B.G.A. TECHNICAL COMMITTEE

TECHNICAL NEWSHEET TNS 1/2/87

PART 1 AIRWORTHINESS "AGGRO". The 1987 "B.G.A. Compendium of Airworthiness Directives, Mandatory Modifications and Special Inspections for U.K. and Foreign Gliders and Motor Gliders" is enclosed herewith ("Green" pages for 1987).

a) Please destroy the 1986 (Pink) pages.
b) Please notify any errors or omissions to B.G.A. office.
c) Please note that, in respect of Civil Registered Self-launching motor-gliders, C.A.A. may raise Additional Directives, which will be incorporated in B.G.A. TNS.

1.1. KESTREL RUDDER GIMBAL DRIVES Tech/Note 604-2 (from Germany) was mailed to owners 17/12/87 and specifically applies to German manufactured sailplanes.

However, certain U.K. manufactured Kestrels may incorporate the original German component to drawing 301-45-10, with 12mm spigot. Other U.K. built sailplanes will incorporate a drive unit with ½" spigot. The B.G.A.'s overriding advice is that an annual NDT inspection is required. (LBA AD/86/221 herewith).

1.2. KESTREL ELEVATOR VERTICAL FINAL DRIVE TUBE Severe internal corrosion of the final drive in the fin has been detected, and an immediate inspection or replacement is required. Reported by Bob McLean to B.G.A. and to Slingsby's. Gliders fitted with a leather seal at the top of the fin are most vulnerable.

1.3. LS6 - SPEED RESTRICTION Rollander - Schneider Bulletin 6009 imposes speed restriction of 108 knots (to be placarded) to prevent airframe vibration.

1.4. JANTAR 2 LOWER RUDDER RIB NOT BONDED to the skin. May be detected by applying pressure to the Rudder Skin? This rib carries rudder hinge and rudder cable loads. (Reported by John Holland).

1.5. T.65 "VEGA" FAILURE OF AIRBRAKE CONTROL universal joint, on the fixed control rod. (Pin sheared). Reported by Angus G.C.

1.6. SZD-45 "OGAR" (SLMG) Partially seized elevator control. Corrosion of the elevator torque-tube resulted in very stiff controls which should have been detected on Daily Inspection. Preventive maintenance is required.

1.7. GROB 109 (A) ASSYMETRIC SPEED-BRAKE, caused by failure of bell-crank below fuel tank (Wing damaged in previous incident). (B.G.A. Accident Report).

1.8. BLANIK SUBSTANTIAL DAMAGE TO ONE WING and to fuselage after picketting by both wings and fuselage, in strong winds. (B.G.A. Accident Report).

1.9. BOCIAN Cracks around timber in the area of the belly hook. Timber damp (B.G.A. Accident Report).

1.10. KA.7 BADLY WORN REAR CANOPY Lock, caused canopy to open on launch (B.G.A. Accident Report).

1.11. COBRA - UNDEMANDED UNDERCARRIAGE RETRACTION on landing, due to foreign matter (dirt) in the mechanism. (B.G.A. Accident Report).

1.12. KA7 TAILSKID DETACHED, DAMAGES RUDDER Skid fixing fatigued. (B.G.A. Accident Report).

1.13. KA8 (B) AILERONS JAMMED Foreign object (Pliers) found in the works! (B.G.A. Accident Report).

Slingsby TI enclosed

1.14 BOCIAN - TAILSKID DETACHED damages rear fuselage and base of the rudder. (B.G.A. Accident Report).

1.15. ASK 13 CANOPY UNLOCKED ON AEROTOW Lock Bolts lacked lubrication. Red Marks added to identify UNLOCKED position. (B.G.A. Accident Report).

1.16 LIBELLE (STD) UNDERCARRIAGE ARM FATIGUE-FAILURE Wheel retracted after brake shoe lining became detached, and locked the wheel. (B.G.A. Accident Report).

1.17. PEGASUS 101 SPEEDBRAKES JAMMED by battery retaining bar (not secured). (B.G.A. Accident Report).

1.18. FALKE (S.L.M.G.) ENGINE VIBRATION diagnosed as cracks in the crankcase. (B.G.A. Note - cracks in these engines are epidemic, but so far, never catastrophic!).

1.19. WEIGHT & BALANCE A.I.B. Report (herewith) on the fatal accident to ASW 20 BL at Dunstable, brings home the need for correct weight and balance data, documentation and placarding!

