B.G.A. Technical Committee

TNS 10/11/12/81

- Part 1: (Airworthiness "Aggro" (Do not add to 1981 yellow pages, which will be re-issued 1/82))!
- 1.1 T.61 "Falke" Cracked (front) tailplane attachment brackets, adjacent to the weld at the centre bolt hole strip-off paint and inspect/repair as required. (May also apply to SF 25 series). (Reported to S.E.L. and C.A.A.).
- Blanik. Wing-Root (main-spar spacer), inspection for cracks ("laps"). Bulletin Ll3/048 (Ref. TNS 4/5/78) has been extended to all serial numbers of Blaniks by Bulletin Ll3/053 dated May '81. (Extracts from Ll3/048 repeated herewith).
- Skylark 3/4. Outer wing fittings- Severe Corrosion.

 A case of massive defoli ation of the outer wing attachment fitting, within the spar area was detected only because of significant ply skin distortion around the fitting. (Reported by Speedwell Sailplanes on Skylark 4 C of A).
- 1.4 <u>Kestrel. Rudder Actuator</u>. TT 101/T59 herewith requires inspection for cracks at welded areas. (CAA mandatory before March 1982).
- 1.5 T.53 Wing Centre section. Frame 6. Inspection for cracks. Tl 100 (herewith) has been mailed to registered owners, and requires immediate inspection, repeated annually.
- 1.6 <u>Diamant</u>. Lower rudder hinge failures. FAA/AD has been issued requiring inspection- repeated annually.

Part 2: General Matters

- 2.1 LS3 a. Serial Numbers as listed in Tech. Bulletin No. 3028 offers optional Aileron Mass Balance to "improve flight characteristics to gust sensitivity". Details from Vendors.
- Glider Tow Hook Release Springs. Where replacement springs are not available, B.G.A. Technical Committee will consider minor modification applications to fit external springs, properly engineered to achieve an equivalent standard of airworthiness.
- 2.3 Carman JP 15/36 Undercarriage hand-grip lever.
 Rubber cover may slide up the handle, and baulk the "down" lock. (Reported by Peterborough and Spalding G.C.).

"Unrecommended use of Sytrofoam brand plastic foam in aircraft construction"

The above titled letter from the Dow Chemical Co. "unrecommends" the use of Styrofoam in aircraft construction "due to the absence of testing". (This is the normal product liability disclaimer - CTO).

2.5 Blanik. Fin Support Frame 13 (front) Recurring cracks in this area require repair - (consult Chalky white Nympsfield).

Part 3: Tugs and Motor-Gliders

- 3.1 T.61 Falke Series Ref. paragraph 1.1 for action on Tailplane attachment bracket failure.
- Carburettor Heat Shrouds and Shutter Controls.

 (All types). Recurring maintenance is required to prevent failures, and to eliminate hot-air leakage when "cold" is selected, thereby degrading performance. These components are subject to dynamic activity every time each cylinder breathes-in! (Ref. G.A.S.I. 10/81)
- 3.3 Fuel Tanks Contaminated with water. There have been fourteen cases reported to CAA in 5 years.

Fatal accident to parachute dropping aircraft due to water in the fuel. (A.I.B. Bulletin).

Water in fuel lines may freeze. (G.A.S.I. 10/81),

Fuel tank caps/covers may allow water to enter fuel tanks. (G.A.S.I. 10/81).

NEED MUCH MORE BE WRITTEN BEFORE COMMONSENSE PREVAILS?

"Mogas" A B.G.A. Report published October 1981, titled "the case for B.S. 4040 Mogas in selected light aircraft" was submitted to the Airworthiness Requirements Board (light aircraft) Committee meeting 12/10/81, and to the CAA (Airworthiness Division). It has been given worldwide publicity in "Flight International". (Copies availabe from B.G.A. office).

