BRITISH GLIDING ASSOCIATION

TECHNICAL COMMITTEE

TNS 8/9/81

PART 1 (Airworthiness"AGGRO" - Please add to the 1981 Yellow Pages).

1.1. Astir CS. Tailplane Attachment Spherical Locking Bolt and Tailplane attachment pins. TM 306-17 effects serial numbers 1001-1536 and requires replacement, to avoid failure of cracked threads. (Copy herewith).

1.2. Astir CS/CS 77/CS Jeans - Serial numbers as listed in TM 306-16 (copy herewith) requires inspection and replacement of Hotellier-Quick-Links, in elevator circuits.

1.3. Twin Astir and Twin Astir Trainer. TM 315-17 (herewith) requires inspection and replacement of Hotellier Quick-Links in elevator circuit.

1.4. Janus B, damage to elevator drive fork in front cockpit. Probably due to persons standing on the controls, whilst inserting the rigging pins. Result is cracked weld, bent rod and diminished elevator travel. (Report by J.W. Wynch - 4 Counties G.C.).

1.5. Vega - undercarriage failures. Several cases are now on record of involuntary retractions on both take-off and landing, due to failure of components. Special inspections are required for signs of failure.

1.6. Bocian Undercarriage Failures. Cases are again reported of gear failures which require repeated special inspections. (Colin Golding, Borders G.C.).

1.7. Bocian - Lower Rudder Hinge Failure. This item again reported by Bath & Wilts G.C. Modified hinge to DWNG MTB 060981 has been approved as BGA/Bocian/1/81. (Copy herewith).

1.8. FOKA - Heavy Landing damage to Elevator Circuit. Restricted elevator travel was caused by damage to elevator level assembly behind Pilot's seat. Heavy landing inflicted no apparent damage to the glider! (Reported by Kent G.C.).

1.9. Controls incorrectly assembled after C of A renewal (Libelle). The aileron controls in the wing may be reversed, if the lever assemblies are inadvertently swopped between wings, during overhaul. B.G.A. Form 267 (item 49) requires duplicate inspection.

2.0. GENERAL MATTERS

2.1. ASW 15 - Increase of Service Life to 6000 Hours. Tech. note 20 (herewith) defines the inspection required before 3000 Hrs., and at intervals of 1000 Hrs. not exceeding 6000 Hrs.

2.2. Winch Parachute damages KA 8B, "Ballooning" of cable parachute (type supplied by FLOW TECHNOLOGY), caused damage to "D" Box and trailing-edge of the wing. Parachute being modified. Report by Cambridge G.C. (Duxford).

GROB TFE

Technical Information
TM 315-12

TWIN ASTIR
TWIN ASTIR
TRAINER

TM 306-6 applies to. ASTIR CS
ASTIR CS 77
ASTIR CS JEANS

Subject: Replacements of Hotellier Quick-links of the control system.

Effectivity: Glider TWIN ASTIR and TWIN ASTIR TRAINER from serial-number 3000 to 3275 including. Steps 3 and 4 from serial-number 3000 to 3291 including.

Accomplishment: Step 1 prior to next flight, after completion every 50 hours until completion of step 2. Step 2 and 3 not later than July 31,1981. Step 4 is recommended.

Reason: After a high total aircraft time several fractures of 90° quick-connections with open housing (Z-type) due to strong wear and tear were observed at the swivels of the aileron control system which requires the general exchange of the above mentioned joints against those with closed housing and new swivels.

Pages of the manual have to be exchanged that describe the maintenance of links.

Instructions: Step 1. Prior to the next flight and afterwards every 50 hours swivel N°. 961 M (detail N°. 4) attached to the aileron levers at the root-ribs and the elevator lever must be inspected for wear and tear. Step 1 is not applicable if the elevator push-rod is already equipped with a joint R 9.41. (detail N°. 1).

Diameter of the swivel has to be controlled by a micrometer at differencess in diameter may not exceed 0.1 mm (0.004 in.) that means the swivel must be spheric.

Tolerances in excess of 0.1 mm (0.004 in.) require step 2 prior to the next flight.

Step 2. Not later than July 31, 1981 all Hotellier Quick-links (swivel and joint) of the aileron control ass'y at the wing mounting and the elevator connection have to be replaced. Step 2 is not applicable to the elevator control ass'y if the elevator push-rod is already equipped with a joint R 9.41. (detail N°. 1).

Installed joints R Z 9.41. (open housing) with 9 mm swivel diameter (detail N°. 3) of the aileron control ass'y must be replaced by joints R 12.41 (detail N°. 2) (normal housing) with 12 mm swivel diameter and installed swivels N°. 961 M (detail N°. 4) by swivels N°. 262 M (detail N°. 5).

After extended storage check accordingly to regular service pos. 1 to 11 and inspect for evidence of rodents and birdness.

IX. Lubrication

Ball Bearings

All bearings installed are sealed with a permanent grease filling. Greasing of bearings is therefore unnecessary.

