



AIRWORTHINESS DIRECTIVE

Issue 1

TYPE AFFECTED:

SZD-9 BOCIAN 1E SAILPLANES

SUBJECT:

Replacement of elevator horn alloy rivets with steel rivets.

BACKGROUND:

Manufacturer's Service Bulletin BK-023/82, Bocian1E asks for inspection/replacement of the above rivets.

The bulletin forms Sheets 2, 3, 4, 5, & 6 of this A.D.

REQUIRED ACTION:

(Overriding Bulletin Required actions)

(1) Before next flight

Inspect the rivet joint for signs of loose or sheared rivets as described in Section 5 of the bulletin.

If looseness/shear is found, replace the alloy rivets as described in (2).

(2) Form 2 inspection

At or before the next Form 2 inspection replace the 6 alloy rivets with steel 3 mm dia. rivets, supplied by the manufacturer. Alternatively open the holes to 1/8" dia. and fit AN 435-M4 Monel rivets, MS206134C (or equivalent) length as required.

IMPLEMENTATION:

This modification can be carried out by any person authorised on their 1109 for metal repair or component replacement,

LOG BOOK

Inspection/rectification details to be recorded in the sailplane's log book.

COMPLIANCE:

The requirements of this Airworthiness Directive 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:

*R. P. Burns*Chief Technical Officer
Airworthiness

For and on behalf of:

GLIDING FEDERATION OF AUSTRALIA

10/10/83

Sheet 1 of 6

BULLETIN No BK-023/82 "BOCIAN-1E"

Ref.: Replacement of duraluminium rivets into the steel one in the connection of elevator control system lever with the torque tube and the inspection of this connection up to the date of introducing the change.

Way of introducing: To be introduced by way of the nearest 200 flying hours maintenance.
In the meantime inspect the above mentioned connection after each 50 flying hours.

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 found, but individual, case of the rivets connecting the elevator actuating lever with the shells of torque tube being sheared off. This fault occurred in aerobatic manoeuvres performed. The change is aimed to protect the gliders of "Bocian 1E" type against such an accident.

The change depends on the replacement of duraluminium rivets in the connection of elevator control system lever with the new steel ones by way of the nearest 200 flying hours maintenance. Up to the date of replacement of the above rivets the inspections of this connection after each 50 flying hours shall be performed for safety reasons.

2. List of glider Fact. Nos covered with this Bulletin

This Bulletin covers all the gliders of SZD-9 bis - 1E "Bocian 1E" type having the Fact. Nos from P-425 to P-789.

3. List of enclosures

To this Bulletin the sketch Fig. 1 describing the above mentioned lever and the way of riveting it is enclosed.

4. Description of the change

The change defined in this Bulletin depends on the replacement of duraluminium rivets by the steel ones of the same dimension in the connection mentioned above.

The change should be introduced by way of the nearest 200 flying hours maintenance. Up to the date of introducing this change the connection of lever with elevator torque tube shells should be inspected after each 50 flying hours for safety reasons.

5. Procedures of introducing the change described in this Bulletin.

To introduce the change follow the way described below:

- 5.1. Disassemble the horizontal tailplane out of the glider
- 5.2. Disassemble the elevator out of the stabilizer.
- 5.3. Cut off by means of chipper the heads of 3 rivets /each second in the rivet-row/ connecting the lever with torque tube shells /pay attention to avoid the damage of torque tube!/.
Remove the rivets and replace the new steel ones /steel 45/.- 5.4. Fasten the rivets on crossed sequence /beat the rivets by intermediation of metal strip/.
Minimum height of formed rivet head should range 1,2 mm, Pay attention that the rivet correctly plugs the hole diameter. For this reason a hammer of about 1 kg mass and the support of about 2 kg mass are necessary.
- 5.5. With the rest of rivets proceed similary to instructions of items 5.3. and 5.4.
- 5.6. Formed rivet heads should be protected with the pad for metal.
- 5.7. Assemble the elevator, check the operation.

NOTE:

Up to the date of introducing this change after each 50 flying hours the connection of actuating lever with torque-tube shells shall be inspected in the following way:

Repeat the procedures described in items 5.1. and 5.2. Immobilize the elevator in a way enabling to apply the load of about 10 daN upwards and downwards in respect to lever plane. Touch with the finger the place of fitting the shells to torque-tube and check for the plays. In case the play is found the described change shall be made immediately. If no play appears proceed acc. to the above described directions.

