British Gliding Association

TNS 10/11/12/77

PART I Airworthiness Aggro - (Please add to mandatory list)

1.1. ASK. 16 (Motor glider) AD 77-234 and Schleicher Tech. Note 8 requires modification to WHEEL to prevent possible breakage of bolts; (copy herewith).

1.2. Rhonlerche II. AD 77-268 and Schleicher Tech. Note 14 requires checking of safety pins in clevis pins on aileron control cables, for shearing. (copy herewith).

1.3. German Safety Belts BAGU FAG-5 and FAG-7 AD 77-258 requires inspection and action. (copied herewith).

1.4. L.S.3 - AD 77-257 requires Flight Manual ammendments dated April 26, 1977 to be incorporated.

1.5. Dart 17R. Cable Release Ball jams elevator control stick. Check that excessive cable length does not create this hazard.

1.6. Astir C.S. AD 77-235. Tech. Note 102-6 requires inspection of cable release pulley bearings for signs of overstressing.

1.7. Hirth engines. Crankcase pressure relief valve. The R.V. is incorporated in a drilled bolt (wire-locked), which may become inoperative through corrosion. Excess pressure will blow-out crankcase seals. (Grenville Hill - Ulster).

1.8. SF 25E Motor gliders. Water in fuel. Tank sumps should be drained at 50 hr intervals, to prevent possible engine malfunction. (Joe Podolski Norfolk GC).

1.9. Mini-Nimbus H-S7 (15 metre). Failure of BEARING in air-brake system at bell-crank lever. Attached sketch supplied by I.R. Cook provides repair scheme.

1.10. Astir C.S. DAMAGE TO WING ATTACHMENT (DRAG) fittings. The use of excessive force to make these structural joints, and mishandling during rigging/de-rigging, may damage the spigots. (A force of 30 tons is required to sheer-off these spigots). Inspect for signs of overloading.

PART II General

2.1. Bergfalke III - introduction of C.G. (winch launching) hook. Scheibe Tech. Note 104-13, introduces drawing 104-C-11-512/1, for improved installation.

/2.....

2.2. Conspicuity Paint Schemes. Mandatory for 1978 comps. TNS 5/76 gives details of paint schemes. BGA operational regulations will require compliance for 1978 competitions. (Instruction repeated herewith by courtesy of RAFGSA).

2.3. Tyres - Remoulding. The Watts Tyre Co., Church Road, Lydney, Glos. (Lydney 2203), will remould tyres for gliders and motor gliders, provided the carcass is in satisfactory condition. (CAIP Leaflet AL-3-18 refers).

2.4. Tyres - Soft urethane filling. Watts Tyre Company will fill tyres to equivalent pressure as air, to achieve similar energy absorption and puncture proofness! BGA approves!

2.5. Kestrel 19 Flap-drive Mod. Mr. I.D. Parker has designed mod Ref BGA/Kestrel/1/77 to eliminate backlash. (copies from BGA).

2.6. Blanik Safe-life.

(a) The proforma questionnaires returned to the BGA have been processed and despatched to the manufacturer.

(b) RAF College Cranwell have kindly agreed to conduct in-flight gust measurements, as requested in Bulletin L13-045.

(c) In Australia, a Blanik has flown 7.500 hrs, and several past 5000 hrs, and 8 out of 100 are "grounded".

(d) One sample only has achieved 3000 hrs in the UK.

2.7. Tost-wheel bolt failures (Ref item 1.1.) may also occur on SF.25 series motor-gliders, and should be inspected/rectified accordingly. (Re engineer for oversize bolts).

3.0 Tug Aggro

3.1. Chipmunk brake caliper failures may result in a locked wheel, and nose-over damage to propeller/engine costing more than £1500!!

3.2. Rollason Condor brake malfunction has caused one "nose-over" accident. Also rudder travel was restricted by incorrect brake adjustment.

/3.....

4.0.