Sliding Bearings

All slide bearings installed on the fixed control linkages do not require servicing or greasing. However, the push rod bearings in the root rib and on the tailplane mounting should be cleaned with petrol and regreased when dirty. The pins and bushes on the wing fittings should be regreased when necessary during rigging.

The pins on the tailplane fittings and the screw thread should be lubricated periodically. The hinge and catch of the cover should be occasionally oiled. Dirty release hooks are best cleaned using a brush and compressed air whilst operating the mechanism. The belly hook is accessible from inside and can be lubricated with Sprayoil or similar.

Maintenance on Hotellier quick-locks must be conducted during each annual inspection or 500 hours which ever occurs first. They are installed at the control-connections of aileron and airbrakes at the wing-fuselage joint and at the elevator connection to the pushrod.

The diameter of the swivel has to be measured at different points by a micrometer with no differences in excess of 0.1 mm (0.004 in.) that means the swivel must still be spheric. If there are larger differences the swivels and the appropriate joints must be replaced.

Swivels and joints should be greased prior to each rigging.

The use of additional safety-pins guided through the holes of the wedge-type slides increases safety. (safety-pins No. 500 3771 from A. Würth, D - 7118 Künzelsau, W.-Germany or manufacturer)

4. 5. 1981

- Please inspect the interior attachmentspar of the fin for tightness with bolt installed. This can be checked visually from the rear through the opening of the spar. If the attachment spar moves contact the manufacturer.
- Mount the tail unit properly and couple the control-rods. Check for safe installation. If the lockingplate in front of the fin moves less than 3 mm (0.12 in.) from the „unlock" to the „locked" position the diameter of the ball is too small and not allowable play can be expected (see detail no. 2). A larger locking bolt must be installed.
- Please send the used bolt back to GROB TFE, D–8939 Mattsies, Am Flugplatz, and inform us about the aircraft's total time and landings. We will inspect the bolt and prevent a new installation.

2. Replacement of the two retaining pins of the elevator hinge plate in the fin (see detail no. 3)

The replacement of these two retaining pins is easier than that of the locking bolt and can be accomplished as follows. You need a screwdriver 6 mm (1/4 in.), an open ended wrench 13 mm and, if possible, a torque wrench.

- Remove the tail unit (stabilizer and elevator) from the vertical stabilizer.
- Unscrew the 8 mm self-locking nut on the rear ends of the bolts with the 13 mm wrench. If the bolts turn with the nut, hold it inplace with the screwdriver.
- Remove the loosened bolts and be sure that both washers remain on the hinge plate.
- Install the new bolts (102-2142.46) and make sure they are properly positioned at the washers according to detail no. 3. Use a new 8 mm self-locking nut so that the bolt is installed securely.

  Caution: Do not tighten too far. If possible use a torque wrench and torque with 13 Nm (32"/lb) only.
- Mount the tail unit on to the fin and couple the control-rods. Check for safe installation. A small amount of play is acceptable.
- Please send the used bolts back to GROB TFE, D–8939 Mattsies, Am Flugplatz, and state the total time and landings. We will inspect the bolts and prevent a new installation.

Material:

1 spheric locking bolt 102-3500.21
(when ordering advise us about the exact diameter ± 0.1 mm/0.004 in.)
1 special nut 102-3510.21
1 Toothed washer 10.5 DIN 6797 phr
2 Retaining pins 102-2142.46
2 Self-locking nuts M8, LN 9348

All parts can be ordered from the manufacturer by using the attached form.

Sheet 1 Number of sheets : 1	ASW 15 & ASW 15 B Technical Note No.20	Alexander Schleicher Segelflugzeugbau 6416 Poppenhausen

TNS/8/9/81

Kind : Continuation of Airworthiness.

Subject : Increase of service life.

Effectivity : All ASW 15s and ASW 15s B as well as modified versions (e.g. ASW 15 N).

Accomplishment : Before reaching a service time of 3000 hours, but not later than August 1, 1981.

Reason : The results of fatigue tests of wingspar sections have demonstrated recently that the service time of the ASW 15 may be extended to 6000 hours, if for each individual ASW 15 the airworthiness is demonstrated according to a special multi-step inspection program which is an amendment to the Operations Manual of the ASW 15.

Instructions : To the chapter 2.8 'Notes For The Inspections' the pages 21a and 21b must be added to the ASW 15 Manual respectively the pages 24a and 24b to the ASW 15 B Manual; these pages explain the dates and inspection program to extend the service time.

Notes : A licensed inspector must certify in the log book and by an inspection form that the above instructions have been fulfilled.