PART 2 GENERAL MATTERS

2.1. PA 25 - 235 "PAWNEE" Removal of outer undercarriage bungee (Part No. 1080 HD) leaving in place two inner bungees (Part No. 1280 HD), "softens" the rider. Minor mod 9/215/MM/416 raised by Holdcroft Aviation Limited, 17 Mixbury, Brackley, Northants. NN13 5RR authorises this change and restricts the max weight to 2150 lbs (non-spraying).

2.2. VENTUS a) T/Note 349-7 increase MAX Weight from 948 lbs to 1157 lbs according to serial numbers. A modification is required to the Tost Hook installation. (Owners should apply for C. of A. amendment after compliance with T/Note 349-7.)

2.2. (b) VENTUS T/Note 349-8 introduces TAILWHEEL

2.3. C. of A. RENEWALS (SELF LAUNCHING MOTOR-GLIDERS).

Supplement to TNS/1/87 herewith explains slightly revised procedures, effective JANUARY 1987.

2.4. G.R .P. LAMINATORS COURSES

The MARINE BUILDERS TRAINING TRUST will continue to offer courses which are aerospace orientated, leading to City & Guilds Certificates. Contract Trust Secretary, Marine Builders Training Trust, Hazel Road, Woolston, Southampton SO2 7GB. (0703-446824).

HAPPY NEW YEAR

R.B. STRATTON
CHIEF TECHNICAL OFFICER

B.G.A. TECHNICAL COMMITTEE

SUPPLEMENT TO TNS 1/2/87

C of A Renewals Self-Launching Motor Gliders, Ref: CAA Approval of the B.G.A. REF DAI/8378/73.

1) Introduction The CAA (Airworthiness Division) have indicated their intention to survey samples of civil registed aircraft administered by the B.G.A.(and also by the P.F.A., B.M.A.A. etc).

2) Since the location of some 100 such aircraft is so geographically wide-spread, and since clubs, and club members responsible for such aircraft, may not be available other than at weekends, some delays in completing such renewals is likely to arise.

3) To minimise the loss of use of such aircraft, full advantage should be taken of the facility to complete renewals 62 days prior to expiry (Ref LAMS (Blue Book) section 5 Note 2).

4) Having completed the C of A renewal work, the aircraft may continue to operate on the unexpired portion of the current C of A, whilst the C of A renewal submission and/or inspection is processed.

5) Preparation for the C of A Renewal (and/or CAA Inspection).

a) The Working conditions and facilities required to complete such work, must be to a commonsense acceptable standard.

b) Spare parts, whether in stock, or removed from aircraft must be properly identified and stored.

c) Such technical literature as may be essential to the proper maintenance of the aircraft, its engine, propeller, and equipment, must be available.

d) Technical Records such as worksheets, logbooks (Cap 389-Engine, and CAP 399 Airframe), rectification worksheets, and LAMS Proforma maintenance schedules, must be available.

The Green Pages of the airframe & engine log books should be updated, for scheduled servicing.

The Red Pages should record the current status of Mandatory Modifications and Inspections.

(Reference should be made to the B.G.A.'s Annual Compendium of Mandatory Modifications and Inspections, and to subsequent TNS, as well as to C.A.A.'s Airworthiness Notices).

6) The Light Aircraft Maintenance Schedule (lams Blue Book Issue 2. as ammended), is the basis for all Scheduled Maintenance. The third Annual Inspection is referred to as the "STAR" Inspection, at which time the C of A is renewed. The LAMS should be read by all concerned with its implementation. A record of the work carried out to show compliance with LAMS can be made on B.G.A. LAMS Proforma (TNS 10/86). Rectifications should be recorded on a separate Proforma.

7) Aircraft Documentation. The following original copies should be available ON SITE for inspection:

a) Certificate of Registration (CAA Form 71).
b) LAMS Proforma Record BGA LAMS 86.
c) Rectification Worksheets B.G.A. Form/TI.
d) Flight Manual or Operators Manual.
e) Weight & Balance Report.
f) LAMS)Blue Book) Issue 2 + amendments.
g) Certificate of Approval of Aircraft Radio Installation CAA Form 917 AD.
h) Log Books, complete with daily records of flying, schedule maintenance, rectification, repairs and modifications.
j) Daily inspection record (Article 34 of the A.N.O.).

