# B.G.A. TECHNICAL COMMITTEE

### TECHNICAL NEWSHEET

### TNS 7/8/89

### PART 1 AIRWORTHINESS \*AGGRO\*

Please add to the 1989 BGA Blue Pages.

- 1.1. Shelbe SF 34 LBA A/D 89-73 (herewith) must be complied with a.s.a.p.
- 1.2. JANUS CM )
  NIMBUS 3DM) Rotax Type 535 Engines.

Technical Bulletins 535-05 and 535-05 "concerning the fixation of charging coil and lighting coil" and, "concerning the examination of the starter gear for cracks", are available from U.K. agents.

- 1.3. SLINGSBY T.21 (Sedbergh) Rudder cable stops. The attached letter to operators is self-explanatory, following discovery of fin-post failure at East Sussex G.C. Ringmer. This directive will apply to all other similar control stop systems.
- 1.4. Undercarriage Structural failures and axle separation, PAI3-150 Cub and Citabria tugs. All alreaft of similar construction require periodic inspection in depth, (and possibly with NDT?) to detect incipient failures which may develop into total failures. Fabric may have to be removed to gain access for such inspections. (Reported by Cambridge G.C.).
- 1.5. Pawnee Fuel Tanks (Forward of the cockpit). Extract from G.A.S.I.L. strongly recommends the installation of the Rubber fuel cell liner kit, in all such tanks, to reduce the hazards of fire.
- 1.6. Carburettor Icing applicable all types of aircraft including S.L.M.G.'s.

Extract from G.A.S.I.L. 5/89 emphasises the potential for ice-induced engine failures in conditions of high humidity.

- 1.7. LS6 LBA/AD/89-60 (herewith) Air Brake Stops, and interference between air brake and flap selection. This Bulletin requires immediate action. Details from U.K. agents.
- 1.8. <u>Tost Hooks</u> Information Leaflet (herewith) gives useful advice. (from Chiltern Sailplanes).
- 1.9. Ka7 Modification to the Airbrakes. Derek Piggott has reminded me of a modification to reduce the loads, comparable to that of Ka 13s details herewith. Strongly recommended.

- 1.10. Tug Maintenance The attached letter to Chairmen and C.F.I.s. reminds all concerned of their responsibilities under the Air Navigation Order. C.A.A. Surveyors have been inspecting tugs throughout the U.K. S.L.M.G.s are likewise included.
- 1.11. A.L. Hotelier Connector once again becomes disconnected from an Astir alleron, In flight, at Dunstable. NO SAFTY PINS WERE INSTALLED!
- 1.12. INDUCTION AIR FILTERS (Tugs and Motor Gliders). FAA AD 84/86/02 is self-explanatory. (herewith).

<u>Dirty Filters</u> can degrade engine power, and <u>contaminated oil coolers</u> will raise temperatures.

- 1.3. Weight & Balance Please ensure that meaningful weight & balance data is available and that all periodic re-weighs are copied to the B.G.A. and secured in the glider log books.
- 1.14. G.Q. Parachutes Types as specified in FAA AD 89/13/03 (herewith). This airworthiness information may apply to parachutes in the U.K.?
- Bergfalke 4 Assymetric Speed-brake Drive tube from the mechanism behind the 2nd pilot's seat falled. Careful inspection is required to detect incipient failure (Reported by Tim MacFadyen Cotswold G.C.).
- 1.16. SHRINKING Structures Beware of tightening up fastners on wooden aeroplanes, which have suffered from the current heat-wave. For sure it will rain, and the resulting rise in moisture content may damage over tightened components.

Cable tensions should be re-adjusted only sufficiently to eliminate backlash and not so that they will create damage and friction should they tighten with reduced temperature.

- 1.17. SF 25E Super Falke Burning/Boiling Battery. Lasham report a forced landing following a battery induced fire. Whereas the cause is not yet known, the venting of batteries (where fitted) and the security of connections should be checked regularly.
- 1.18. DG 100 ELAN Tech/Note 301/15 imposes the following restrictions:
  - a) NON aerobatic
  - b) Vne restricted to 150 km/h

pending detailed inspection of the welding of the L4 tallplane mounting fitting.

1.19. VEGA Corrosion and failure of Tow Release, and Brake cables. These cables cannot be removed for inspection without cutting them. Cables should be replaced a.s.a.p. and thereafter anti-corrosion fluid injected annually.

A Tow Release Cable failed! (Reported by Tony Burton, Talgarth).

1.20. Grob G.103 Twin 3 Accro TM 315-39 requires installation of new hinged operating handle on the Air Brake Lever Details from Agents.