6. Final statements

Together with this Bulletins the producer supplies.

6.1. Rivets 3x15 /15/ acc. to BN-70/1121-03
standard - 6 pieces.

This Bulletin is to be introduced by the user himself. The works on reriveting the levers should be performed by the producer or the repair workshop approved by the Authority.

The change introduced should be noticed in the glider documents.

- THE END -

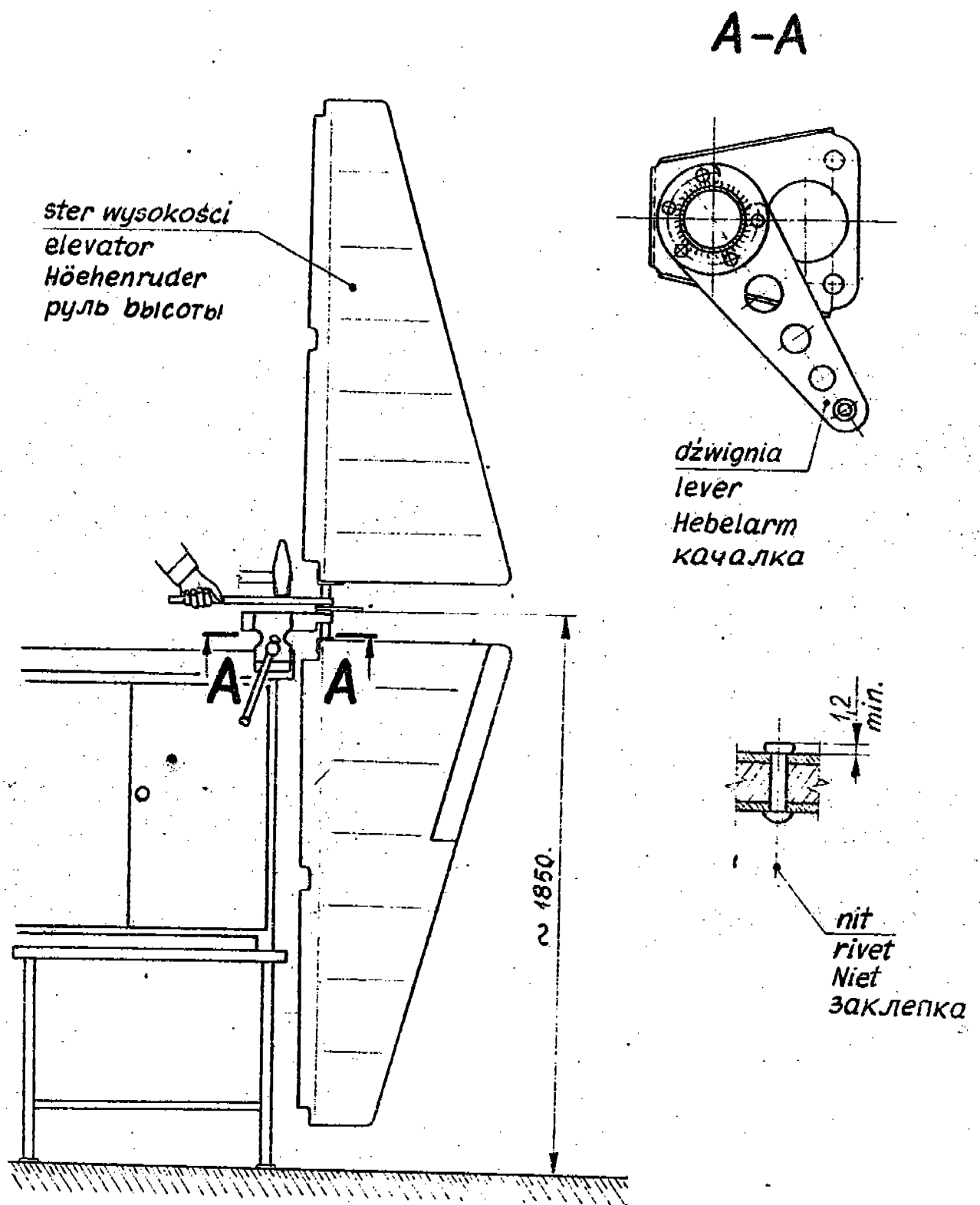


Fig.1.