8) The following documentation has to be submitted to the B.G.A. Office prior to its despatch to CAA:-

a) B.G.A. Form 267 (airframe inspection report).
b) B.G.A. Form 267M (Engine inspection report).
c) B.G.A. Form 267FT (Flight Test Report).
d) Certificate of Airworthiness (CAA Form 958).
e) CAA Forms 202L (From CAA or BGA Office). (Sample copy attached herewith).
f) Cheque for CAA fee - (Ref CAA Airworthiness Notice No. 25 currently £29.00 per 500kg or part thereof per year of validity i.e. for a 550kg aircraft the fee Payable to the B.G.A. is £29.00 x 2 x 3years = £174.00 (A 3% increase is expected 1/4/1987.

9) Placards and markings on the aircraft should be renewed as required, to ensure that essential limitations are conveyed to the crew. Fuel markings and accuracy should be checked.

10) The OWNERS Name Plate, (in steel) should be displayed in the cockpit area, to comply with the ANO.

11) Radio Installation Approvals (simple communication systems)

a) There is an ICAD/LAMS requirement for the frequency of transmitters to be checked at 48 month intervals.
b) Proforma BGA/RAD/INST/86 can be used to simplify your application to the CAA, for the issue of a Radio Installation Approval (CAA Form AD971).

12) Airworthiness Guidelines

a) B.G.A.Technical Procedure Manual(Tugs and Gliding Related Powered Aircraft) price £1.50
b) CAO 520 "Flight Aircarft Maintenance" £1.50 from CAA Offices, are useful guides to getting things right!

13) Present Your Aircraft For C of A Renewal free of corrosion, well protected paintwise, clean both inside and out, and properly documented.

R.B.Stratton
Chief Technical Officer
Feb 1987

No: 11/86 **Ref: 1c**

Aircraft type and registration: Piper PA-25-235 G-AZPA PAWNEE

No & Type of engines: 1 Lycoming 0-540-B2C5 piston engine

Year of Manufacture: 1970

Date and time (UTC): 22 October 1986 at 1253 hrs

Location: Talgarth, South Wales

Type of flight: Aerotowing

Persons on board: Crew — 1 Passengers — None

Injuries: Crew — None Passengers — N/A

Nature of damage: Right main landing gear collapsed with resulting damage to flaps and propeller. Engine shock loaded

Commander's Licence: Private Pilot's Licence

Commander's Age: 27 years

Commander's Total Flying Experience: 660 hours (of which 400 were on type)

Information Source: Aircraft Accident Report Form submitted by the pilot

The pilot reports that he was returning to land after his ninth aerotow of the day. He positioned the aircraft for a normal approach towards the touchdown aiming point, which was the beginning of a level landing area at the top of a slight ridge. This manoeuvre required that the landing flare be commenced over upward sloping ground. He considers that on this occasion he misjudged the extent of wind shear caused by the slope, and the aircraft was landed firmly well short of the aiming point. On landing the right main landing gear collapsed. The wind at the time was from 30 degrees right of the landing direction gusting to 23 knots.

TNS/1/87.

No: 11/86 WEIGHT AND BALANCE. Ref: 3

Aircraft type and registration: Schleicher ASW20BL Glider BGA No 2948

No & Type of engines: Nil

Year of Manufacture: 1984

Date and time (UTC): 16 August 1986 at 1430 hrs

Location: Adjacent to London Gliding Club, Dunstable

Type of flight: Pleasure

Persons on board: Crew — 1 Passengers — N/A

Injuries: Crew — 1 (Fatal) Passengers — N/A

Nature of damage: Glider totally destroyed

Commander's Licence: Gliding Silver "C" certificate

Commander's Age: 24 years

Commander's Total Flying Experience: 136 hours (of which 10 were on type)

Information Source: AIB Field Investigation

The pilot and part share owner of the glider arrived at the airfield at approximately 1130 hrs (UTC) and proceeded to rig the aircraft. Several club members assisted in this task as some difficulty was experienced in inserting the wing main pins. The pilot was left to complete the connection of the flying controls and generally prepare it for flight, the responsibility for this customarily resting with the pilot of a glider.