# GENERAL MATTERS

- 2.1 <u>S.L.M.G's Warning Placards</u>. The attached letter from the CAA requires removal of all placards worded "This aircraft must not be operated in conditions such that engine failure could result in a hazzard", (Rule 5 of the Rules Of The Air (ANO) already covers this situation).
- 2.2 <u>Licence Privileges S.L.M.G's</u>. Extract from G.A.S.I.L 2/89 is self explanatory, and arises from the total destruction of a G.109B with casualties!
- 2.3 <u>Changes To The Air Navigation Order</u> (4th amendment). SIGNIFICANT CHANGES effecting all forms of recreational flying are briefly outlined in extract from G.A.S.I.L. For full details refer to ANO.
  - In particular. Article 32 "Pre Flight Action By The Commander Of An Aircraft, is extended and re-enforced, in repsect of PRE-FLIGHT CHECKS
- 2.4 <u>G.R.P. Courses.</u> Southall College of Technology, Beaconsfield Road, Southall, Middlesex. UB1 1DP (Mr Frank Dunning 01-574-3448) are now running both ab initio and advanced courses. These courses are aerospace related, as are such courses at Slingsbys, and the Marine Builders Trust (TNS/1/89).
- 2.5 New Types Evaluated by the BGA Technical Committee:-

LS 7 - BGA C of A Issued.

 $\underline{ASW}$  24 - Permits To Fly will be isued for ASW 24's until such time as the vendor makes a Flight Manual available in English!

<u>DG 600</u> - Permits To Fly are issued pending flight test evaluation.

- 2.6 <u>Blanik Oleo Modifications</u> to accept standard "O" rings. The attached sketch from The Gliding Federation of Australia is acceptable to BGA.
- 2.7 <u>Blanik Repairs to Wing Spar</u>, following galvanic corrosion (Ref 7/8/88). A repair scheme devised by J.L. Smith, Culdrose G.C, is available from BGA.
- 2.8 <u>Ex Air Cadet Twin Drum Winches</u> The Attached advice may prove useful

# EX AIR CADET (TWIN DRUM/PETROL) WINCHES

These will become available, as and when replaced by new winches, from which ever sites they are currently located. Most will probably be in good working order.

The configuration of these winches make them very suitable for re-engining with high performance automotive power units with automatic transmissions, or with diesel power units with fluid couplings etc.

If you are interested, make your interest known in writing to M.O.D Air (F6 Disposals), Government Buildings, St. Georges Road, Harrogate, North Yorkshire. M62 9DB. You might also enquire about the future disposal of winch spares.

The BGA's book "Winching & Auto Towing 1989" gives useful guidance. Price £1.50 from BGA office.

# NOTE: LATE AMENDMENT (Under Airworthiness Aggro)

# REF GROB 103, TWIN ASTIR/ACCRO AILERON MASS BALANCE WEIGHT

### **ATTACHMENTS**

# 1.22

- 1) Cracks have been reported in the G.R.P attachment brackets on a G.103 Accro at Lasham, by Southdown Aero Services. (025/683/359).
- Separation of Mass Balance Weight might jam ailerons, and would reduce flutter margins.
- 3) BGA recommend inspection a.s.a.p, and thereafter at annual inspections.
- 4) Southdown Aero have repaired by local re-enforcement.

R.B. STRATION.

CHIEF TECHNICAL OFFICER

1,4,1989

# PART 2 GENERAL MATTERS

2.1. Sale of Ex Air Cadet Twin-Drum Winches

M.o.D, F.6 DISP (Air) Rm 10, BLK4, St. Georges Road, Harrogate, N. Yorks, HG2 9DB have advised B.G.A. that sales may begin in January 1990.

- 2.2. The Bristol Wire Rope Co. Ltd., Montague Street, Bristol BSI 3NT have C.A.A.

  Approval Ref Al/9156/88 as a Group B2 supplier of control cables.
- 2.3. C. of A. Renewal Air Tests S.L.M.G.s. These may be completed 62 days immediately preceding the date of C. of A. renewal, (C.A.A. letter to B.G.A. 9/23/7/1 dated 25/5/89 refers).

There are still too many S.L.M.G. renewals being submitted after the C. of A. has expired, notwithstanding that you have had 36 months to plan its next renewal!

2.4. Aeronautical Radio Station Licences

D.T.I. circular herewith should leave you in no doubt.

- 2.5. STAMO engine spares Bob McLean, Rufforth, can obtain these from Germany (0904 83653).
- 2.6. "Quiet" Propellers for Pawnee 235, Robin 300/400 and Rallye 180 tugs. 8.G.A. holds C.A.A. Airworthiness Approval Note (AAN 20697) for Hoffman 4 bladed propeller installations.
- 2.7. New types certificated by the B.G.A. Technical Committee

Gobe (R26-SU).

2.8. SF.27 Repair Scheme to eliminate backlash in tailplane attachments. Scheme by 1.D. Smith is available from B.G.A.

R.B. STRATTON CHIEF TECHNICAL OFFICER 1st August 1989.

# AIRWORTHINESS DIRECTIVE

89-60 Rolladen-Schneider

### Date of issue:

2 8. JUNI 1989

Affected sailplane:
German Type Certificate No. 357
LS6, LS6-a, LS6-b
all serial numbers

Subject: Air brakes

#### Reason:

If during full extension of air brakes it is possible to move the flap handle from the landing position (+15°) backwards, the travel of the air brake handle must be limited at the cockpit cutout end by a stop.