4.1. Information. Accident Investigation Dept, Board of Trade, have moved to Kingsgate House, 66-74 Victoria Street, London, SW1E 6ST.

Telephone 01-212-5101.

Club Technical Officers. Please ammend BGA Technical Procedure Manual Page 15 Para. 14.2 accordingly.

4.2. BGA Inspection Fee Renewal. Please respond promptly to BGA renewal letter, otherwise this will be your last TNS!!

4.3. G.R.P. Course - 25 applications have been received for the weekend G.R.P. Course to be arranged in March 1978.

4.4. Hopefully there may not be enough "aggro" to justify a further TNS in 1977, thereby saving paper, printing, and postage. If so, Happy X-MAS well in advance!

R. B. Stratton
Chief Technical Officer

TNS 16/11 77

Airworthiness Directive

77-234 Alexander Schleicher

Date of issue:
August 15, 1977

Affected powered glider:
ASK 16
(German Type Certificate No.758),
all serial numbers.

Subject:
Wheel.

Reason:
Possible breakage and loss of bolts.

Actions and compliance:
Until December 31, 1977, enlarge holes of wheel hub by drilling and countersinking in accordance with Technical Note No. 8. Replace existing bolts and nuts by Allan bolts M8x70 8.8 DIN 912 and nuts M8-5 DIN 934.

Technical information of the manufacturer:
Alexander Schleicher Technical Note No.8 of July 5, 1977, which becomes herewith part of this AD.

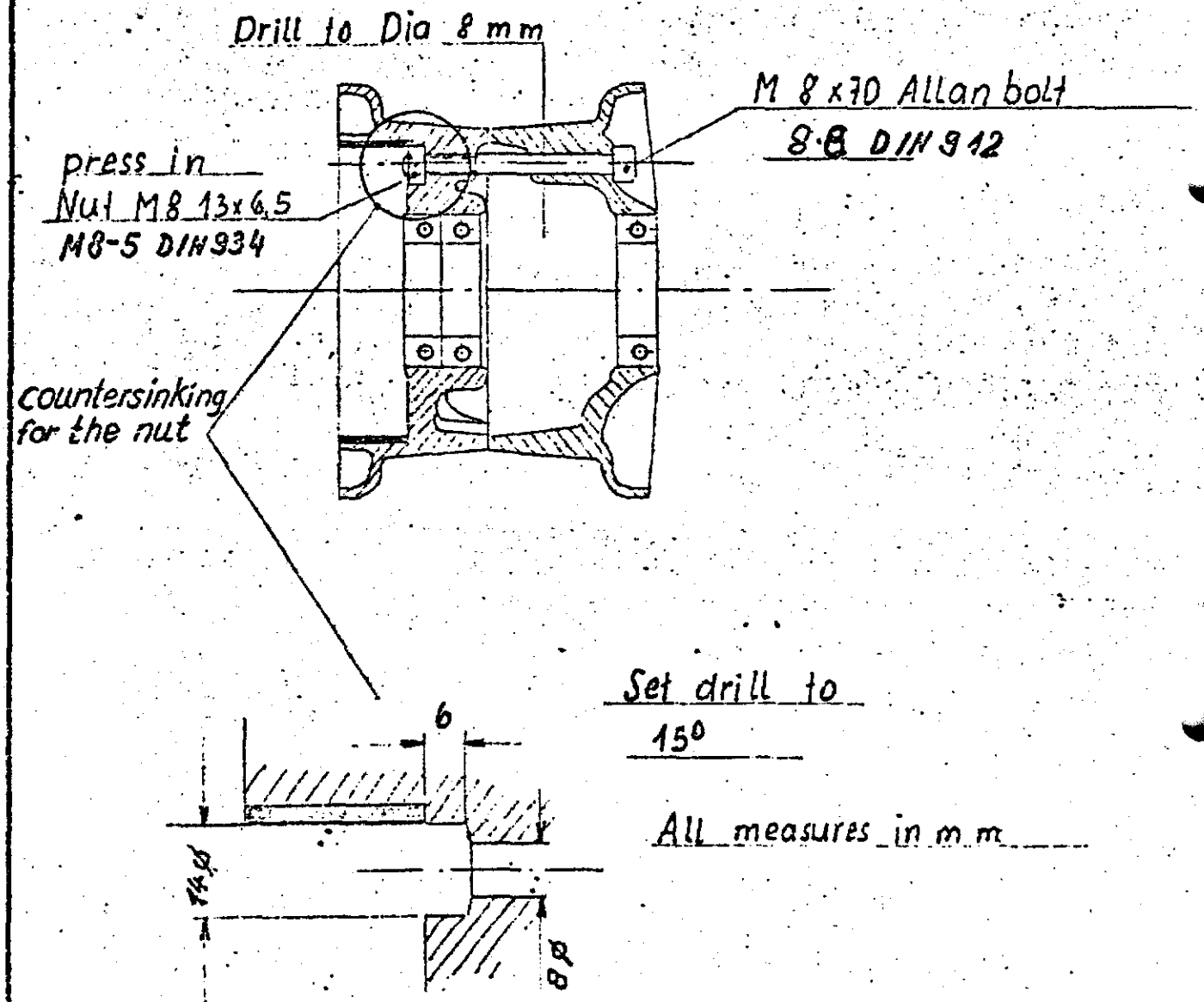
Accomplishment and log book entry:
Action to be accomplished by a skilled person and to be entered in the powered glider's log.