At approximately 1330 hrs the pilot, who was making her 15th flight on type, was aero-towed to a height of 1100 feet without exhibiting any problems and released into a thermal. For the next hour the glider was seen in the local area by several other glider pilots to be flying normally at heights between 1000 feet and 2000 feet. The weather was reported as generally a westerly wind of 15—25 knots with good visibility and with moderately strong thermal activity. At least one glider pilot airborne at the time experienced patches of moderately strong turbulence in the area. At approximately 1430 hrs witnesses, both on the ground and in the air, became aware of a glider descending at high speed in a near vertical dive to the south west of the airfield, and saw it strike the ground. Several of the airborne witnesses reported seeing the aircraft rotating (rolling) as it descended, the rotation either slowing or ceasing during the descent, and that it had descended from a height in excess of 1000/2000 feet. All reports suggest that the glider structure was intact during this time.

The glider crashed some 200 yards to the south west of the airfield boundary across a hedge which divided two fields of standing crop. It had struck the ground at a speed estimated at between 200/230 knots in a wings level but nose low attitude of 100/105° below the horizontal. Its configuration at the time was airbrakes in, wheel retracted, and flaps at the 0° position. The maximum speed quoted in the flight manual for this configuration is 119 knots.

From the wreckage distribution, ground impact marks, and a detailed examination of the wreckage at the AIB facility at Farnborough, the following was determined:

The glider had been structurally complete prior to impact but with a downward bend of 12° of each wing between root and tip. The impact had completely destroyed the cockpit and fuselage forward of the wing trailing edge and had caused severe disruption to the wings, rear fuselage, and tail. Wreckage was scattered for a distance of some 80 feet along a track of 120°M with the majority laying to the north of the hedge.

The canopy was closed and locked and the pilot's four point harness had remained connected to the release buckle.

A lead ballast weight of 5.875 lbs, including the attachment bolt, was found in the lower part of the fin, the presence of this being recorded in the glider log book as the first entry after the initial Certificate of Airworthiness (C of A) was issued in March 1984.

The effect of the lead weight, which was fitted to improve the glider's performance in competition flying, was to move the centre of gravity (CG) of the empty glider rearwards. The result of this was that the minimum cockpit load had to be raised from its previous value of 143 lbs to 166½ lbs and the maximum reduced from 206 lbs to 200 lbs, to keep the in-flight CG position within the required limits. A cockpit placard recovered from the wreckage, one issued by the manufacturer, stated minimum and maximum loads of 165 lbs and 238 lbs respectively, figures which related to the glider prior to installation of the owner's equipment.

Estimates of the pilot's weight varied from 126 lbs to 145 lbs which, together with a 15½ lb parachute and 5 lbs of clothing, meant that on the accident flight the cockpit load was between 146½ lbs and 165½ lbs. Thus, on this flight, the CG position was either at or up to .78" beyond the aft limit.

The effect of such an aft position was to make the glider more sensitive to elevator control inputs and generally become more unstable in pitch.

A statement is included in the flight manual for the glider which warns of a dangerous deterioration in its stalling and spinning characteristics if the CG position is too far aft. The manufacturer has demonstrated, however, that it is possible to recover the ASW20 from a spin with the CG 1.65" aft of the aft limit.

Information provided by the manufacturer has shown that at very high speeds, particularly with an unloaded or negatively loaded wing, a significant wing twist occurs. This results in a downward load being produced by the outer section of each wing. It was estimated that at 200 knots 7 to 8 degrees of up elevator deflection would be required to overcome such wing deformation in a vertical dive. At higher speeds this effect becomes more pronounced and would require greater elevator deflection to recover from the dive.

There was evidence within the wreckage that, at impact, the elevator control system was positioned between the mid and full up elevator positions.

The glider possessed a current Certificate of Airworthiness, although this and other documents relating to the glider retained the previous cockpit load limits of 143 lbs and 206 lbs.

SLINGSBY AVIATION

TECHNICAL INSTRUCTION

TITLE

T.I. No. 106/T59

T59 'Kestrel' Elevator Push Rod in Fin

CLASSIFICATION This bulletin has been classified as MANDATORY by CAA.

COMPLIANCE To be carried out within 6 months of issue of Bulletin.

OBJECTIVE To ensure structural integrity of the Push Rod.

JUSTIFICATION An inspection on a Kestrel revealed internal corrosion on the push rod of the elevator, sufficiently advanced to corrode through the rod wall, due to water ingress from the top inspection hole.

