#### BRITISH GLIDING ASSOCIATION

### TECHNICAL COMMITTEE

## TNS 2/3/81

- 1. AIRWORTHINESS AGGRO (Please add to 1981 pink pages).
  - 1.1. Grob Astir Tailplane Front Ball attachment cracked. A case of 75% cracking through the threads has been detected by Ted Henman, Dorset Gliding Club and confirmed by Non-Destructive-Testing. Reported in TNS 8/80.
  - 1.2. <u>Grob Astir all models</u>. Possible cracking of tailplane attachment pins and possible distortion of plate fitting, due to overtightening or ground-loop damage. (Cases reported by Gliding Federation of Australia).
  - 1.3. ASK 21 Rudder-Pedal Toe Straps, can jam rudder. Case reported by Stan Armstrong, Derby & Lancs. Gliding Club, where toe-straps were inadvertently displaced under the foot, and locked both pedals together. (Notified to owners 19/2/1981). Suggest that the straps be deleted or otherwise made safe.
  - 1.4. S.I.E.3 Elevator Counter Balance cracked. A/D 81-17 and Siebert TN 264-2 require inspection, re-enforcement by welding. (Mailed to owners and attached herewith).
  - 1.5. SZD 48 Series Jantar Lower Rudder Hinge Securing split-pin failure.

    Action required to prevent shearing of split-pins by rudder movement where such pins are primary method of security. (Alternatively, nut and split-pin may be fitted on some models). (G.F.A. Australia).
  - 1.6. SZD 38A Jantar 1 and SZD 41A Std. Jantar, AND SZD 48/1 Std Jantar 2 (All 'T' tail models) Possible Tailplane / Elevator Flutter. Inspect centre Rib and its attachment to centre tailplane for strength and security (G.F.A. Australia).
  - 1.7. Grob Club Astir II Standard Astir II. "Marks to control correct mounting of elevator". TM 306-15 is attached herewith, effects Serial No. 5001 onwards.
  - 1.8. IS 28B 2 Accelerometer for Aerbatic Flight. Service Bulletin E0-9 requires installation of the above (Copy from Slingsby Engineering Ltd.).
  - 1.9. IS 28B 2 Safe-Life Limitation 8000 hours. Service Bulletin EO-10 defines the basis for the above limitation. (Copy from Slingsby Engineering Ltd.).
  - 1.10. OLY 460 Series Spar Fitting Washers cracked. Please inspect and replace cracked washers where root-end fitting is bolted to spar end. (Reported by D. Masterson).

### 2. GENERAL MATTERS

- 2.1. New Types approved by B.G.A. Technical Committee:
  - L.S.4. Subject to the introduction of venting/draining facilities in all enclosed G.R.P. structures.

### 3. TUGS AND MOTOR GLIDERS

- 3.1. Chipmunk Engine Mountings cracked. Extract from G.A.S.I.L. 1/81 draws attention to cracks which have been subject of Manufacturers TNS 168 over many years.
- 3.2. Air Navigation (General) Regulations. Amendment to Regulation No. 16, to include VHF Communication Equipment only, amongst those items which may be replaced by a pilot under A.N.O. Article 11(2). This amendment will be made shortly, but will specifically exclude Navigation equipments. CCAA letter 9/90/Gen C11 21/1/81.
- Progress with 'MOGAS' About 100 hours of flying 'Airedale' G-AVKP (Lycomming 180hp 8.5:1 Compression Ratio) on B.S. 4040 '4 Star'have been completed. B.G.A. reports 'AVGAS MOGAS trials proposal to extend approval to Group 2 and Group 3 Engines', was submitted to A.R.B. (Light Aeroplane Committee) on 10/2/81, and is now the subject of debate with C.A.A. (Copies available from B.G.A. Office). Insurance brokers have been sent copies of the Report, and it should now be possible to regularise insurance cover with some of them.
- 3.4. <u>Induction System Flexible Air Ducts</u>. Extract from G.A.S.I. (attached) is self explanatory.
- 3.5. Tug Maintenance. 3 year 'Star' Inspections.

  DO NOT FORGET TO MAKE ARRANGEMENTS FOR B.C.A.R. A8-15 APPROVAL FOR YOUR NEXT C. OF A. RENEWAL.

R. B. STRATTON. CHIEF TECHNICAL OFFICER

# Airworthiness Directive

81-17 Siebert

Date of issue:
January 22, 1981

Affected sailplane:
German Type Certificate No. 264
Siebert Sie 3.
all serialnumbers.

Subject: Elevator-counterbalance

Formation of cracks at the supporting arm (tube) of elevator-counterbalance.