PTO

Sheet: 1 Number of sheets: 1	Technical Note No. 8	Alexander Schleicher Segelflugzeugbau 6416 Poppenhausen

LTA-Nr. 77 - 23

Subject:	Enlarging of the bolts at the wheel hub
Effectivity:	Powered glider ASK 16
Accomplishment:	Changing of the screws
Material:	See drawing
Weight and balance:	To be neglected



The modification has to be made until 31. Dez. 1977

It is recommended to send the hubs to Fa. Tost, 8000 München 2, Thalkirchenerstr. 62, Tel. 089-534472 for making the modification.

Poppenhausen, the 05.07.77

ALEXANDER SCHLEICHER
Segelflugzeugbau

TNS

Airworthiness Directive

77-268 Schleicher

Date of issue:
October 4, 1977

Affected sailplane:
Rhönlerche II
(German Type Certificate no. 164),
all serial nos.

Subject:
Clevis pin for aileron control cable connection at main control shaft.

Reason:
Cotter pins on Clevis pins connecting aileron control cables to the control shaft sheared.

Action and compliance:
Prior to next flight proceed in accordance with the Technical Note.

Technical Note of the manufacturer:
Alexander Schleicher, Segelflugzeugbau, Technical Note No. 14 of September 15, 1977, which becomes herewith part of this AD.

Accomplishment and log book entry:
Action to be accomplished by a qualified person and to be entered in the sailplane's log.

PTO

Sheet 1 Number of sheets: 1	Technical Note no. 14	Alexander Schleicher Segelflugzeugbau 6416 Poppenhausen

Subject: Clevis pin for aileron controlcable connection at main controlshaft.

Effectivity: Glider Rhönlerche II, all serial numbers

Accomplishment: Immediately / Before next flight

Instruction:

1) Referring to Modification No. 5 (1958) and Airworthiness Directive 12/60 (1960) and caused by an accident we again point to the fact that the clevis pins for aileron controlcable connection to the main controlshaft must be inserted from aft to front (Head of clevis pin must face wheelbox).

2) To avoid the wheelbox contacting the aileron-controlcable-connection by excessive bending of the skid, the skid must not be allowed to be abraded to less than 3/4 inch in the range from 24 to 32 inch in front of the wheel-axle, otherwise the skid must be replaced.

3) The manual of the "Rhönlerche II" must be supplemented by handwriting as follows:

   page -5-: after "connect at the controlshaft" insert: " The clevis pins must be inserted from aft to front".

   page -9-: ahead of: "If the glider is used much on rocky and ..." insert: "Measured 24 to 32 inch forward of wheel-axle the skid must not be thinner than 3/4 inch".