APPLICABILITY

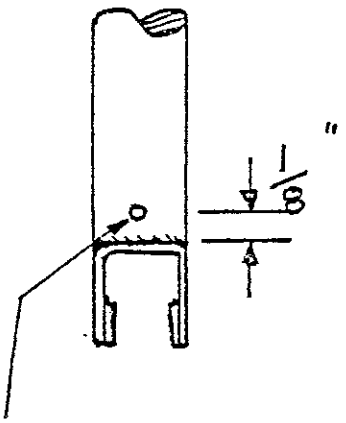
All Slingsby T59 A,B,C,D,E,F,G,H & J gliders.

CONSEQUENTIAL LIMITATIONS

Not applicable.

ACTION

The Push Rod must be removed for examination. Bottom access can only be gained through the removal of the wheel well fairing. If possible inspect to check wall thickness at the bottom. See Fig. If facilities exist for ultrasonic inspection or x-ray to ensure no internal corrosion then the rod can be refitted. If structural integrity cannot be confirmed then the rod must be replaced.



1/16" dia inspection hole can be drilled and left open on refit if no corrosion found.

PARTS REQUIRED

T59A-45-507 Push Rod - Elevator Fin.

ISSUED BY: B Mellers

for and on behalf of SLINGSBY AVIATION PLC

Date 20.1.87

Page 1 of 1

SLINGSBY AVIATION

TECHNICAL INSTRUCTION

TITLE

T.I. No. 101/T59 Iss 2

T59 'Kestrel' Rudder Actuator Inspection

CLASSIFICATION This TI has been classified as MANDATORY by CAA.

COMPLIANCE To be embodied not later than C of A renewal December 1987. Repeat annually unless new part fitted then repeat annually after further 5 years.

OBJECTIVE To ensure structural integrity of the rudder actuator, part number T59A-45-427.

JUSTIFICATION Further examples of cracking in Area A have been found on German built gliders.

APPLICABILITY

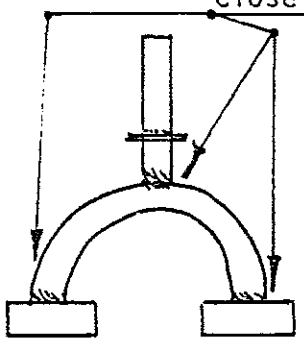
All Slsingsby T59 A,B,C,D,E,F,G,H & J gliders including spares held in Stores and all rudder assemblies pre and post Mod 25.

CONSEQUENTIAL LIMITATIONS

If cracking is found the part must be discarded immediately and scrapped.

ACTION

Remove the rudder in accordance with Addendum A.2.2. of the Pilots Notes.
Visually examine (using a x5 magnification) the actuator for cracks especially in the area of the central weld 'A' see diagram. Should any sign of cracking be found then the existing part must be discarded and scrapped.
Replace Rudder.
Annotate aircraft log book showing compliance of this T.I.



T59A-45-427

PARTS REQUIRED

If inspection reveals a defective actuator, a replacement T59A-45-427 Issue 5 (one off) actuator may be obtained from SA PLC.

ISSUED BY: B Mellers.

for and on behalf of SLINGSBY AVIATION PLC

Date 20.1.87

BGA Letter to owners 17/12/86 Refers

Airworthiness Directive

86-221 Kestrel KESTREL (GERMAN)

Date of issue:
October 28, 1986

Affected sailplane:
"Kestrel"
German Type Certificate No. 276
all serial numbers.

Subject:
Rudder gimbal drive, rear actuator arm

Reason:
Failure of the actuator arm.

Action and compliance:
Action to be accomplished in accordance with Technical Note before March 31, 1987.

Technical publication of the manufacturer:
Hansjörg Streifeneder, Glasfaser-Flugzeug-Service
Technical Note No. 401-19 of September 12, 1986
which becomes herewith part of this AD and may be obtained from Messrs. Hansjörg Streifeneder, Glasfaser-Flugzeug-Service GmbH, Hofaner Weg, D-7431 Grabenstetten, Federal Republic of Germany.

Accomplishment and log book entry:
Action to be accomplished by an approved service Station and to be entered in the sailplane's log by a licensed inspector.