### Action and compliance:

Before the next flight after the effective date of this AD a deflector must be bonded into the wing air brake boxes to avoid possible locking of lower blade at wing shell structure in accordance with the Technical Bulletin.

# Technical publication of the manufacturer:

Rolladen-Schneider Technical Bulletin Nr. 6019, LS6 of February/March 89 which becomes herewith part of this AD and may be obtained from Messrs. Rolladen-Schneider Flugzeugbau GmbH, Mühlstr. 10, D-6073 Egelsbach, 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 and on TB-AD-Accomplishment List, page 8-1 of Instructions for Continued Airworthiness (Maintenance Manual).

Copied to ouners &

Glaser-Dirks Flugzeugbau GmbH Im Schollengarten 19-20, 7520 Bruchsal 4 Telefon 07257/89-0, Telex 7822410 GLDG LBA anerkannter Herstellungsbetrieb 18 25 LBA anerkannter Luftfahrttechnischer Cetrieb IIA 279

Technical note No. 301/15

Page 1 from 2

SUBJECT

: Main fitting L 4 of the all-flying tailplane

EFFECTIVITY

: DG-100 Elan from serial no. E 13 on and all DG-100 and DG-100 ELAN where during a repair executed 1979 or later the fitting L 4 has been replaced.

ACCOMPLISHMENT

: Instruction 1: Prior to the next flight Instruction 2 until Sept. 30. 1989 Instruction 3 until Dec. 31. 1989

REASON

: On one DG-100 ELAN the main fitting L 4 of the all-flying tailplane failed under violen violent forces. Thereby it was detected, that the welding was not done completely over the whole wall thickness of the part.

INSTRUCTIONS

- : 1a) Limitation of the max. speed to 150km/h. Aerobatics prohibited.

  Therefore glue the placard (see enclosure 1.) next to the data placard in the cockpit and glue a red line at 150 km/h on the cover glass of the ASI (e.g. with red tape).
  - 1b) Lift and pull down the tip of the allflying tailplane (aircraft rigged) with ca. 150 N (33 lbs.) (see enclosure 2.). If damage is detected no more flying is allowed.
  - 2) Inspection of the fitting L 4 for correct welding (see enclosure 3.). If the welding is o.k. instruction 1 may be cancelled.

    If a failure in the welding is detected the fitting must be repaired according to instruction 3. Until the execution of instruction 3 further operation of the aircraft is prohibited.
  - 3) Repair the fitting L 4 according to enclosure 4. After successful repair the instruction 1 may be cancelled.

MATERIAL

: Enclosure to TN 301/15

Welding wire 1.7734.2 for instruction 3.

REMARKS

: Instructions No. 2 and 3 are to be executed by the manufacturer or by a licensed work shop and to be inspected and entered in the aircraft logs by a licensed inspector.

Bruchsal 4, date 07.07.89

Author: W. Dirks

Wilhelm O

The German original of this TN has been approved by the LBA under the date of 13.07.89 and is signed by Mr. Schmaljohann. The translation into English has been done by best knowledge and jugdement. In any case of doubt the German original is

authoritative.

LBA - approved:

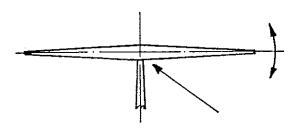
Type certification inspector:

1. Cut out this placard and stick it next to the dataplacard in the cockpit.

> Max. speed limited to 150 km/h (81 kts) Aerobatics prohibited Execute the bending check of the allflying Tailplane prior to each flight

> > TM 301/15

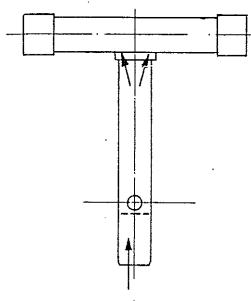
2. Check prior to each flight



+ 15 daN (33 lbs.)

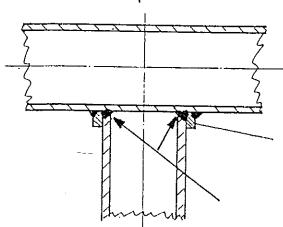
no permanent deformation is allowed

3. Inspection of the welding



Inspect the welding in the edges inside the tube by means of an Endoscope or an other suitable method.

If a plastic plug is glued into the tube, the plug is to be removed and to be glued into the tube after the inspection and repair by use of metal adhesive.



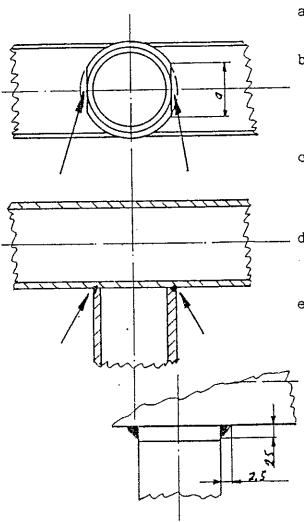
stop ring

This welding must be visible inside the tube.

