevator control must be at the seat. When the control is stopped at the rear, the push rod may be cracked by the very high hand power.

4.7.62. Kai/v

K 8
Technical Note
No. 24

Alexander Schleicher
GmbH & Co.
Segelflugzeugbau
XXXXX D-6416 Poppenhausen

new zip code: D-36163

Subject:

A1) Canopy retaining cord
A2) Rudder pedals
A3) Elevator control linkage
A4) Inspection of the fuselage tube skeleton and the control linkages for corrosion.
B1) Amendment of the K8 Flight and Operations Manual.
B2) Specification of the max.diameter for the wing attachment pins

Serial number applicability:

K8, K8B, K8C, Data Sheet no.216, all serial no.s including any license- or home-built gliders and any variations thereof.

Compliance:

ad A) Action to be accomplished with each annual C. of A. inspection, but for the first time before or on April 30, 1996.
ad B1) Action to be accomplished with the next annual C. of A. inspection, but before or on April 30, 1996, at the latest.
ad B2) As need be.

Reason:

For safety reasons and on requirement by the German CAA (Luftfahrt-Bundesamt) a complete inspection of the fuselage tube skeleton and of all control linkages is scheduled and required by this Technical Note.

ad A1) When a canopy retaining cord is used which either does not comply with the Type Certification status and/or is wrongly fitted, it may cause the canopy not to detach from the fuselage in case of canopy emergency jettison.

ad A2) In case of extreme overloading the rudder pedals the attach collars of the pedal boards may bend. As a result also the full deflection of the rudder can become restricted.

ad A3) The inspections of several aircraft reported that pre-damaged, bent and broken elevator push rods had been found.
A serious flight accident happened which was presumably due to a bent elevator push rod which remained undetected for a longer period and then caused the rod to break at the kink point.
Where the keel tube has been bent (eg: in a crash landing) it is possible that also the elevator push rod has been damaged without this being noticed. Also on transports in rough terrain it is possible that the elevator may deflect downwards and hence by its mass may bend a pre-damaged elevator push rod leading to a break of the rod.

ad A4) As a consequence of penetrated moisture corrosion damages may develop at the inside walls of the tubes of the fuselage skeleton and of the control linkages.

ad B2) Play between wing-to-fuselage atttachment can be removed by reaming the attachment fittings and using oversize pins. If "attachment pins for wing, front" and/or "Plug-in pins for wing attachment, rear" have to be replaced, oversize pins may be used.

new zip code: D-36163

Action:

ad A1) Check whether the canopy retaining cord uses a snap hook as weak link at the fuselage (eg: Simplex-snap hook to spec DIN 5287, hook length 30 to 35 mm). This snap hook should open at a tensile load of ≈ 34 kg.
Other means of fixing, such as leather sloop or Nylon cord without weak link are not permissible and must be replaced by the prescribed type of fixing.

ad A2) Checking the rudder pedals:
With the rudder neutral the pedals left and right must be evenly adjusted. Check the pedal board angle versus the pedal (dimensions see drawing L-216.42-U01). The angle must meet the specified dimension.
Engage the pedal adjustment into its foremost position and check full deflection of the rudder.
Where pedals or attachment collars are bent, these can be either repaired or replaced by new ones.
In order to impede the bending of the pedal boards it is optionally recommended to weld an additional butt strap onto the attachment collar (see Fig.A2).

ad A3) Inspect elevator push rods L-216.44-U 01 and L-216.44-U 02 for bending, deformation, or damage. If any of these are found, the push rod must be replaced by a new one. Never try to straighten any bent push rod; even only slightly bent rods must be replaced !

ad A4) Inspect for corrosion:
If there is suspicion of corrosion, the keel tubes or the primary tubes of the fuselage skeleton as well as all control linkage tubes using a control check hole must be inspected internally for corrosion. Tubes may also use drill holes for the purpose of mounting fairings, pockets etc. and these are particularly endangered.
So the wall thickness must be inspected by suitable procedures. The specification of the wall thickness of the fuselage skeleton tubes is detailed in drawing L-216.11-S1, issue Jan.17, 1958, or L-216.11-S1 with revision entry dated Nov.24, 1961, applicable as of serial number 1014.
Where in doubt check the wall thickness by knocking (check from the sound) or by a suitable ultrasonics test equipment for measuring the thickness of the layers, else in case of push rods with thread connectors check the tube inside wall for corrosion damages using an endoscope.
If the inside tube walls are all right, then the interior of the tubes must be preserved. In any case this must not increase the mass of the push rods noticeably!
Where rust is found, tubes must be replaced.
During each annual C. of A. inspection checks for rust pitting or rust formation must be included.

