



AIRWORTHINESS DIRECTIVE

JANTAR SERIESTYPES AFFECTED:

SZD-37	SZD-42-1
SZD-38	SZD-42+2
SZD-38A	SZD-48
SZD-42	SZD-48-1

SUBJECT:

Replacement of the aileron pivot pins and their securing M3 screws.

BACKGROUND:

Manufacturers Service Bulletin No. BR-016/81 "Jantar" outlines the possibility of corrosion causing seizure of the pivot in the aileron, at the end of the aileron/wing connecting rod. The seizing action can cause the M3 shaft securing screws to shear off.

In Australia the M3 screws have been found to shear when being removed for normal maintenance, and evidence of corrosion/seizing of the pivot pins noted.

The Bulletin forms part of this A.D.

REQUIRED ACTION:

(1) NEXT FORM 2 INSPECTION (OR BEFORE)

Remove both ailerons and implement SB Br-016/81, replacing the pins but only replacing the M3 screws if required.

(2) SUBSEQUENT FORM 2 INSPECTIONS

Ailerons to be removed, pivots cleaned, relubricated and screws checked both for signs of shearing and thread condition. Replace M3 screws with M4 screws as found necessary.

PARTS AVAILABILITY:

The manufacturer has provided Adams Aviation with parts for all Jantars, which are available from -

T. Gilbert,
P.O. Box 324, Camden N.S.W. 2570

The pins vary in detail so the correct Jantar model must be stated when requesting parts.

CAUTION:

IF THE AILERON/WING CONNECTING LINKS ARE SWAPPED OVER AND FITTED INTO THE OPPOSITE WING, BY ERROR, ALTERATION OF THE RANGE OF AILERON MOVEMENT WILL RESULT.

IMPLEMENTATION:

SB Br-016/81 can be carried out by any GFA inspector holding a DoA 1100 endorsed for C. of A. inspection for any type of construction material. A dual inspection should be made of the aileron circuit on completion.

LOGBOOK:

Full details of this modification are to be entered into the logbook.

COMPLIANCE:

The requirements of this AD are mandatory. This Directive is issued pursuant to Air Navigation Regulations under the delegated authority of the Secretary of the Department of Aviation.

Issued by: *M P Burns* Chief Technical Officer
Airworthiness

8/5/1985

For and on behalf of:

GLIDING FEDERATION OF AUSTRALIA

Sheet 1 of 1

Ref: Replacement of pins connecting the aileron control lever on wing with the aileron itself.

Way of introduction: Change described in this Bulletin shall be introduced on below listed gliders up to Sept. 30 1983.

Note: This Bulletin covers the following types of gliders;

SZD-37	SZD-42-1
SZD-38	SZD-42-2
SZD-38A	SZD-48
SZD-42	SZD-48-1

This text is the translation of Polish version
approved by CACA.

1. GROUNDS FOR INTRODUCING THIS BULLETIN

This Bulletin is introduced in connection to the in operation observed shearing of M3 screws securing the bolts which connect the aileron control lever in wing with the aileron itself, as well as the analysis of the cause involving this shearing of above mentioned screws which shall be replaced. The new bolts delivered together with this Bulletin have the corrosion-resistant working surface. It should be noted that the cause of shearing of above mentioned securing screw is the lack of grease between the working surfaces/

In case the water penetrates into the non greased elements of control system the condition favourable for corrosion appears.

This corrosion results a jamming of the screw in lever. The increment of friction between the lever and pin results the shearing of securing screw/remember that the maintenance of above element of control system is required by Technical Service Manual.

2. LIST OF GLIDER FACTORY Nos COVERED BY THIS BULLETIN

This Bulletin covers the following types of "JANTAR" family gliders having the below listed Factory Nos.

- 2.1 SZD-37 Fact. Nos. X-104 and X-105
- 2.2 SZD-38 Fact. Nos. X-108 and X-109
- 2.3 SZD-38A Fact. Nos. from B-609 and B-627
from B-634 to B-642 and from B-664 to B-689
- 2.4 SZD-42 Fact. Nos. X-119 and X-120
- 2.5 SZD-42-1 Fact. Nos. X-128 from B-776 to B-792
B-867 and B-876
- 2.6 SZD 42-2 Fact. Nos. X-131, from B-858 to B-868, from B-868 to B-875,
B-908, from B-934-953, B-964, from B-1065 to B-1074,
from B-1125 to B-1134 and from B-1305 to B-1314
- 2.7 SZD-48 Fact. Nos. from W-846 to W-890
- 2.8 SZD-48-1 Fact. Nos. from W-891 to W-926
from B-985 to B-1064, from B-1095 to B-1124
and from B-1135 to B-1274.