Telelon 07257/89-0, Telex 7822410 GLDG LBA anerkannter Herstellungsbetrieb iD 25 LBA anerkarener Luftfahrttechnischer Deirstu IIA 279

# 4. Repair of the fitting L 4

The repair may be executed without removing the fitting from the tailplane.



- a. file off part of the stopring each
- b. weld the fitting in the region "a". Therefore cover the structure of the tailplane with sheetmetal parts to protect it against heat.
- c. check again see 3. if the welding is correct and visible from the inside of the tube.
- d. the missing part of the stop ring must not be replaced.
- e. preserve the inside of the tube with a suitable protecting agent for hollow spaces.

Thickness of welding 2,5 mm (0.1 in.)

Welding method for 4 b): Method WIG (Wolfram Inert Gas) TIG (Tungsten Inert Gas) Welding wire 1.7734.2

Issue:

Juli 1989

W. Ou

Author:

W. Dirks

Type certification inspector:

#### AIRWORTHINESS DIRECTIVE

89-73 Scheibe

### Date of issue:

1 0, MAI 1989

Affected sailplane:

German Type Certificate No. 336 SF 34 and SF 34 B serial no. 5102 through 5131

Subject:

Wing-Fuselage connection

Reason:

Corrective measures to fully re-establish airworthiness.

Action and compliance:

Action to be accomplished in accordance with Technical Note at the next annual inspection, but not later than June 30, 1989.

Technical publication of the manufacturer:

Scheibe Flugzeugbau Technische Mitteilung No. 336-2 of March 3, 1989

which becomes herewith part of this AD and may be obtained from Messrs. Scheibe Flugzeugbau GmbH, August-Pfaltz-Straße 23, D-8060 Dachau, 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.

Note:

This Airworthiness Directive replaces AD-No. 88-162/2 of August 25, 1988 after accomplishment of the manufactures Note 336-2.

\* BCA requirement is a. s. a. p and not later than 1st January 1990.



The British Gliding Association Ltd. Registered No. 422605 England Registered Office as address

Administrator and Secretary: Barry Rolfe

Kimberley House, Vaughan Way, Leicester LE1 4SE · Telephone 0533 531051

# **British Gliding Association**

6th June 1989.

BGA TECH NOTE 7.8.1989

# SLINGSBY T.21 (Sedbergh)

# FIN POST DAMAGED BY INCORRECT ADJUSTMENT

# OF RUDDER STOPS

(Reported by East Sussex Gliding Club)

Excessive rudder travel, caused by slippage of the rudder stops on the cables, (or stretching of the cables), has caused separation of the stern post from the fin structure.

Further damage had been caused by indescriminate cutting of the ply facing on the stern post, in the course of re-covering the fin with fabric.

(TNS/5/6/87) and 7/8/87 drew attention to rudder stop settings, following a fatal accident to a Skylark caused by fin post failure).

All T.21's, and all other Slingsby types having similar rudder cable stops, should be inspected a.s.a.p.

R.B. STRÁTTON. CHIEF TECHNICAL OFFICER

> Patron President Vice Presidents

HRH The Duke of Edinburgh KG
Basil Meads MBE
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KG Wilkinson BSc FCGI DIC CEng FRAeS
Christopher R Simpson MA LLM
Roger Q Barrett

An important objective of CAA AAD 031-01-89 is to obtain feedback from UK Beech 76 owners/operators on the status of their nose landing gear door linkages following the detailed inspection. It is intended that the AAD will be revised to delete this requirement when a more definitive solution is identified.

investigating the problem.

In the meantime, reports of findings following compliance with AAD No 031-0189 are awaited from a number of the owners of UK certificated Beech 76 aircraft. The requirement to report findings is an integral part of this AAD.

# PLEASE ENSURE THAT THE REPORTS OF AIRCRAFT THAT YOU OWN/OPERATE/MAINTAIN ARE SUBMITTED PROMPTLY.

A total of four reports covering five aircraft have been received at 22nd March 1989, three weeks after the expiry of the compliance time for first inspection. That leaves 19 UK registered aircraft outstanding.

# PIPER PAWNEE FUEL TANKS

The National Transportation Safety Board of the USA has reviewed all Piper Pawnee (- lircraft accidents that have occurred since March 1983 to decide the relationship between post crash fire and fatalities.

The Piper Pawnees involved in these accidents have one of three types of fuel tank systems. The first series of aircraft from PA25-1 to PA25-3884 have a fibre glass fuel tank located immediately behind the engine and forward of the main hopper which, in turn, is just forward of the cockpit. The second series to serial number PA25-7405574 has a fuel tank system in the same location as the first series, but with a rubber fuel cell liner installed instead of a glass fibre tank. The third system consists of metal tanks in the outboard sections of the wing.

From a crash worthiness standpoint, the fibre glass fuel tank is more susceptible to catastrophic failure than is a rubber fuel cell. Fuselage distortion during a crash would more typically result in a massive failure in the rigid glass fibre tank and the rapid escape of a larger volume of fuel than would be lost via a In the event of a post crash puncture or tear in a flexible rubber fuel cell. fire, the slower spill rate from a flexible rubber fuel cell probably would result in more time for evacuation and therefore reduce the fire related fatalities.