Alexander Schleicher
GmbH & Co.
Segelflugzeugbau
~~XXXXX~~
D-6416 Poppenhausen

new zip code: D-36163

ad B1) This Technical Note must be inserted into the Flight and Maintenance Manual K 8 as annex to "Attachments" and the insertion must be certified in the Manual.

ad B2) For the maximum oversize diameters of the "attachment pins for wing, front" (AS P/N 080.11.0730) and/or "Plug-in pins for wing attachment, rear" (AS P/N 080.11.0511) please observe:
the material thickness of the fitting around the bore at its thinnest section must still be at least half of the diameter of the pin!
The bore in the "wing attachment fitting, front" and in the "main fitting, rear" must have H7 tolerance (off size). If tolerance is exceeded, the fittings must be replaced.

Material & drawings:

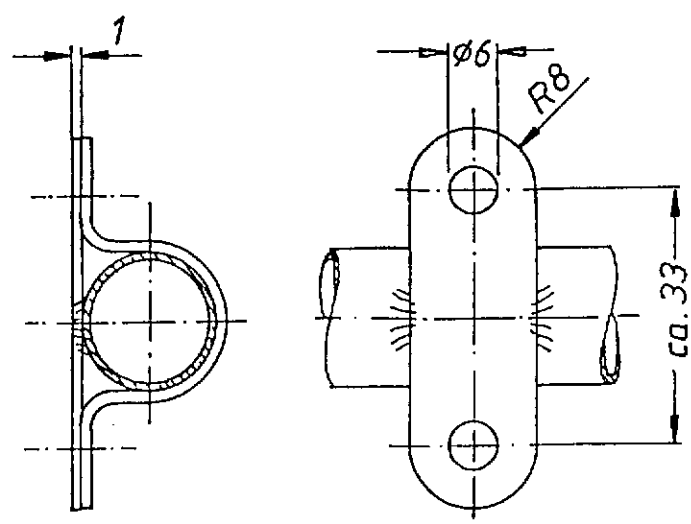
Any required materials and/or replacement parts may be ordered from Messrs. SCHLEICHER (Tel. +49(0)6658-890 or -8929, FAX +49(0)6658-8940) stating the glider type and the serial number of the aircraft in question.

For the interior wall preservation of the tubes you may use e.g. the preservative agent "Hohlraumkonservierung ML", P/N 3762, by Messrs.VOSSCHEMIE or any equivalent product.

Drawings applicable to this TN:
L-216.42-U01; L-216.44-U 01; L-216.44-U 02;
L-216.11-S1, issue 17.01.1958 or
L-216.11-S1, rev. of 24.11.1961, valid as of s/n. 1014.

Fig. A2

Reinforcing the attachment collars for pedal boards at the pedal assembly. Material: 1.7734.4
Welding procedure WIG to spec DIN 1912, welding wire material: 1.7734.2



Alexander Schleicher
GmbH & Co.
Segelflugzeugbau
~~D-6416~~ Poppenhausen

new zip code: D-36163

Notes: If the inspection as per actions A2, A3, or A4 reveals any damages, a copy of the report of findings must be returned to Messrs. SCHLEICHER including the serial number of the aircraft in question, its number of take-offs and total flight hours!

The above actions must be accomplished by a competent person.
The accomplishment of the actions must be certified by a licensed aviation inspector in the glider`s inspection documents, in the Flight and Maintenance Manual, and in the log-book.

Poppenhausen, Dec.4, 1995

ALEXANDER SCHLEICHER
GmbH & Co.

(Lutz-W. Jumtow)

The German original of this Technical Note has been approved by the LBA under the date of Dec.7, 1995 (signature: WALTER). The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.

INFO SHEET AS ANNEX TO:	K 8 Technical Note No. 24	Alexander Schleicher GmbH & Co. Segelflugzeugbau XXXXX D-0416 Poppenhausen

new zip code: D-36163

The points A1) thru A4) described in the TN do not have to be regarded as a new requirement. As a principle the said points should have been included already with each Annual C. of A. inspection in the past. The full description contained in TN no.24 is considered to be a guide and support for the technical personnel, to deal with the problems seriously and expertly.

The action described under point A4) should only be accomplished where there is reasonable suspicion. Reasonable suspicion may be: if sudden rust pitting or corrosion focus appear on or around a so far undamaged paint coat of a tube; this applies particularly to tubes with holes in them (for connectors, fittings etc.) where moisture may penetrate.
The problem concerns not only corrosion penetrating from outside into the tube, but such corrosion developing at the inside tube walls and possibly damaging by this the supporting structure.

Accomplishing the TN no.24 does of course not mean doing at any price a destroying inspection for the purpose of trouble-shooting, but this TN is meant to detect damages in process of development by means of expert technical personnel and modern technical device. Likewise we recommend to include this inspection on the occasion of a re-fabric or overhaul which must be done e.g. every 12 years for all gliders within the applicability of the German Airworthiness Rules.