"Airedale" fuel system components (plastic carbfloat, and rubber fuel-pump diaphrams) show no signs of deterioration after 14 months/1400 galls of Mogas. Spark plugs remained clean after 200 hours untouched. 4.0 B.G.A. Inspector Renewals (due October 1981).

Those who have failed to send £8.50 subscription will no longer be included in the list to be published in January 1982, and your insurance cover will lapse. Please respond a.s.a.p., or otherwise you will not receive 1982 mandatory inspection summary. TNS etc!

ONCE UPON A TIME there was a non-conforming robin who decided not to fly south for the winter. However, the weather soon turned so cold he reluctantly started to fly south. In a short time ice formed on his wings and he fell to earth, almost frozen and landed in a farmyard.

A cow passed by and dropped a "PAT" on the little robin. He thought it was the end but instead the "Deposit" warmed him and defrosted his little wings. Thus warm and happy and able to breathe, the little robin started to sing. Just then a large cat came by and hearing the chirping investigated. The cat found the happy little bird and ate him.

This story contains three morals:

- 1. Anyone who drops you in it is not necessarily your enemy.
- 2. Anyone who gets you out is not necessarily your friend.
- 3. If you are warm and happy keep your mouth shut.

Happy x-mas to all our readers from the Chief Technical Officer and the Technical Committee.

2. A Andre

Dick Stratton Chief Technical Officer

SLINGSBY ENGINEERING LIMITED

AIRCRAFT DIVISION

TECHNICAL INSTRUCTION

TNS 12/81



T.I. No. 101/T59 Issue 1

TITLE

Kestrel Rudder Actuator Inspection

CLASSIFICATION

CAA MANDATORY

COMPLIANCE

A single inspection to be completed by 1st March 1982

OBJECTIVE

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

JUSTIFICATION

Cracks on the fitting have occurred, in Area A shown on diagram, the cause of which cannot be established.

APPLICABILITY

All Slingsby T59A, 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

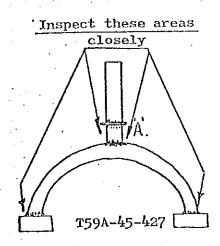
If cracking is found the part must be discarded immediately and scrapped.

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.

Anotate aircraft log book showing compliance of this T.I.
All findings to be reported to the

All findings to be reported to the undersigned.



MAN HOURS: Approximately $2\frac{1}{2}$ hours will be required to complete this action.

PARTS REQUIRED

If inspection reveals a defective actuator, a replacement T59A-45-427 issue 5 (one off) actuator may be obtained from S.E.L.

ISSUED BY:

Chief Engineer

B. Mellers Chief Engineer

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Date 5-11-81

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SLINGSBY ENGINEERING LIMITED



TECHNICAL INSTRUCTION

TITLE	T-53/

T.I.No. 100/T53 Issue 1

Inspection of attachment of wing centre section to Frame 6.

COMPLIANCE

CAA MANDATORY Inspection to be completed before next flight and annually thereafter

JUSTIFICATION

This is a re-issue of the information of TI 90 which this instruction hereby cancels and replaces. A failure in fatigue of the brackets which holds the rear spar member of the centre section to Fuselage Frame 6 has been reported.

APPLICABILITY

All T53B gliders and to later variants of YS 53 by Yorkshire Sailplanes.

RESTRICTIONS

The glider must not be flown until this Technical Instruction is carried out.

OBJECTIVE

To inspect for fatigue cracks in the affected parts listed below: T53B-10-168 issue 1-1 welded fittings rivetted T53B-10-168 issue 5 T53B-10-118 issue 1 T53B-10-115

PARTS REQUIRED

In the event of cracks in any of the fittings then they must be discarded and new parts fitted.