3. LIST OF ENCLOSURES

The enclosures to this Bulletin are:

Fig 1, Fig 2, Fig 3 being the illustrations of control system portion concerned and the drawings of pins.

4. DESCRIPTION OF CHANGE

The change introduced by this Bulletin depends on the replacement of the pins connecting the aileron control system lever in wing with the aileron actuating member.

Instead of the pins protected against corrosion by means of oxydation the chromium plated or made of stainless steel one are replaced. In case the M3 screw securing the pin against shifting off is sheared or its thread in aileron actuating member is worn it should be replaced with M4 screws enclosed to this Bulletin. The procedures of replacement this screw are described in item 5.3 of this Bulletin.

5. PROCEDURES TO INTRODUCING THE CHANGES DESCRIBED IN THIS BULLETIN

To replace the concerned pins:

5.1 Take the aileron out of hinges/in case of gliders SZD-37, SZD-38 SZD-38A, SZD-42. SZD-42-1 or disassemble in case of gliders SZD-48 and SZD-48-1. In case of gliders SZD-42-1 and SZD-42-2 the aileron should be taken out when the wing outer panels are disassembled.

5.2 Remove the pin securing M3 screws and take out the pin. In case the M3 screw is sheared the pin rotating together with the lever cuts the elliptic hole in the glass-fibre skin. This hole should be glass-fibre covered and glued up.

5.3 Clean and grease the hole in lever and aileron actuating member. Put on the new pin covered with a grease / in case of gliders SZD-37, SZD-38 and SZD-38A the portion of pin protruding out of the aileron outline should be filed away.

Secure with the screw in case the M3 screw is sheared or the thread worn, the hole for the above mentioned screw should be reamed on $\varnothing 4$ and the hole in the aileron actuating member threaded on M4.

5.3 (contd)

The screw in position should be immobilized by means of a drop of lacquer.

- 5.4 Assemble the aileron and secure with its buffer as prescribed in Technical Service Manual. Check the operation of aileron.

6.0 FINAL STATEMENTS

The described change is to be introduced by the user himself.

Together with this Bulletin the producer supplies appropriately:

- 6.1 Pins: 2 pieces of length $l = 49$ mm and 2 pieces of length $l = 59$ mm for gliders: SZD-37, SZD-38, SZD38-A, SZD-42-1 and SZD-42-2 Fig. 2, or;
- 6.2 Pins: 2 pieces of length $l = 46$ mm for gliders: SZD-48 and SZD-48-1 Fig 3.
- 6.3 Screws M4/10/ acc to BN-76/1112-04 standard - 4 pieces for gliders: SZD-37, SZD-38, SZD-38A, SZD-42-1 and SZD-42-2 or 2 pieces for gliders SZD-48 and SZD-48-1

The works related to this Bulletin should be noticed in the Glider Log Book and approved by the Authority.

Lotka lewa SZD-48-1 (SZD-48) - jako przykład.
Left aileron SZD-48-1 (SZD-48) - for example.
Linkes Querruder SZD-48-1 (SZD-48) - zum Beispiel.
Левый элерон SZD-48-1 (SZD-48) - на пример.