First feedback reports after accomplishment of TN no.24 on 30 year old K8 aircraft showed that there were still borings inside the tubes which were still metallic bare and showed no corrosion.

If the inspection reveals that the elevator pushrods are neither bent nor damaged and that after scrutinous investigation there is no corrosion nor rust pitting at the fuselage skeleton as well as at the control linkage tubes with holes in them, the points A3) and A4) may be considered to be accomplished. If the inspection report of the inside tube walls says okay, then the interior of the tubes must be preserved by filling in a liquid anti-corrosive preservative (any surplus liquid should be allowed to drip out). You may also take any commercial-quality suitable anti-corrosive used by the car industry for preserving the interior walls. Partly also spray tins with an extended spraying head are available.

February 15, 1996

Signed: G.Heller (Chief Inspector)

For: ALEXANDER SCHLEICHER
GmbH & Co.

K:\TM\08\08TM24EA.TAT

72-7/3 Schleicher

Date of issue:

13. Dez. 1989

Affected Sailplane:

German Type Certificate		
No. 140,	Ka 2,	all serial nos.
203,	Ka 2B,	all serial nos.
205,	Ka 6,	all serial nos.
205,	Ka 6/0,	all serial nos.
205,	Ka 6B,	all serial nos.
205,	Ka 6BR,	all serial nos.
205,	Ka 6CR,	all serial nos.
205a,	Ka 6BS,	serial no. E1
211,	K7,	all serial nos.
216,	K8,	all serial nos.
216,	K8B,	all serial nos.
216,	K8C,	all serial nos.
221,	K9,	serial nos. 1
660,	K11,	serial No. V1
267,	ASK 13,	all serial nos.
307,	ASK 18,	all serial nos.
307,	ASK 18B,	all serial nos.

Subject:
Elevator

Reason:
Loose glue joints on rip 1 of the elevator

Action:
In accordance with the respektive Technical Note

Compliance:
Before the next start

Technical publications of the manufacturer:
Alexander Schleicher, Technical Note, October 4, 1989 "Elevator"

Model	Ka 2 and Ka 2B	TN No. 11
	Ka 6, 6/0, 6B, 6BR, 6CR, 6B-S . .	TN No. 21
	K7	TN No. 18
	K8, K 8B, K 8C	TN No. 23
	K9	TN No. 1
	K11	TN No. 1
	ASK 13	TN No. 12
	ASK 18, ASK 18B	TN No. 6

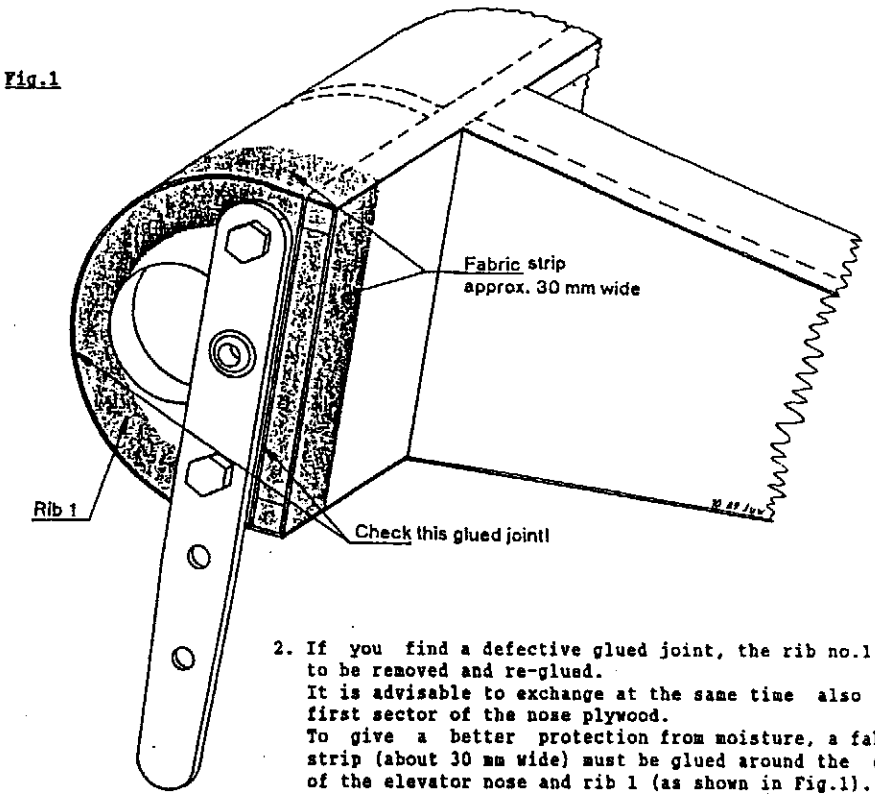
which become herewith part of this AD and may be obtained from Messrs.
Alexander Schleicher GmbH & Co. Segelflugzeugbau,
D-6416 Poppenhausen, Wasserkuppe, Federal Republic of Germany

Accomplishment and log book entry:
Action 1 and 3 to be accomplished by a skilled person.
Action 2 to be accomplished by an approved service station.
The accomplishment of this AD must be certified by a licensed inspector in the powered gliders inspection documents and in the log-book.