Issue 6
October/November/December 1986

SPORTAVIA-PUTZER RF4 AND RF5 SERIES MOTOR GLIDERS

CAA AD No.	Associated Material	Description	Applicability - Compliance - Requirement
	PART 1 - LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES		
	72-24	Remove ground handling bar from the fuselage and inspect for grinding marks in longitudinal direction of the fuselage centre-line.	Applicable to all RF5 aircraft. Compliance required as detailed in Airworthiness Directive.
	72-25	Replacement of propeller boss bolts and centering bushings.	Applicable to all RF5 aircraft. Compliance required at next 100 hour inspection. Working Instruction A-04-72 and Service Letter S-02-72 refer.
	83-15	Inspection/repair of aft fuselage and vertical fin spar.	Applicable to all RF4, RF4D, RF5 and RF5B aircraft. Compliance required as detailed in Airworthiness Directive. Technical Note S-02-82 also refers.
	85-207	Inspection/replacement of the rear stabiliser mounts.	Applicable to all RF4D and RF5 aircraft. Compliance required as detailed in Airworthiness Directive. Technical Note S-01-85/1 also refers.

FOURNIER RF3 SERIES MOTOR GLIDERS AND FOURNIER RF6 SERIES AIRCRAFT

CAA AD No	Associated Material	Description	Applicability - Compliance - Requirement
		PART 1 - DIRECTION GENERALE DE L'AVIATION CIVILE AIRWORTHINESS DIRECTIVES	
	67-39-1	Wing Skin - Inspection for cracks and deterioration of glued joints.	Applicable to all RF3 Series aircraft. INSPECT the critical zone every 30 fligh hours until modified in accordance with Service Bulletin Alpavia No 2.
	79-234	Fuselage - Modification to the fireproof bulkhead - Inspection of a seal supporting plate.	Applicable to all RF6B-100 aircraft. Compliance required as detailed in AD. Fournier Aviation Service Bulletin No 3 also refers.
	79-235	Flight Controls - Inspection and replacement of aileron control coupling rod.	Applicable to all RF6B-100 aircraft. Compliance required as detailed in AD. Fournier Aviation Service Bulletin No 2 also refers.
	86-31	Aircraft Structure and Flight Controls - Inspection for corrosion of metal parts.	Applicable to all RF6B-100 and RF6B-120 aircraft. Compliance required as detailed in AD. Fournier circular dated 10.01.1986 also refers.
	75-76	Operating Limitations - Normal category certification only.	Applicable to all RF3 Series aircraft. Install a plate in the cockpit on the wheel well with the folowing notice no later than 15 May 1975: U category operation and spins prohibite

Issue 5
October/November/December 1986

ICA BRASOV MOTOR GLIDERS

CAA AD No	Associated Material	Description	Applicability - Compliance - Requirement
	PART 1 - ICA BRASOV SERVICE BULLETINS CLASSIFIED AS MANDATORY BY ROMANIAN DCA		
	IS-28M2/CO-2	Product improvement.	Applicable to all IS-28M2 motor gliders. Modifications 145, 147, 149, 153, 154, 155, 156, 165 and 167 should have been embodied prior to 1983.
	IS-28M2/EO-3	Placard - landing gear lock.	Applicable to all IS-28M2 motor gliders. Modification 198 should have been embodied by 15 March 1979.
	IS-28M2/CO-4	Landing gear - Down and locked indicator.	Applicable to all IS-28M2 motor gliders. Compliance with Service Bulletin by 30 August 1979.
	IS-28M2/EO-5	Maintenance practices and Flight and Maintenance Manual amendments.	Applicable to all IS-28M2 motor gliders up to Serial No 33 except Serial Nos 04, 07, 09 and 23. Should have been complied with prior to 1983.
	IS-28M2/EO-8	Overhaul life.	Applicable to all IS-28M2 motor gliders.
	IS-28M2/EO-10	Flight Controls.	Applicable to all IS-28M2 motor gliders. Compliance required by 1 March 1983.

CAA AD No	Associated Material	Description	Applicability - Compliance - Requirement
	IS-28M2/EO-11	Replacement of speed limitation placard and amending of the Flight and Maintenance Manuals.	Applicable to all IS-28M2 motor gliders. Compliance required as detailed in Service Bulletin.
	IS-28M2/EO-12	Safe and service life increase.	Applicable to all IS-28M2 motor gliders. Compliance required as detailed in Servi Bulletin.
	IS-28M2/EO-13	Replacement of rudder bar axle fixing rivet.	Applicable to IS-28M2 and IS-28M2A Serial Nos as detailed in Service Bulletin. Compliance required as detailed in Service Bulletin.