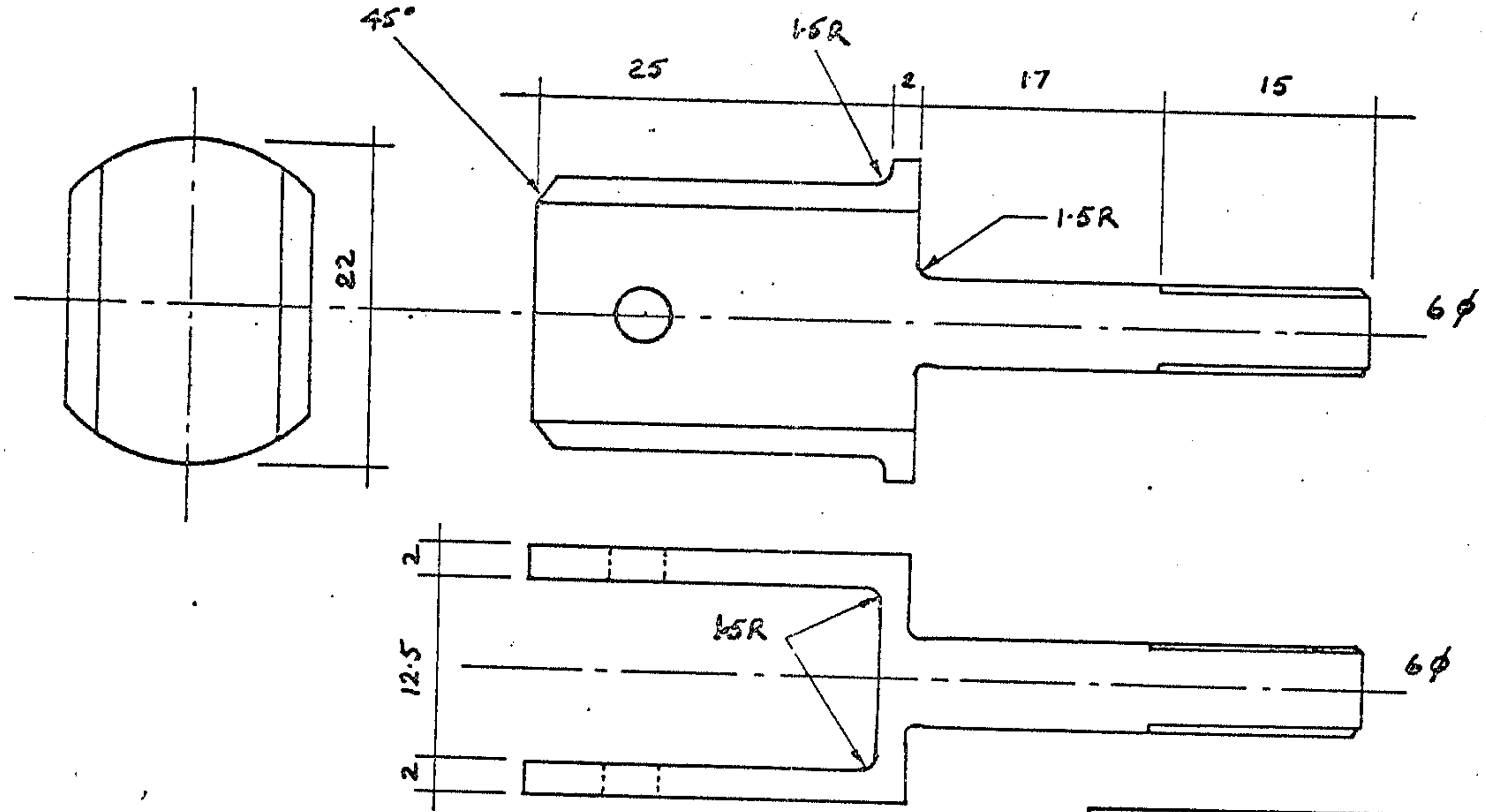
Poppenhausen, March 16, 1981

ALEXANDER SCHLEICHER
Segelflugzeugbau

Gerhard Waibel

Gerhard Waibel.

Bocian File.



Scale: TWICE FULLSIZE	BOCIAN LOWER RUDDER HINGE BRACKET
ALL DIMENSIONS IN M.M.	
Material: S106 CADMIUM PLATED	MTB 060981

Bocian Rudder Hinge [illegible] BGA/Bocian/1/81. 15/9/81.

MICHAEL TAYLOR - BEASLEY

C.A.S.I
No: 9/81

Ref: EW/G81/04/04

Aircraft:	Socata Rallye 100ST G-BDED
	CARB - ICING.
Date and time (GMT):	4 April 1981 at 9.05 hrs
Location:	Papa Westray Airfield, Orkney Isles
Type of flight:	Private (business)
Persons on board:	Crew - 1 Passengers - nil
Injuries:	Crew - nil Passengers - N/A
Nature of damage:	Undercarriage detached, wings damaged, fin bent
Commander's Licence:	Private Pilot's Licence
Commander's total flying experience:	176 hours

Whilst making an approach to runway 04 on Papa Westray Airfield at a height of approximately 100 feet the engine stopped. The main undercarriage struck a stone wall at the field perimeter causing the aircraft to cartwheel and come to rest inverted. There was no fire. The pilot considered the cause of engine stoppage to be carburettor icing and reports that carburettor hot air was selected. Ambient temperature was 5.5°C and humidity 99%.