Note:
This Airworthiness Directive replaces AD-No. 72-7/2 of August 24, 1989.

SHEET: 2 of 3	Technical Note for Glider Models as per Sheet 1	Alexander Schleicher GmbH & Co. Segelflugzeugbau D-6416 Poppenhausen

Fig.1



2. If you find a defective glued joint, the rib no.1 has to be removed and re-glued.
It is advisable to exchange at the same time also the first sector of the nose plywood.
To give a better protection from moisture, a fabric strip (about 30 mm wide) must be glued around the edge of the elevator nose and rib 1 (as shown in Fig.1).

3. The above action under points 1. and 2. must be repeated every three years during the annual re-inspection. This copy of the Technical Note must be inserted in the Flight and Operations Manual of the respective glider as an annex and a corresponding entry must be made into the "Amendments to the Manual".

Material & drawings:

Rib 1 made from multi-plywood, 15 m thick, and nose plywood, 1 mm thick, according to DIN L 182/183, class 1/2 or NL 9128, 6.1013. Drawing as above.

Mass and C.G.:

It is not necessary to redetermine the mass and C.G. data.

1135

SHEET: 1 of 3	Technical Note for	Alexander Schleicher GmbH & Co. Segelflugzeugbau D-6416 Poppenhausen

Glider model:

Ka 2 u. Ka 2B	TN-No. 11
Ka 6, 6/0, 6B, 6BR, 6CR, 6B-S	TN-No. 21
K7	TN-No. 18
K8, K 8B, K 8C	TN-No. 23
K9	TN-No. 1
K11	TN-No. 1
ASK 13	TN-No. 12
ASK 18, ASK 18B	TN-No. 6

Serial number applicability:

Ka 2,	Data-Sheet No. 140,	all serial no.s
Ka 2B,	Data-Sheet No. 203,	all serial no.s
Ka 6,	Data-Sheet No. 205,	all serial no.s
Ka 6/0,	Data-Sheet No. 205,	all serial no.s
Ka 6B,	Data-Sheet No. 205,	all serial no.s
Ka 6BR,	Data-Sheet No. 205,	all serial no.s
Ka 6CR,	Data-Sheet No. 205,	all serial no.s
Ka 6BS,	Data-Sheet No. 205a,	serial no. E1
K7,	Data-Sheet No. 211,	all serial no.s
K8,	Data-Sheet No. 216,	all serial no.s
K8B,	Data-Sheet No. 216,	all serial no.s
K8C,	Data-Sheet No. 216,	all serial no.s
K9,	Data-Sheet No. 221,	serial no. 1
K11,	Data-Sheet No. 668,	serial no. V1
ASK 13,	Data-Sheet No. 267,	all serial no.s
ASK 18,	Data-Sheet No. 307,	all serial no.s
ASK 18B,	Data-Sheet No. 307,	all serial no.s

Subject: Elevator.

Compliance: Prior to the next take-off.

Reason: A glider of the model K7 failed to gain normal flight attitude immediately after tow rope release on winch launch. With the stick full back only the left elevator could be actuated in the correct direction; the right elevator deflected downwards. The reason for this was a loose glue bond at the elevator rib 1 at which the elevator fitting is attached. Similar incidents lead already before to the issue of the LTA 72-7 dated Feb.9,1972.

Action:

1. Remove elevator.
   Check that the glued joint between rib 1 and the leading edge plywood and the elevator spar respectively is in good condition (see Fig.1). Before doing so check whether the LTA 72-7 of Feb.9, 1972 was already previously accomplished (this is not applicable to K9, K11 and ASK 18); if yes then the fabric strip first carefully has to be detached in order to be able to check the glued joint.

11.86

SHEET: 3 of 3	Technical Note for Glider Models as per Sheet 1	Alexander Schleicher GmbH & Co. Segelflugzeugbau D-6416 Poppenhausen

Notes: Actions 1. and 3. can be accomplished by a person who is familiar with such work.
Action 2. must only be accomplished by a technical aviation service station holding an appropriate license; the accomplishment of all actions must be certified by a licensed aviation inspector in the glider logbook and in the inspection certificates.

Poppenhausen, October 4, 1989

ALEXANDER SCHLEICHER
GmbH & Co.
i.A. L.-W. Jumtow

The German original of this Technical Note has been approved by the LBA under the date of Oct.17, 1989 (signature: FRIESS). The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.