CAA AD No.	Associated Material	Description	Applicability - Compliance - Requirement

Page 3.

PART 2 — ADDITIONAL ITEMS CLASSIFIED AS MANDATORY BY THE CAA

014-11-82	-	Flight Controls - Inspection of aileron control rods and control cables turnbuckle locking wire.	Applicable to all IS 28M2 aircraft. Compliance required as detailed: (a) INSPECT the control rod in the wing connected to the aileron for bowing not later than 31 January 1983. Replace if found bowed. (b) INSPECT the control rod before fligh if aileron has been forced through mis-handling during ground handling. Replace before flight if found bowed (c) INSPECT the control rod before furth flight if aircraft has been subjecte to an uncontrolled tail slide during aerobatic manoeuvres. Replace befor flight if found bowed. (d) INSPECT cable turnbuckles on control cables not later than 31 January 198 if locking wire is made from brass replace with steel locking wire.

Issue 4
October/November/December 1986

GROB G109 SERIES MOTOR GLIDERS

CAA AD No	Associated Material	Description	Applicability - Compliance - Requirement
		PART 1 - LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES	
	83-6	Flight Manual - Correction of pages.	Applicable to all Serial Nos. Exchange pages 4, 11, 31, 37, 41 and 43 of the Flight Manual dated 14-12-1982 on or before 31 March 1983 for new ones. Grob Technical Note No. 817-8 refers.
	83-104	Gravity Range - Correction of Flight Manual and procedure for spin recovery.	Applicable to all Serial Nos. Action to be accomplished in accordance with Grob Technical Note No. 817-10 not later than 15 July 1983.
	85-132	Main Landing Gear - Fractures of the undercarriage legs.	Applicable to G109 and G109B Serial Nos. as detailed in AD. Compliance required as detailed in AD. Grob Technical Information TM 817-19 also refers.
	85-218/2	Flight Controls - Aileron flutter at speeds above 190 km/h.	Applicable to G109B Serial Nos as detailed in AD. Compliance required as detailed in AD. Grob Technical Note No 817-20 also refers.

CAA AD No	Associated Material	Description	Applicability - Compliance - Requirement
	86-219	Flight and Maintenance Manuals - Replacement of pages.	Applicable to all G109 motor gliders. Compliance required as detailed in AD. Grob Technical Information TM 817-22 als refers.

CAA AD No	Associated Material	Description	Applicability - Compliance - Requirement
	PART 2 - ADDITIONAL ITEMS CLASSIFIED AS MANDATORY BY THE CAA		
012-11-86	Technical Information TM 817-20	Flight Controls - Improvement of flutter behaviour - Variation of the requirements of LBA AD 85-218/2.	Applicable to G109B Serial Nos. 6200 to 6434 inclusive except as indicated in th Technical Information. Notwithstanding the compliance requirements contained in Grob Technical Information TM 817-20 MODIFY the aircraft in accordance with the TI not later than 31 December 1987. Until the modification is embodied the permitted Never Exceed Speed (Vne) is reduced to 100 kts/190 km/h. A placard to this effect must be displayed adjacen to the air speed indicator.

Issue 4
October/November/December 1986

HOFFMANN H36 DIMONA MOTOR GLIDER

CAA AD No.	Associated Material	Description	Applicability - Compliance - Requirement
		PART 1 - LUFTFAHRT-BUNDESAMT AIRWORTHINESS DIRECTIVES	
	82-236	Aileron, elevator and wings - Possibility of water accumulating.	Applicable to aircraft serial numbers up to and including 3619. Compliance required as detailed in AD. Hoffmann Technical Notice 2 also refers.
	82-237/2	Inspection of composite skin on the wings.	Applicable to aircraft serial numbers as detailed in AD. Compliance required as detailed in AD. Hoffmann Technical Notice 3 issue 2 also refers.
	83-156	Fuel tank - ascertain cubic capacity.	Applicable to aircraft serial numbers as detailed in AD. Compliance required as detailed in AD. Hoffmann Technical Notice 6 also refers.
	83-157/2	Inspection and modification of engine brackets.	Applicable to aircraft serial numbers as detailed in AD. Compliance required as detailed in AD. Hoffmann Technical Notice 7 issue 2 also refers.
	84-205	Fuel system - Engine failure due to formation of vapour bubbles in the fuel pump, filter and lines at an ambient temperature of 25°C.	Applicable to aircraft serial numbers up to and including 36143 and 3539. Compliance required as detailed in AD. Hoffmann Technical Notice 11 also refers.