A rubber fuel cell liner has been available as a retrofit on the early Piper Pawnee models in the form of a modification kit that is the subject of Piper Aircraft Service Spare Letter No SP-236A. This letter was last issued on August 1971 and according to Piper only 10 modification kits have been sold. The poor response can be attributed partially to the fact that the Service Spares Letter does not relate the crash worthiness benefits of the bladder type fuel cell liners and does not strongly encourage the incorporation of this modification.

Therefore, the National Transportation Safety Board recommends that Piper:

Revise and reissue Piper Aircraft Service Spares Letter SP236A to include a discussion of the safety benefits of the rudger fuel cell liner on Piper PA25 aircraft currently equipped with fibre glass tank.

### CAA Comment:

Out of 52 reportable PA25 accidents in the United Kingdom, 2 were fatal. fatal accidents, one included an explosion after impact. Fire was reported in three of the other accidents, but there was no indication of what type of fuel tanks were fitted. However, operators will be interested in the views of the NTSB.



# General Aviation Safety Information Leaflet

Safety Promotion Section Aviation House, South Area Gatwick Airport, West Sussex, RH6 0YR Telephone – (0293), Safety Prom 573225/6, Exchange 567171 Telex – 878753, Facsimile – (0293) 573999



5/89

26th May 1989

# 1. USE OF CARBURETTOR HEAT

Р

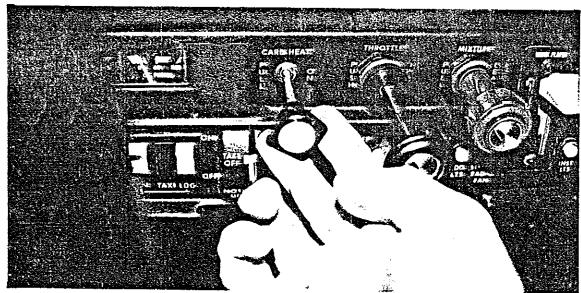
Aircraft Date

Cessna 152 July 1988

The aircraft was returning from a local flight and the pilot reduced the throttle setting for a descent to the airfield. On re-opening the throttle, the engine failed to respond and in attempting to reach the airfield, the aircraft struck some electrical power cables damaging the tailplane and severing the cables.

### CAA Comment:

An aftercast of the weather that day showed that the air temperature between 3000 ft and 1000 ft rose from 7°C to 12°C with a humidity remaining at about 70%. These conditions would be conducive to carburettor icing even at cruise power. At reduced throttle settings, the tendency for carburettor ice formation would be even more severe.



Pilots must remember that in this country, particularly in the best of summers, (because warm air will hold more moisture than cold air) the possibility of carburettor icing always exists and regular use of carburettor heat must be borne in mind at all times. Furthermore, carburettor heat MUST BE GIVEN TIME TO WORK. It may take up to a minute for all of the ice to melt.

Photo-copying this leaflet is permitted and short extracts can be published provided that the source is duly acknowledged.

The records used to compile this document include information reported to the CAA, information obtained from CAA investigations and deductions by CAA staff based on the available information. The authenticity of the contents or the absence of errors and omissions cannot be guaranteed.

In order to identify the broad subject matter each item is classified as follows:

Operational items mostly of interest to pilots Airworthiness items mainly for engineers Items which involve both operational and airworthiness interests





\* Paritish Gliding Association Ltd.

Experied No. 422605 England

Requirered Office as address

Administrator and Secretary: Barry Rolfe

Kimberley House, Vaughan Way, Leicester Telephone 0533 531051

# **British Gliding Association**

BGA TNS/7/8/88.
Rapertol TN/7/8/89

16th June 1988.

# L'Hotelier Connectors Can Endanger Your Health!.

- a) The ball/socket can become worn.
- b) The springs can lose their tension.
- c) They can become contaminated with dirt, and lack lubrication.
- d) The sockets can become distorted if they are overloaded. They may then fail to hold on to the ball under load. Check after ground loop or other incidents.
- e) A safety pin hole is provided as a means of ensuring that they have been correctly mated and checked.

  Safety pins are available from the motor trade, and are used for brake-pad retention.

  Make sure safety pins do not foul on anything.
- f) There have now been two cases of aileron disconnects on Astirs. The rods can drop into the rootend structure, locking on full aileron deflection. In one case there was a fatality, in Germany.