11.86

Airworthiness Directive

2000-369

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

Stemme

Effective Date: November 30, 2000

Affected:

Kind of aeronautical product:	Powered Sailplanes
Manufacturer:	Stemme, Berlin, Germany
Type:	Stemme S 10
Models affected:	Stemme S 10 and -V
Serial numbers affected:	S 10: 10-03 up to 10-63 as listed in the Technical Note S 10-V: 14-002 up to 14-030 and 14-012M up to 14063M as listed in the Technical Note
German Type Certificate No.:	846

Subject:
Air brake eye bolts and air brake sheets and Landing gear door hinges and door actuation

Reason:
Air brake eye bolts and air brake sheets
At higher airspeed near V^{NE} there may be fluttering in the upper covering straps on the air brake. Two mounting bolts (eye bolts) of the air brake have a significant effect upon this behaviour.
A low locking force of the air brake covers may also promote fluttering. To produce the necessary locking force, the air brake sheets must not touch the bottom of the GFRP air brake box.

Landing gear door hinges and door actuation
In one case, fluttering on one side of the right air brake cover led to side slipping condition, whereupon the L/G door opened and tore off. The L/G door that was torn off damaged the horizontal stabiliser. The tearing was possibly favoured by L/G door hinges that were already damaged.
For the model S 10-VT the L/G door actuation has been redesigned. This re-design which prevents the opening of the L/G door may be retrofitted also for models S 10 and S 10-V.

Action / Compliance:
Action 1 - before the next flight:
The airspeed V^{NE} must be limited to 220 km/h - mark a „Red Line" on the airspeed indicator at 220 km/h.
Not later than the next annual inspection: Exchange the eye bolts on the air brake. After this exchange, the „Red Line"-mark shall be removed.

Action 2 - before the next flight:
Check the clearance of the air brake sheets and if necessary, modify them.

Action 3 - before the next flight:
Visual inspection of the Landing Gear doors and area and if necessary exchange of damaged parts.

Action 4 - optional:
The L/G door actuation may be converted to the serial standard of the model S 10-VT.

The action must be done in accordance with the instructions given in the Service Bulletin.

Technical publication of the manufacturer:
Stemme Service Bulletin No. A 31-10-055, Amendment-Index 02.a dated October 09, 2000 which becomes herewith part of this AD and may be obtained from Messrs.

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!

Stemme GmbH & Co. KG
Am Flugplatz

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.

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.

RZECZPOSPOLITA POLSKA
GŁÓWNY INSPEKTORAT LOTNICTWA CYWILNEGO

REPUBLIC OF POLAND
GENERAL INSPECTORATE
OF CIVIL AVIATION

REPUBLIQUE DE POLOGNE
INSPECTORAT GENERAL
DE L'AVIATION CIVILE

ul. Grójecka 17, 02-021 Warszawa, Tel. (4822) 624 42 87, Fax (4822) 629 86 89; (4822) 8225096

Warszawa, dn.18/09/2000
Warsaw, day/month/year

DYREKTYWA ZDATNOŚCI - AIRWORTHINESS DIRECTIVE
Nr SP -0094 -2000-A

1.Przedmiot: Szybowce / gliders, model: SZD-50-3 „PUCHACZ"
Product (wyrób / model, wyposażenie, numery - product name / model , appliances, numbers)

2.Numer Świadectwa Typu /Orzeczenia: GILC / GICA
Type Certificate/Approval Number (Nazwa Nadzoru - Name of Authority)

3.Dotyczy: Wymiany przedniego zawieszenia kadłuba / Replacement of fuselage front fitting.
Subject (opis usterki, rysunek części - description of the problem, identification of part)

4.Przyczyna wydania: Dyrektywę wydano ze względu na występujące pęknięcia konsol
Reason for the issuance of this AD (dla wyrobów importowanych przywołać AD Nadzoru Lotniczego kraju producenta - for imported products „ as in AD " point 6.)
przedniego zawieszenia kadłuba mocowanego do wręgi przedniej / AD issued
due to cracks detected in console, of the mounted to fore bulkhead fuselage front fitting

5.Działania korygujące: jak w Biuletynie Obowiązkowym / as in Mandatory Bulletin No.
Corrective action (dla wyrobów importowanych wpisać „ jak w AD" pkt 6.- for imported products, „ as in AD" point 6.)
BE-049/SZD-50-3/2000 „PUCHACZ"

6. Nazwa Władz Lotniczych wydających AD: ----------
Name of Aviation Authority that issued AD (dot zagranicznych AD, podać Nr i datę wydania - for foreign „AD" give Number and date of issue).