CAA AD No.	Associated Material	Description	Applicability - Compliance - Requirement
	85-34	Prohibition of aerobatics including spins.	Applicable to all aircraft serial numbers. Compliance required as detailed in AD. Hoffmann Technical Notice 12 also refers.
	85-128	Fuel tank - restriction of fuel feed to engine by deposits in the fuel tank.	Applicable to all aircraft serial numbers up to and including construction year 1984. Compliance required as detailed in AD. Hoffmann Technical Notice 13 also refers.
	86-177/2	Inspection of wing attachment to fuselage for structural defect and placarding with new flight limitations.	Applicable to all aircraft serial numbers. Compliance required as detailed in AD.

CAA AD No.	Associated Material	Description	Applicability - Compliance - Requirement
		PART 2 - ADDITIONAL ITEMS CLASSIFIED AS MANDATORY BY THE CAA	
002-08-85	CAA Letter ref. 9/97/CtAw/119 dated 31 July 1985	Stabilisers - Inspection of the forward tailplane attachment rod end.	Applicable to all aircraft. Before further flight then at intervals not exceeding 50 flight hours. INSPECT in accordance with procedure detailed in AD.
010-08-85	CAA Letter ref. 9/97/CtAw/119 dated 23 August 1985	Flight controls - Check of the elevator control system for correct connection.	Applicable to all aircraft. Before further flight and at each rigging of the tailplane.
008-09-86	CAA Letter ref. 9/97/CtAw/119 dated 26 September 1986	Flight limitations - Variation of the requirements of LBA AD 86-177/2.	Applicable to all aircraft serial numbers. Before further flight carry out the requirements of this Directive. Carry out action in paragraphs 1 and 2 of the LBA AD 86-177/2. Compliance with paragraph 3 may be accomplished with an additional placard next to the ASI stating in red on a durable material: DO NOT EXCEED (Vne) 180 km/h (97 kts). DO NOT EXCEED 147 km/h (79 kts) IN ROUGH AIR. ABOVE 147 km/h (79 kts): DO NOT MOVE CONTROLS ABRUPTLY. DO NOT USE LARGE CONTROL DEFLECTIONS.

Issue 2
June 1979

ANGLO POLISH SAILPLANES
SZD45A OGAR SELF-LAUNCHING MOTOR GLIDER

CAA AD No.	Associated Material	Description	Applicability - Compliance - Requirement
		ADDITIONAL ITEMS CLASSIFIED AS MANDATORY BY THE CAA	
0837 PRE 78	-	GLASS-FIBRE FUEL TANK Electrical Bonding check of the glass-fibre fuel tank.	Compliance required every 50 hours.

Issue 3
August 1986

VALENTIN TAIFUN 17E MOTOR GLIDERS

CAA AD No	Associated Material	Description	Applicability - Compliance - Requirement
		PART 1 - LUFTFAHRT - BUNDESAMT AIRWORTHINESS DIRECTIVES	
	85-29	Flight Controls - Elevator control connection. Tailplane mounting. Landing Gear - Actuating struts of main gear and nose gear. Securing the bearing of the main landing gear. Electrical Power - Push button starter. Fuel - Emergency fuel shut-off valve.	Applicable to all Serial Nos. until 1032. Compliance required as detailed in Airworthiness Directive. Valentin Technical Information 3/818 also refers.
	85-129	Improvement of the stall characteristic.	Applicable to all Serial Nos. Compliance required as detailed in L.B. Airworthiness Directive. Valentin Technical Information 4/818 also refers.
	85-263	Installation of a stall warning device.	Applicable to all Serial Nos. Compliance required as detailed in Airworthiness Directive. Valentin Technical Information 8/818 also refers.

CAA AD No	Associated Material	Description	Applicability - Compliance - Requirement
	86-137	Inspection and modification of tailplane front mounting.	Applicable to all Serial Numbers. Compliance required as detailed in Airworthiness Directive. Valentin Technical Note 10/818 also refers.