A-A

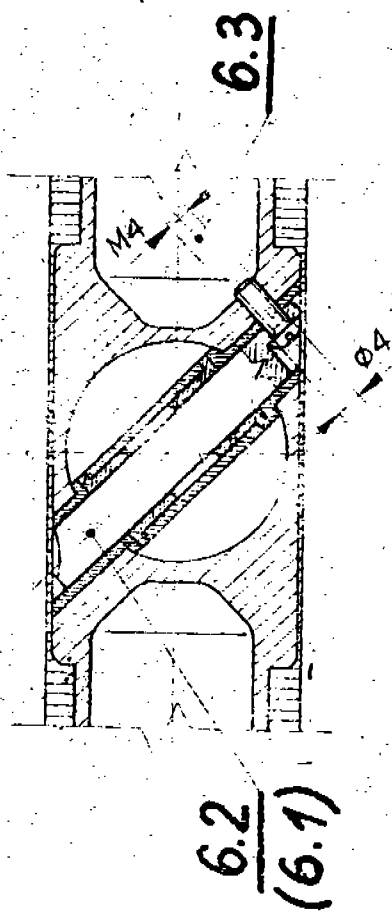
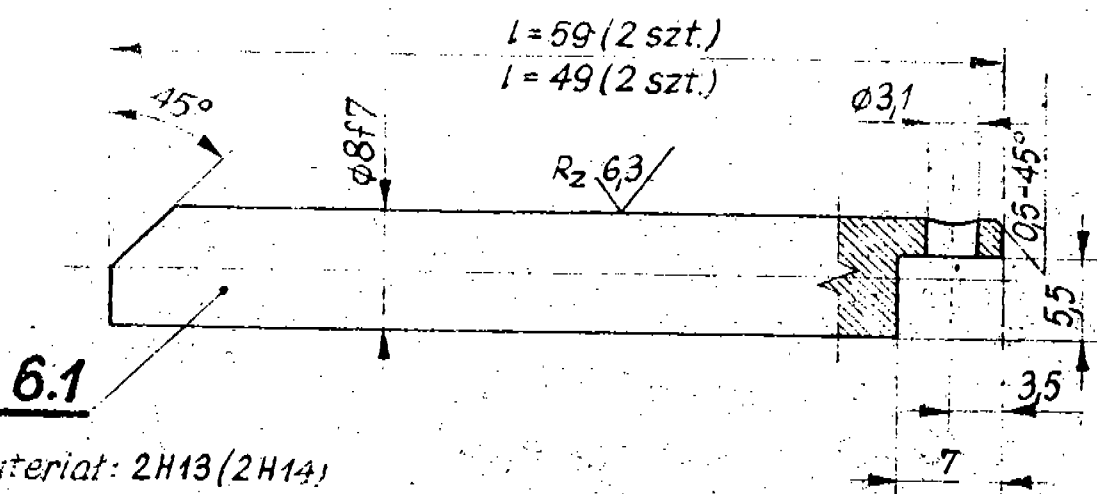


Fig.1.



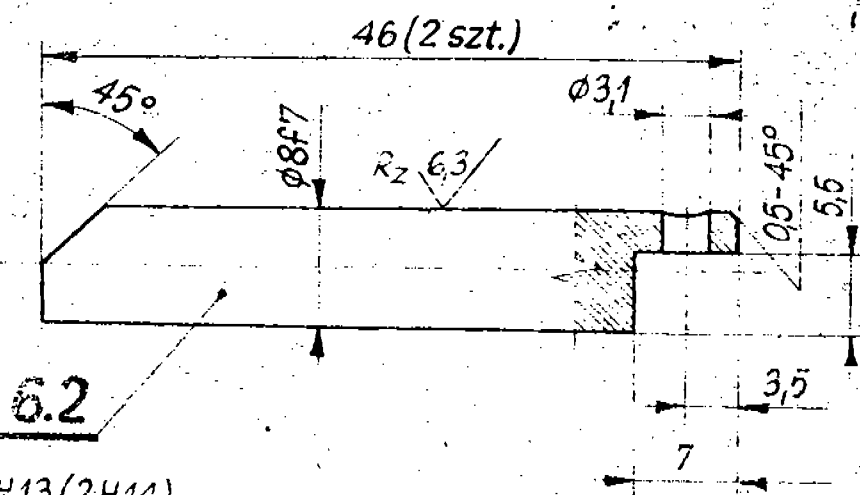
Materiał: 2H13 (2H14)

Hartować: 1000-1050°C

Odpuszczać: 640-780°C (woda lub olej)

$R_m = 65 \text{ kg/mm}^2$

Fig. 2.



Materiał: 2H13 (2H14)

Hartować: 1000-1050°C

Odpuszczać: 640-780°C (woda lub olej)

$R_m = 65 \text{ kg/mm}^2$

Fig. 3.