7. Dokumentacja związana: Biuletyn Obowiązkowy / Mandatory Bulletin No.
Ref. publications (Biuletyn Obowiązkowy - Mandatory Bulletin)
BE-49/SZD-50-3/2000 „PUCHACZ"

Niniejsza Dyrektywa Obowiązuje z dniem : 15/10/2000
Effectivity date of this AD: (day/month/year)

Zygmunt MAZAN
Główny Inspektor IKCSP
Chief Inspector of Civil Aircraft Inspection Board

RZECZPOSPOLITA POLSKA
GŁÓWNY INSPEKTORAT LOTNICTWA CYWILNEGO

REPUBLIC OF POLAND
GENERAL INSPECTORATE
OF CIVIL AVIATION

REPUBLIQUE DE POLOGNE
INSPECTORAT GENERAL
DE L'AVIATION CIVILE

ul. Grójecka 17, 02-021 Warszawa, Tel. (4822) 624 46 96, Tlx 817688, Fax (4822) 629 86 89
Fax (4822)8225096

Warsaw, 18.09. 2000
day/month/year

GLC-T1-094/00/AD

Subject: Issuance of the Airworthiness Directive

NOTICE
To Whom It May Concern

This NOTICE approves and makes Mandatory the Airworthiness Directive N°: **SP-0094-2000-A**, Dated: September 18, 2000

This Airworthiness Directive concerns: All gliders of SZD-50-3 „PUCHACZ" type
(aircraft, engine, propeller, equipment)

Reason for the issuance of this Airworthiness Directive: Cracks detected in console, of the mounted to fore bulkhead fuselage front fitting

Enclosures: 1. Airworthiness Directive N° SP-0094-2000-A
2. Mandatory Bulletin No. BE-049/SZD-50-3/2000 „PUCHACZ"

Chief Inspector of Civil Aircraft Inspection Board

.....

Zygmunt MAZAN

PRZEDSIĘBIORSTWO DOŚWIADCZALNO-PRODUKCYJNE SZYBOWNICTWA

PZL-BIELSKO in bankruptcy

ul. Cieszyńska 325, 43-300 BIELSKO-BIAŁA, POLSKA
tel. +48 (033) 8125021 fax. +48 (033) 8123739
Orzeczenie GILC IKCSP Nr 023

ACCEPTED BY
Syndic of „PZL – Bielsko"

on: September 6, 2000

[---]
Andrzej Sikora, M.Sc.

APPROVED BY
Chief Inspector of CAIB

on: September 14, 2000

[---]
Zygmunt Mazan, MSc. Eng

MANDATORY BULLETIN
No BE-049/SZD-50-3/2000 „PUCHACZ"

DESIGNATION-TYPE/MODEL: SZD-50-3 „PUCHACZ"

SERIA / NUMBER: All gliders of SZD-50-3 "PUCHACZ" model on which cracks have been detected in inspection held according to the BE-048/50-3/200 Bulletin.

CONCERNS: Replacement of fuselage front fitting.

COMPLIANCE TIME: On receiving this Bulletin.

ELABORATED BY:
Responsible for type design

Bogumił Bereś, MSc. Eng.
[---], 24.08.2000
(signature, date)

AGREED WITH:
CAIB Division No X

Senior Eng. of CAIB
Jerzy Mędrzak, M.Sc. Eng
[---], 06.09.2000
(signature, date)

Bielsko-Biała

Translated by
Tadeusz Zboś

1. GROUNDS FOR ISSUANCE OF THIS BULLETIN

Bulletin issued due to cracks detected in console of the mounted to fore bulkhead fuselage front fitting.

2. LIST OF FACTORY NOS COVERED WITH THIS BULLETIN

Inspection according to the BE-048/50-3/2000 Bulletin to be accomplished on all gliders of SZD-50-3 "PUCHACZ" model after every 100 flying hours, or in annual inspection – every 12 months of calendar.