Repeated in TNS 7/8/89 because

another incident occurred at London G. C. on July 2nd 1989. NO SAFETY PINS WERE FITTED

R.B. STRATTON

CHIEF TECHNICAL OFFICER

# PLEASE DISPLAY ON YOUR NOTICEBOARD

Patron President Vice Presidents HRH The Duke of Edinburgh KG
Basil Meads MBE
Air Chief Marshal Sir Theodore McEvoy. KC
Sir Peter Scott CBE DSC LLD
Or A E Slater MA FRMetS
K G Wilkinson BSc FCGI DIC CEng FRAeS

Christopher R Simpson MA LLB Roger Q Barrett SUBJECT

Air brakes

37-60

EFFECTIVITY

: Sailplane model LS6, all versions, all serial numbers

ACCOMPLISHMENT :

Before next flight

REASON

MATERIAL and INSTRUCTIONS

- 1) If during full extension of air brakes it is possible to move the flap handle from the landing position (+15°) backwards, the travel of the air brake handle must be limited at the cockpit cutout end by a stop. See details page 2.
  - 2) A deflector must be bonded into the wing air brake boxes to avoid possible locking of lower blade at wing shell structure. See details page 2/3.

WEIGHT AND BALANCE

: Not applicable

REMARKS

: Updating by operator / owner. Certification of accomplishment by licensed inspector in logbook and on TB-AD-Accomplishment List, page 8-1 of Instructions for Continued Airworthiness (Maintenance Manual).

DETAILS FROM U.K AGENTS.

Erstellt: 08. MRZ 1989 Leccella

Geprüft: -3. MPZ 1889 Weaple

(TM6019)

# GO SECURITY PARACHUTES

89-13-03

July 31, 1989.

This amendment (39-C7 (APPLIANCE) Decomes effective

# SMALL AIRCRAFT

FOR FURTHER INFORMATION CONTACT:

89-13-03:2GO PARACHUTES ETD: Amendment 39-62210 and That Yare and Assemblies (P/N's MRI GQ 1277, MRI GQ 1304 and MRI GQ 1325), 1850 Parachute Assemblies (P/N's MRI GQ 1284, MRI GQ 1315 and MRI GQ 1330) and 4.8m SAC Parachutes (P/N's MRI GQ 1308 and MRI GQ D 22918/2).

Compliance: Required as indicated, unless already accomplished.

To prevent the use of FAA approved canopies which may contain understrength material, accomplish the following prior to next use after the effective date of this AD:

- (a) Perform an acid test on each mesh panel, in accordance with page 11 of GQ Parachutes Ltd. Service Bulletin (SB) No. 25-01, dated January 18, 1989. Those canopies found to be free of acid contamination may be approved for return to service.
- (b) For those canopies found to have acid contamination, perform the acid neutralization, pH test, and tensile test, in accordance with pages 5 and 6 of GQ Parachutes Ltd., (SB) No. 25-01, dated January 18, 1989. Those canopies having a pH value greater than 5.5 and a minimum tensile strength of 180 N/25mm (405.5 lbs./in.) may be approved for return to service. For those canopies found to have a pH value of 5.5 or less and/or a tensile strength less than 180 N/25mm (40.5 lbs./in.), remove or obliterate the TSO-C23c marking.

(c) In lieu of compliance with paragraphs (a) and (b) above, the TSO-C23c markings must be removed or obliterated and the parachute must not be used as an approved parachute.

(d) Upon submission of substantiating data by an owner or operator through an FAA Airworthiness Inspector, the Manager, Boston Aircraft Certification Office, Engine and Propeller Directorate, Aircraft Certification Service, Federal Aviation Administration, 12 New England Executive Park, Burlington, Massachusetts 01803, may adjust the compliance times specified in this AD or approve an equivalent means of compliance with this AD.

The repair and inspection procedures shall be done in accordance with GQ Parachutes Ltd. Service Bulletin No. 25-01, dated January 18, 1989. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from GQ Parachutes Ltd., Portugal Road, Woking, Surrey, GU21 5JE England. Copies may be inspected at the Federal Aviation Administration, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, Massachusetts 01803, or at the Office of the Federal Register, 1100 L Street, Room 8301, Washington, DC 20591.

# Information on Aeronautical Radio Licences for Gliders, Hang-Gliders and Balloons

Radiocomminications Division

This information sheet has been produced to provide answers to questions that are commonly raised by applicants for licences about the use of aeronautical radio equipment in gliders, hang-gliders and balloons.

# Why do I need a licence?

Under the Wireless Telegraphy Act (1949) it is an offence to install or use radio apparatus without a licence issued by the Secretary of State for Trade and Industry. Failure to comply could result in a £2,000 fine and/or three month prison sentence plus forfeiture of the radio apparatus.

Licensing is necessary:-

- to enable as many people as possible to use the limited amount of radio spectrum
- to do so under controlled conditions
- to avoid causing unacceptable interference to other users.

Government policy is that the costs incurred should be borne by licensees:

Costs are incurred not just for the simple administrative tasks of maintaining records of licences and collecting fees. They also include, for example, the cost of international and national negotiations on behalf of radio users and action against unauthorised users and measures taken to cure interference problems.

Note You need separate licences if you use radio equipment in your glider, hang-glider or balloon and in a ground station (including vehicle).

### How much does a licence cost?

An annual licence for equipment in air stations is £17.50 and £25.00 for ground stations. Refunds for partial use of the radio during the term of the licence cannot be made.