Material: -----

Weight: Not affected.

Balance: Not affected.

Remarks: Accomplishment by competent person. Accomplishment of Instruction 3) must be stated in the aircraft-log.

Poppenhausen, the 15.09.1977

ALEXANDER SCHLEICHER
Segelflugzeugbau
signed Rudolf Kaiser

Airworthiness Directive

77-258 Autoflug

Date of issue:
October 3, 1977

Affected equipment:
Aircraft safety belts Bagu FAG-5 and Bagu FAG-7 (German Type Certificate no. 40.070/28 and 40.070/30) Series A, B, C, D, E and F. All belts with the GL-2 multiple-point buckle manufactured between July 1970 and September 1974.

Affected:
Multiple-point buckle.

Reason:
Lateral displacement of the cylindrical pin of the GL-2 multiple-point buckle.

Action and compliance:
Unless already done, action to be accomplished within four months after issuance of this Airworthiness Directive according to the instructions of the manufacturer.

Technical publication of the manufacturer:
Autoflug GmbH, technical publication of the manufacturer no. 3/77 of 27 July 1977, which becomes herewith part of this Airworthiness Directive. It may be obtained from Messrs. Autoflug GmbH, Industriestraße 10, D-2084 Rellingen-2, West-Germany.

Accomplishment and log book entry:
Action to be accomplished either by the pilot or a skilled person and to be entered in the sailplane's log.

TNS

Airworthiness Directive

77-235 Grob

Date of issue:
August 18, 1977

Affected sailplane:
Astir CS (German Type Certificate No.306),
serial numbers 1070 to 1199 and 1300 to 1315.

Subject:
Pulleys in cage of cable release.

Reason:
Axial shifting of pulley position from the ball-bearing due to overstressing of pulley by lateral force.

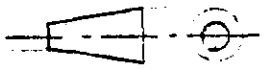
Action and compliance:
Unless already accomplished proceed in accordance with Technical Information within 30 days after publication of this Airworthiness Directive.

Technical information of the manufacturer:
Grob Technical Information No. TN 102-6 of June 6, 1977, which becomes herewith part of this AD.

Accomplishment and log book entry:
Action to be accomplished by a skilled person and to be entered in the sailplane's log by a licensed inspector.

Copies to: BGA.
MR. E. SMITH. (G/D)

TNS 16/11/12/77.



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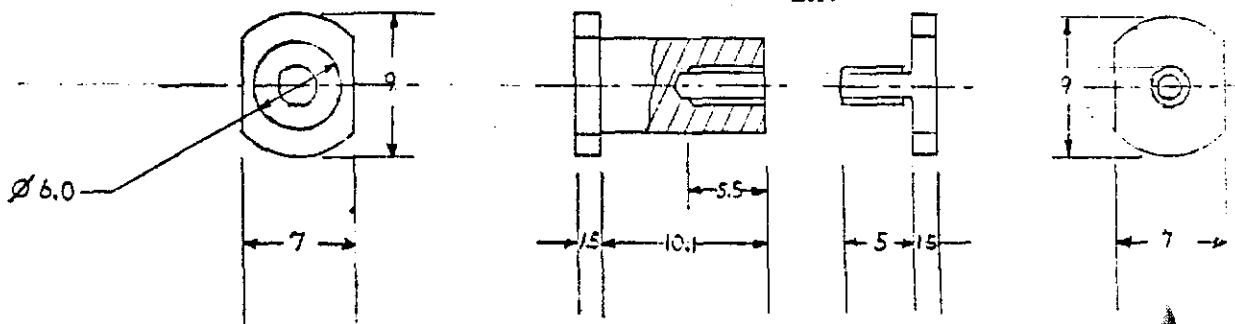

Procedure:- Drill end of bearing mounting shaft off. Discard shaft and remains of bearing. Fit new bearing , retained shim washers and assemble Bolt and Nut using grade A Locktite.