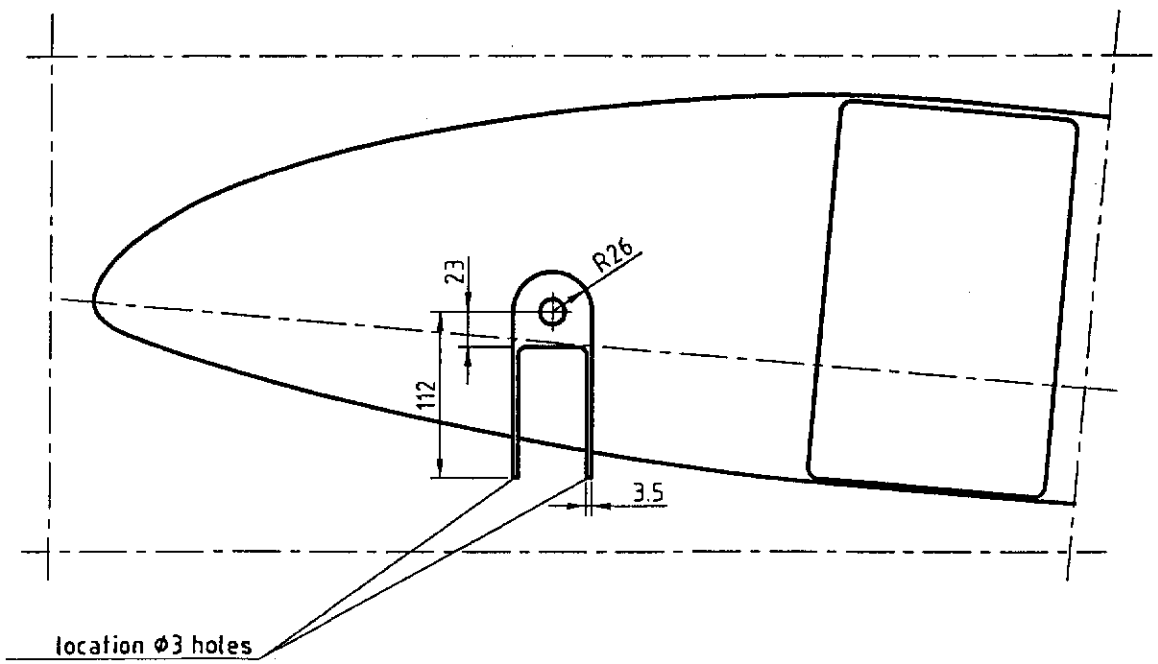
Front fitting replacement must be made on each plane of SZD-50-3 "PUCHACZ model on which, in inspection, a crack of length exceeding 3 mm has been found.

3. MODIFICATION PROCEDURE

Sequence of operations:

- Make a cut-out in fuselage skin, in accordance with following drawing.

  To facilitate marking of cut-out contour, make a hole with 3 mm diameter drill in fuselage skin from inside, close to bulkhead.



- Re-bore the tubular rivets fastening front fitting to bulkhead.
- Remove the bored rivets and sleeves.
- Separate the fitting from bulkhead, and take the former out through the cut-out made (in case of problems with removal, enlarge the cut-out appropriately)
- Remove glue joint remains from bulkhead and repair eventual damages.
- Insert the new, Producer delivered fitting and assemble wings to verify correct wing & fitting positioning.
- On gaining wings and fitting correct position in accordance with openings in bulkhead, mark the holes in consoles of fitting.
- Take-out the fitting and enlarge openings acc. to markings made.
- Prepare a contact surface between bulkhead and fitting for gluing.
- Cover the bulkhead/ fitting contact surface with AEROSIL + resin composition (resin system according to Technical Service Manual must be used)
- Embed new fitting and assemble wings, to verify verify correct wing & fitting positioning.
- Reame lower openings both on R.H and L.H. side of bulkhead to 16 mm H7 size.
- Insert the Producer supplied special, long bolts in openings, bolt head inside.
- Put on washers from bulkhead aft side on both bolts and, on tightening castellated nuts, secure these with cotter pins.
- Disassemble wings and reame remaining openings, then install the remaining bolts repeating procedure of three preceding items.

  Two shorter bolts to be installed in openings closest to fuselage plane of symmetry.
- Repair the cut-out in a rib at fuselage-wing junction from outside, following the Technical Service Manual.
- Remove the split angles (ones connecting bulkhead to fuselage skin) from inside in the area of cut-out made, and laminate new ones of 2 x 92125_X fabric, 60 mm wide.

4. FINAL RESOLUTIONS

1. Repair to be accomplished at workshop approved by the responsible airworthiness Authority.
2. Labour demand for fitting replacement is 10 work-hours approx.
3. Glider operator will cover all costs of repair and spare parts.
4. The following parts necessary for repair will be delivered by Producer:
   - Fuselage front fitting (modified version) 1 pc
   - Special, short bolt 2 pcs
   - Special, long bolt 4 pcs
   - Castellated nut 6 pcs
   - Washer 12 pcs
   - Cotter pin 6 pcs

Note: CAIB/ GICA approval of this Bulletin concerns technical matters exclusively, this does not refer to cost and financial arrangements.

5. ENCLOSURES

There are no enclosures to this Bulletin.

- THE END -

British Gliding Association

Inspection Report

This form may be used for Gliders, Motor Gliders and BGA Tugs.

Reg:	Type:	File Ref:
Date:	Check:	Sheet: of

Details:

The work recorded above has been carried out i.a.w. BGA technical procedures:

Signed: BGA Approval No: Date:

British Gliding Association

Rectification Worksheet

This form may be used for Gliders, Motor Gliders and BGA Tugs.