Action and compliance: Until March 15, 1981 at the latest the reinforcement of the tube must be welded in accordance with the Service Bulletin (Technische Mitteilung).

Technical publication of the manufacturer:
Siebert "Technische Mitteilung" No. 264-2
of December 15, 1980,
which becomes herewith part of this AD and may be obtained from Messrs. Paul Siebert, Rektoratsweg 40, D-4400 Münster.

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



### Technical Information

TM 306-15

CLUB ASTIR II STANDARD ASTIR

BCA TUS2/3/81.

Subject:

Marks to control the correct mounting of elevator.

Effectivity:

Glider aeroplane CLUB ASTIR II and STANDARD ASTIR II starting from serial number 5001.

Accomplishment:

Latest date of action to be taken: 28.02.1981

Reason:

This action should be taken to ensure correct markings at elevator-tabs and fin, to control correct elevator assembly-mounting.

Instructions:

- Mounting elevator section according to Flight Manual page 23. It is important to ensure, that the larger opening of the conical crillings in the inner rings of the horizontal stabilizer spar bearings fall to the rear.
- 1b) Provided the 4 markings at elevator and fin are still existing they must coincide after correct mounting. The former badly adhevent markings should be removed and replaced by new ones at the same position.
- 1c) Provided the 4 markings at elevator and fin are missing completely or partially, the rest of the previous marks should be removed and replaced by new markings according to construction drawing. Before applying glue make sure that the region is free of oil, grease or rest of former labels.
- 1d) To attach the new marks, it is necessary to remove the paper cover before rubbing the arrow firmly with the transparent foil. Then the foil should be carefully removed and the mark again pressed. After 24 hours the adherence is sufficient enough to withstand application of sealing tape between stabilizer and rudder. There is no risk to remove the marking inadvertently when removing the tape.
- 2) Reference tabel at fin:
  Elevator quick lock connected
  Rotating knob turned in
  Tailplane secured (cover closed)

must be replaced by the reference tabel:

Elevator quick lock connected Markings notice Rotating knob turned in Tailplane secured (cover closed)



TM 306-15

3) Replace page 1 and 23 of the Flight Manual. The exchange has to be signed on page 1. On page 23 you will find instructions how to control the mounting of the horizontal stabilizer.

Material:

4 adhesive marking arrows 1 reference tabel for fin 2 new pages in Flight Manual

Material for TM 306-15 can be obtained by manufacturer.

Weight and Balance:

No influence

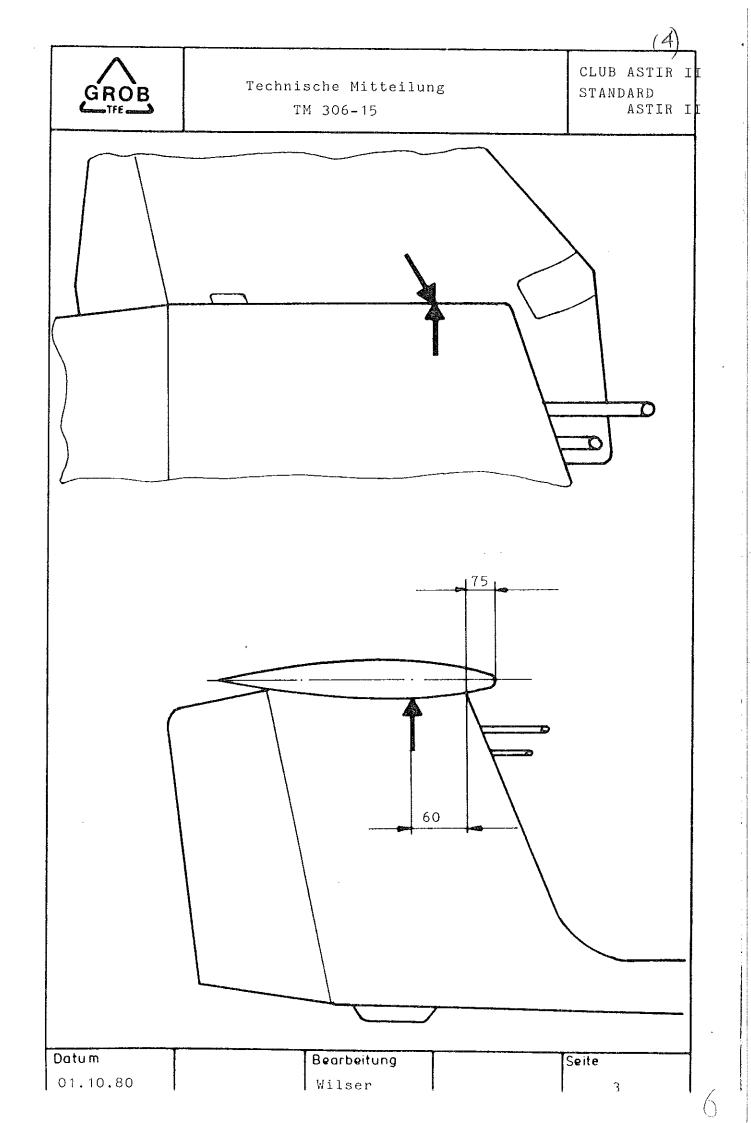
Remarks:

The correct action has to be certified by an authorized inspector (Prüfer Klasse 3) in the log book.

Mattsies, the 01.10.1980

Signed: Dipl. Ing. H. Wilser LBA approved: 27.11.1980

P.S. Provided your a/c is sold in the meantime, you are kindly requested to send this bulletin to the new owner as soon as possible and to inform us about his adress.

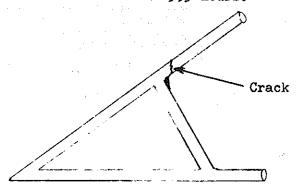


## BADLY CRACKED ENGINE MOUNT

Aircraft : DHCl Chipmunk

GASI 1/8/6)
TUS/S/81.

During inspection a crack was found on the left-hand engine mount. The crack emanated from the weld and had travelled approximately one third of the tube circumference. The aircraft had flown 8593 hours.



#### CAA Comment:

The manufacturer's Technical News Sheet No 168 calls attention to the necessity for paying particular attention to all welded joints when carrying out routine inspections of the engine mounting frames as recommended in the Maintenance and Repair Manual.

CASI.

## INDUCTION SYSTEM FLEXIBLE AIR DUCTS

The following good advice was published in the FAA Airworthiness ALERTS for November 1980.

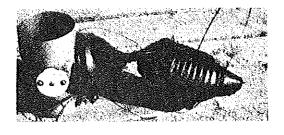
The Beech B23 aircraft engine lost power, resulting in a landing short of the runway. An investigation revealed the air duct from the carburetor heat box to the carburetor had collapsed, stopping air flow to the carburetor.

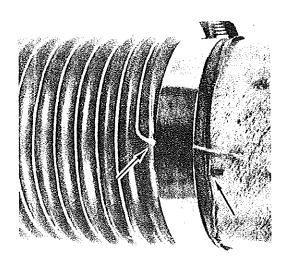
This recent incident prompted reprint of the following article:

"Several incident and accident reports have been received which were attributed to the failure of the flexible air ducts installed on Cessna single-engine aircraft. Some of the reports indicated the hose assembly collapsed, resulting in loss of engine power.

"To prevent the possibility of restricting air flow through the engine air induction system, it is recommended the duct assembly be examined each 100 hours. Inspect for such duct deterioration as separation of inner lining, broken or frayed cord wrapping, evidence of hose collapsing, indication of reinforcement wire slippage, or evidence of wire not being properly bonded to the duct. Replacement of defective duct assemblies should be accomplished properly when any indication of deterioration is evident,

"The Cessna Aircraft Company provided this photograph to illustrate how they recommend the flexible ducts be clamped. Please note that the ends of the inner reinforcing wire and the outer cord are turned 45 degrees to normal and are secured by the clamp."





ASTIR C.S. BGA No. 2162.

ASTIR T/P BALL. CLACKED.

HOURS FLOWN 249.19

LANDINGS

212

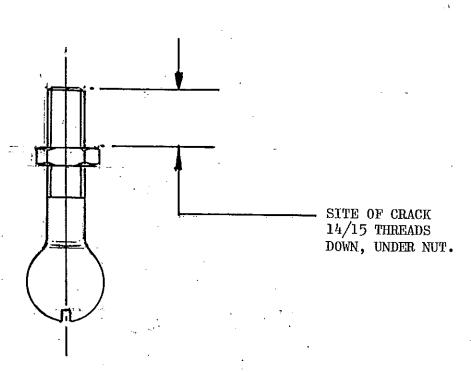
TAILPLANE ATTACHMENT BOLT FOUND CRACKED BETWEEN

14 & 15 FROM START OF THREAD.

THERE IS NO

PREVIOUS HISTORY OF A GROUND LOOP ON THIS

MACHINE.



REPORT FROM TED HENMAN, DORSET GLIDING CLUB, 16/2/81.