TITLE		MATERIAL	TREATMENT	FINISH
BOLT & NUT NIMBUS 15 AIR BRAKE SYSTEM		S 510	NIL	NATURAL
SCALE	DIMENTIONS IN MILLIMETRES (M.M)	DRG NO		
2 : 1	TOLERANCES ± 0.05	HS7 No1		

MIA:- NIMBUS 15M. BEARING FAILURE.

SECTION 2 - SAILPLANES - GENERAL

TECHNOTE S10(G)

CONSPICUITY OF GLIDERS

INTRODUCTION

1. The Executive Committee of the British Gliding Association has strongly recommended that all glider owners should take steps to render their gliders visually conspicuous, in pursuit of the 'see and be seen' principle. The Executive Committee of the RAFGSA endorses this recommendation, and requires that Clubs review the colouring and markings of the gliders that they operate, in accordance with the following detailed considerations.

GENERAL

2. Gliders are probably least conspicuous in bright but hazy conditions, when presented endways-on to the observer, and when the colour is white, cream, grey, aluminium, light green, light blue, or something similar. They are rendered more conspicuous by applying bright colours such as orange or flame, if possible in the form of fluorescent ("Dayglo") paints or plastic film. The regions available for such treatment are often limited by structural or aerodynamic considerations but, fortunately, those listed in paragraph 4 below are very effective visually. The colours mentioned above seem to be more effective than red, particularly when the red is of a darkish shade. Blue or green are least effective and are not recommended.

WOODEN GLIDERS

3. There is no significant structural (ie temperature) limitation on the use of coloured finishes. Many wooden gliders are already very conspicuous and require no further treatment. However, there are also an appreciable number whose finish is almost entirely white, cream or some other neutral colour: it is recommended that, as a minimum, bright colours should be applied as for glass-fibre gliders (paragraph 4 below). The coloured regions on wooden gliders can, of course, be much more extensive, subject only to aesthetics and the need to avoid, as far as possible, paint edges which could upset the boundary layer.

GLASS-FIBRE GLIDERS

4. Glass-fibre Gliders are normally supplied with a white-pigmented gel coat and identification marks in a pale colour. The reason for the white pigmentation is that the resin used for the main structure becomes appreciably weakened at temperatures easily attained by coloured surfaces directly exposed to the sun's rays. Colour should only be applied to lightly-stressed parts of the glider, or in regions unlikely to be exposed to the direct rays of the sun for appreciable periods. For example, it would be quite unacceptable to apply a band of colour to the upper surface half-way along a wing. It is obviously difficult to describe a scheme which is applicable to all types of gliders and, in any case, owners will doubtless wish some freedom to personalize their machines. A general guide to the location of the coloured regions is as follows:

a. Wing and ailerons. Within 500 mm of the tips, upper and lower surfaces. Nowhere else.

b. Fuselage. Around the front 250 mm of the nose and under the nose and cockpit area. Nowhere aft of the wing leading-edge.

c. Fin (T-tail). Nowhere.

d. Fin (conventional tail). Top 250 mm.

e. Rudder. Top 250 mm. Bottom and below operating mechanism only.

f. Tailplane and elevator. Nowhere.

The above dimensions are not intended to be exact but the advice of the Technical Committee should be sought if an owner wishes to colour significantly greater areas or different locations.

Aircraft cellulose finish seems to be quite satisfactory provided that the gel-coat is thoroughly cleaned before application. If other finishes are used, care should be taken to ensure that they are compatible with the gel-coat.

METAL GLIDERS

5. Any metal aircraft with a "natural" finish can often be remarkably inconspicuous and a few 'cheat lines' in a dark colour offer little improvement. The considerations are similar to those of paragraph 2 above: extensive areas of brilliant colour are recommended.

(Reproduced with acknowledgement, from a note by F G Irvin)

Issued: September 1977.