# What frequencies can I use?

The frequencies assigned for use by gliders are 129.000, 129.975, 130.100, 130.125 and 130,400 MHz. Hang-gliders and balloons can use 129,900.

# How do I apply for a licence?

To apply for your glider, hang-glider or balloon air or ground station licence, please write to the address below or telephone 01-215 2024 and we will send you an application form.

> Aeronautical Licensing Department of Trade and Industry Room 712 Waterloo Bridge House Waterloo Road LONDON

# MODIFICATION TO THE AIRBRAKES OF THE SCHLEICHER K7

# Introduction

The airbrakes of the standard K7 are exceptionally powerful when compared with other similar types of glider. In addition the suck open loads are very high making it difficult for many pilots to operate the airbrakes smoothly and to reduce or close them unless the speed is very low. There is therefore a danger that if the speed is allowed to increase on an approach some pilots might not be able to avoid an undershoot because they are not strong enough to close the airbrakes.

A simple modification reduces the effectiveness of the airbrakes to approximately that on the later, ASK13 and by improving the leverage reduces the operating loads to a more acceptable level.

### Method

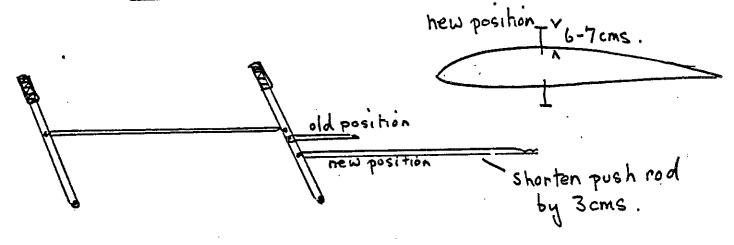
The rear cockpit airbrake lever is disconnected and removed and redrilled inches below the bottom hole. The actuating rod from that lever to behind the rear seat is removed and cut and re-welded to reduce the overall length by xxx inches. When re-assembled into the new hole the cockpit levers should be in their original position when the airbrakes are close and locked.

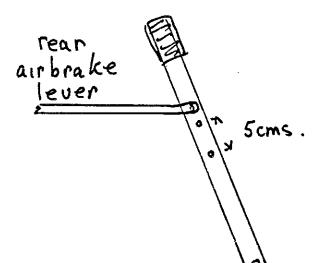
The fully open position becomes with the top blade inches above the wing surface.

This modification was originally approved by the BGA about 20 years ago when Lasham first had their K7s. It is very likely that there are now a number of K7s in use for training which would benefit from being modified and perhaps it should be re-issued.

Derek Piggott

# K7. Airbrake Modification





Remove push rod, redrill rear cockpitairbrake lever 5 cms. down. Cut, shorten and reweld push rod by 3 cms. to reposition lever as before. Readjust stop on push rod.

BGA Appaned description Ref BGA | KA7/1/89.

Codson
3/5/89

D.P. 24.5.89.

P8/8/1247ADA

# TOW RELEASE NEWS

CHILTERN SAMPLANES LTD., Booker Airfield,

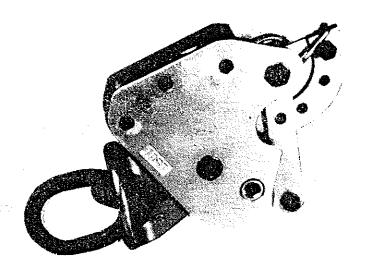
Nr. Marlow, Bucks. SL7 3DR. 0494 445854

Operating time extended by one third for the Europa G 72 and Europa G 73, centre-of-gravity tow releases.

The period of time that may elapse between two general overhauls for the G 72 and G 73 centre-of-gravity tow releases has now been extended from three years to four years. For details see TM 60.230/2 - 4/88. Glider pilots have been pressing for this extension for a long time, and now, after incorporating a new type of spring wire and a series of tests lasting several years, this has become feasible.

An extra bonus for glider owners - the nose and centre-of-gravity tow releases from an aircraft can now be sent in for overhauling at the same time, saving time and costs.

We have developed a new generation of tow releases for gliders and powered gliders weighing over 750 kg. The new tow releases are available immediately. They are:-

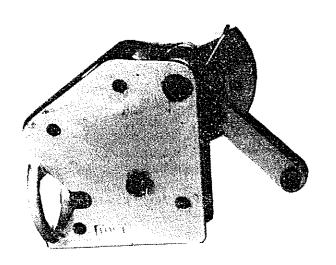


The new Tost Europa G 88 centre-of-gravity tow release, licensed for cable loads of up to 1410 daN.

Approved by the Luftfahrt-Bundesamt (German Aviation Authority) on February 23rd, 1989, Certificate No. 60.230/2.\*

The new Tost nose tow release E 85 for aircraft tow licensed for cable loads of up to 1410 dan.

Approved by the Luftfahrt-Bundesamt (German Aviation Authority) on March 13th, 1989, Certificate No. 60.230/1.\*



The operating time between two general overhauls is now the same for both tow releases - 4 years.