Reg:	Type:	File Ref:
Date:	Check:	Sheet: of

No.	Defect	Action	Completed

The work recorded above has been carried out i.a.w. BGA Technical Procedures

Signed: BGA Approval No: Date:

British Gliding Association
Certificate of fitness for Flight

British Civil Airworthiness Requirements Chapter A3-8 Certificate of Fitness for flight under "A" conditions in accordance with schedule 2 of the Air Navigation Order. BGA Approval No; DAI/8378/73

Registration No:

Aircraft Type: S/No:

Engine Type: S/No:

It is hereby certified that the aircraft defined hereon has been inspected and is fit for flight provided that it is properly loaded.

Purpose to flight:

This certificate is valid until 23.59 on.....or until the airworthiness condition of the aircraft is altered, whichever is earlier.

Signed: Date:

BGA Approval No:

Notes:

1. The period of validity shall not exceed 7 days.
2. This certificate may only be issued by a nominated person, Local Special M3 Chief Engineer, appropriately licensed engineer or the CTO.
3. The certificate shall be issued in duplicate and one copy kept elsewhere than in the aircraft.
4. Conditions of issue are to be found in the latest issue of BCAR A3-8.

British Gliding Association, Kimberley House, Vaughan Way, Leicester, LE1 4SE

British Gliding Association
Personal Experience Record

Name;	Aircraft System

Experience Record;			
Date	Reg.	Detail & Type	Certified

All entries to be certified as correct by a responsible person

British Gliding Association

Minor Modification Application – Glider/SSMG.

[For CAA Reg.(G-) aircraft use CAA form AD261]

BGA Mod No.
BGA USE ONLY

Aircraft Type Reg. No. BGA Serial No	Name & Address of applicant Tel	Applicants Mod Number Issue No Date

Details of Modification (use continuation sheets if necessary)

Suitable for installation on this aircraft only * Suitable for installation on any other _____		Limitations, Conditions, Exemptions	
Weight & C of G Schedule #	Flight Manual Amendment #	Maintenance Manual Amendment #	Electrical Load Analysis #
Modification Instructions #	Modification Drawings #	Parts list #	Published in TNS.

Can this modification be passed on to interested members within the BGA? Yes / No
Or. All enquires to be directed to originator. (The former will apply if no preference is shown)

The above modification has been approved for incorporation on BGA registered Aircraft only.

Signed.....For BGA Date.....

* Delete as reqd, # Tick or N/A in box as reqd, ☐ BGA Use only.

British Gliding Association

Major Modification Application – Glider/SSMG.

[For CAA Reg.(G-) aircraft use CAA form AD282]

BGA Mod No.
BGA USE ONLY

Aircraft Type Reg. No. BGA Serial No	Name & Address of applicant Tel	Applicants Mod Number Issue No Date

Details of Modification (use continuation sheets if necessary)

Suitable for installation on this aircraft only * Suitable for installation on any other _____	Limitations, Conditions, Exemptions

Weight & C of G Schedule #	Flight Manual Amendment #	Maintenance Manual Amendment #	Electrical Load Analysis #
Modification Instructions #	Modification Drawings #	Parts list #	Published in TNS.

Can this modification be passed on to interested members within the BGA? Yes / No
Or. All enquires to be directed to originator. (The former will apply if no preference is shown)

Name of BGA investigating engineer.....

BGA Technical Committee approval Yes / No* Report Completed Yes / No / N/A*

Signed.....For BGA Date.....

* Delete as reqd, # Tick or N/A in box as reqd, ☐ BGA Use only.

British Gliding Association
Engineers Report

Use this form to report findings following an accident or Incident and to report engineering occurrences.

BGA Ref. No.

Engineering Occurrence No. E

Aircraft type: Reg. No. BGA or G- Serial No:	Name & Address of reporter: Tel: Operator:	Date and place of Incident or Occurrence: Date Reported:

Total Hours Flown:	Total Launches:	* Maintenance / Daily Insp. Flight / Retrieve / Land out	Unreported Damage * Yes / No

Component:	Part Number:	Serial Number:	Position:
Date Fitted:	Hours Flown:	Launches:	Supplier:

Brief Title:	Where can Aircraft be inspected:

Engineers Report: (use continuation sheets if necessary) Page 1

Number of Continuation sheets: ____

Reporters Signature.....BGA Approval No (if app.).....Date.....

Date Received..... Flight Report Received Yes / No / NA * Safety Committee item Yes / No *

Quality Lapse Yes / No * CAA Informed Yes / No * Manuf./Agent Informed Yes / No*

TNS item Yes / No *issue..... BGA inspection Yes / No * Ref..... Date Closed.....

Signed.....For BGA Date.....

* Delete as required ☐ BGA Use Only

This form should be completed as far as possible with all applicable data and forwarded to: BRITISH GLIDING ASSOCIATION, KIMBERLEY HOUSE, VAUGHAN WAY, LEICESTER, LE1 4SE. FAX 0116 2515939 e-mail [bga@gliding.co.uk] as soon as possible after the event.