PROCEDURE

Remove glass fibre fairing No.T53B-10-1093 and wings if fitted. Using a Dye penetrant crack detection system, inspect for cracks at the corner of the fittings where the attachment flanges begin (a) the welded brackets Pt No.T53B-10-168 issue 1-4 see figure 1 page 2 which holds the rear spar member of the c/s to the fuselage frame 6 and (b) the alternative riveted bracket Pt No.T53B-10-168 issue 5. Also in a similar manner inspect the metal lugs T53B-10-115 and channel section T53-10-118 on frame 6. See Figure 2. Checking for cracks in way of rivets.

If any cracks are found the aircraft is to be grounded. All findings to be reported to SEL marked for the attention of the undersigned. New components can be obtained from SEL if required as listed above. If there are no cracks the aircraft is cleared for flight.

Once the inspection has been complete the TI 100/T53 action should be recorded in the aircraft log book.

ISSUED BY:

B. Mellers

for and on behalf of

CHIEF ENGINEER/AIRCRAFT DIVISION

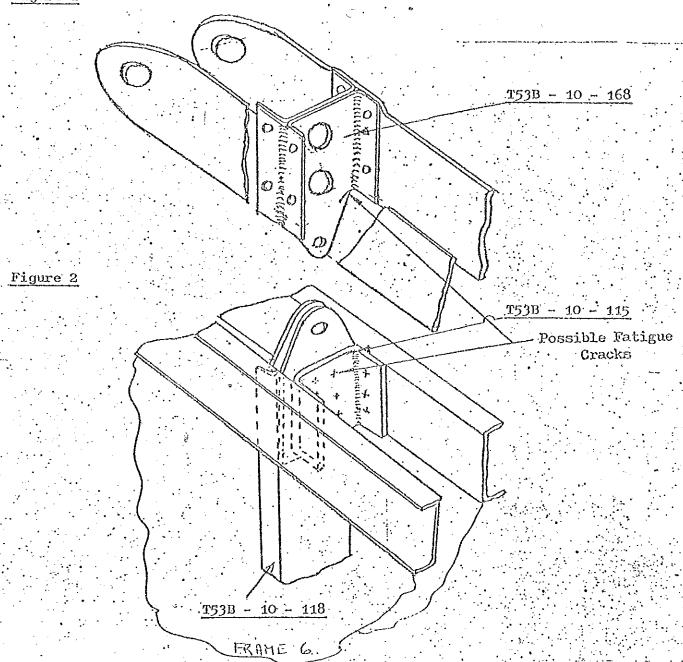
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T53 WING CENTRE SECTION JOINTS

TO FRAME 6

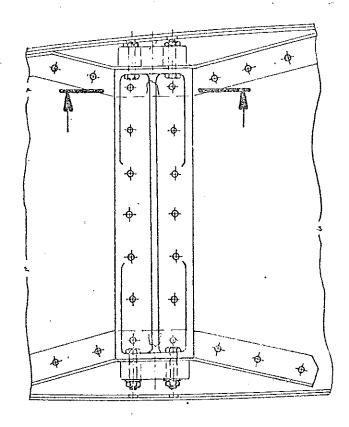
Figure 1

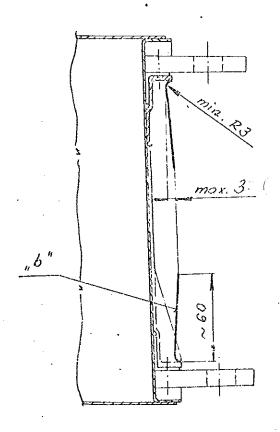


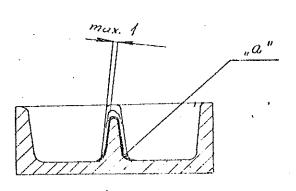
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1550E 1 20/10/81

1. Blank 213/048/053 WINR REST CRACKS.







1. 13/048 Vypracoval Kontroloval Schvalii Listů:
Listů:

BLANIK L13/048/053 CRACKS at WING ROOT. 13 14 12 14 List: 5 Schválil Kontroloval t. 13/048 Lista:6