Tow release overhauls? Here's why.

Tow releases are crucial safety devices. A tow release malfunction can be just as fatal as a parachute which fails to open. It would take a critical situation, before you could test whether your tow release is functioning 100% within the safety limits. Although such an emergency is, statistically seen, highly unlikely, you should not underestimate the potential danger and the importance of checking your tow release regularly and having it overhauled within the specified time limit.

Like gliders, tow releases have to be licensed by the aviation authorities. The regulations specify the minimum required safety standards - you should not be satisfied with less.

As manufacturers of tow releases for nearly forty years, it has been our permanent concern to make sure our products meet the latest technical standards. Over the years we have constantly improved both materials and manufacturing processes, so that now the operating time, which was originally one year only, has been lengthened to four years. We think this is a reasonable compromise between the glider pilot's wishes and what is technically possible.

There are two major factors which limit the operating time of a tow release:

- Because the segment spring is under continuous tension, its lifespan is limited. Even if the release is used relatively seldom, this tension causes the spring rate to drop gradually but continuously over the life of the spring. If it is to perform its task of holding the knee lever mechanism securely shut, the segment spring must be replaced at regular intervals.
- 2. The knee lever mechanism is manufactured to extremely close tolerances, otherwise the device would not function reliably within the operating limits. The moving parts are subject to wear. Extreme wear, resulting from a large number of takeoffs, will cause the force required to operate the release manually to increase unpredictably.

We guarantee the functioning of our tow releases for their total operating time. Not only do we guarantee our new tow releases for 4 years, but we give the same guarantee on each tow release which we have overhauled and checked.

The result of this unique guarantee practice is that you could today come across a tow release that has been in almost continuous use since 1952 and has been under guarantee the whole time. The only condition for our guarantee is that the tow release is sent back to us regularly to be overhauled, have the worn parts replaced and be retested. In addition, during the overhaul we replace obsolete parts, so that the 1952 tow release we mentioned at the beginning of this paragraph will not only be functioning perfectly, but will also incorporate our newest technology.

We are proud of this contribution to air safety.

# TOST GmbH · FLUGZEUGGERÄTEBAU MÜNCHEN

Thalkirchner Str. 62 · 8000 München 2 · Tel. 089/530 90 67 · Telex 528 215 · Telefax 089/53 41 58



The British Gliding Association Ltd. Registered No. 422605 England Registered Office as address

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# British Gliding Association

16th June 1989

TO: CLUB CHAIRMEN & CFIs

# TUG MAINIENANCE

There have been two recent instances of clubs operating their tug aircraft beyond the expiry date of the Certificate of Airworthiness. In terms of breaking the aviation regulations the implications are serious. Club committees must be aware of their responsibilities, and one person (a tug manager) should be responsible for day-to-day maintenance and ensuring that all checks are completed as required.

# Light Aircraft Maintenance Schedule

Under this schedule certain checks can be carried out by the holder of a Private Pilot Licence:

- at 50 hours and 100 hours, both these checks are 50-hour checks with the same maintenance schedule.

The next check at 150 hours must be carried out by a Licenced Engineer, as must the Annual check.

### Standards

At most clubs the tug aircraft is hard-worked and this necessitates a high standard of maintenance. While the demarkation between airworthy and not is usually clear-cut the overall condition of tugs can often deteriorate to the "shabby" level which sometimes encourages a lowering of standards. Such a situation is sometimes reflected in the very high C of A bills and even a reluctance of some repair organisations to undertake the work. All clubs are reluctance of some repair organisations to undertake the work. Failure to do urged to maintain their tugs to the highest possible standard. Failure to do so threatens the LAMS Schedule and, possibly the M3 maintenance approval for BGA clubs.

While the CAA might consider issuing a placard giving the C of A expiry date (a similar scheme to the BGA) there is nothing to stop operators putting such a notice in the cockpit if further such ineptitudes are to be avoided.

W.G. Scull Director of Operations R.B. Stratton Chief Technical Officer

#### INDUCTION AIR FILTERS

84-26-02 INDUCTION AIR FILTERS: Amendment 39-4966. Applies to all paper induction air filters used in small airplanes.

Compliance: Required as indicated, unless already accomplished.

To prevent possible engine power loss or stoppage caused by engine ingestion

fragments of a deteriorated induction air filter, accomplish the following:

Within the next one hundred hours time-in-service after the effective date of this AD or prior to the accumulation of 500 hours time-in-service on the filter, whichever occurs later, and thereafter at intervals not exceeding 500 hours time-inservice on the filter:

Replace the air filter with a new filter that is FAA approved for the (a)

airplane installation.

(b) Within 100 hours time-in-service replace any filter on which the timein-service cannot be determined utilizing the airplane maintenance records for this determination. NOTE: This AD does not alter current maintenance procedures which require inspection of paper induction air filters at 100 hours time-in-service and annual inspections and replacement as necessary based on filter condition.

This amendment becomes effective January 29, 1985.