## THE GLIDING FEDERATION OF AUSTRALIA



**GFA AD 158** 

(ISSUE 2)

## **GFA AIRWORTHINESS DIRECTIVE**

TYPE AFFECTED:

SZD-9 bis Bocian 1D and 1E.

SUBJECT:

Periodic Inspection requirements.

BACKGROUND:

Issue 1 of this AD required the periodic inspection of the fuselage

carry through and the wing root fittings.

The Technical Bulletin under which this AD was issued was replaced by Bulletin BE-20/80 Bocian which simplified the

inspections required.

This AD has therefore been reissued and consideration has also been made of the fact that the GFA requires detailed Daily and Annual

Inspections.

**DOCUMENTATION:** 

PZL-Bielsko Bulletins BE-20/80 Bocian, BE-21/81 Bocian and

BE-27/86 Bocian.

**ACTION REQUIRED:** 

The periodic maintenance requirements in the Technical Description for the Bocian 1E and the Service Manual for the Bocian 1D may be ignored because most of the requirements are covered in normal Daily and Annual Inspections and Surveys (GFA AD 337).

To ensure that the specific items which have had reported defects are checked the following points must be inspected at each annual inspection.

Inspection for cracks as per actions 1, 5 and 6 must be performed using red dye penetrant inspection in accordance with the procedures in "Basic Sailplane Engineering".

1. The wing main fittings must be inspected. The areas shown in Figure 1 are the most likely positions for cracks and damage.

SIGNED:

CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION OF AUSTRALIA

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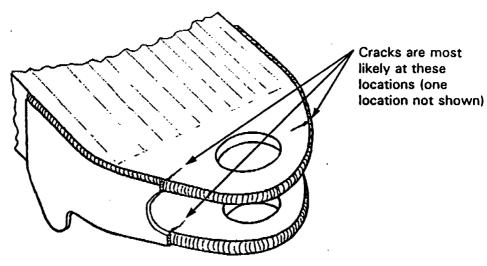
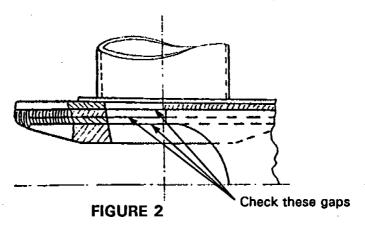


FIGURE 1

2. Check that the laminations of the main wing fittings are not separating. The maximum gap allowed is 0.4 mm. Any slipping movement between the laminations is not permitted.



- 3. Conical wing pins. In addition to a normal visual inspection the contact area between the conical pins and the wing fittings, measured using Prussian Blue or similar must be at least 70% of the total area.
- 4. Rear spar fitting. The rear spar fitting must be inspected for cracks. Special attention must be given to the areas indicated in Figure 3.

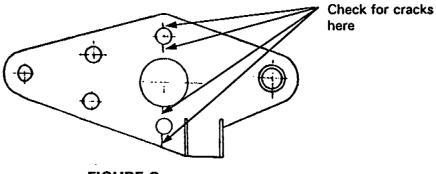
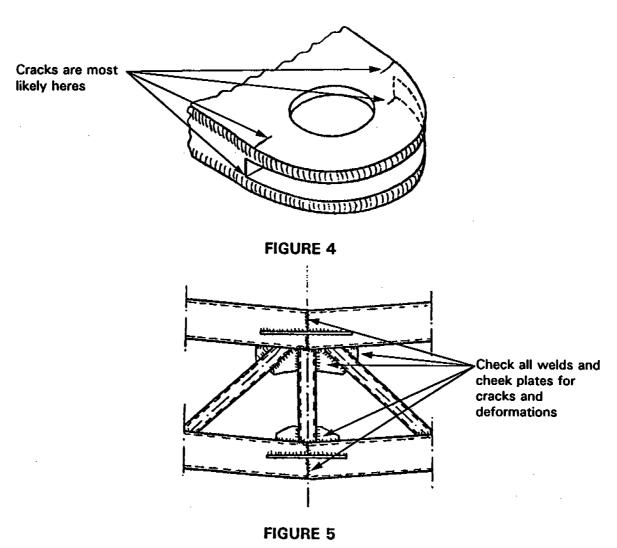
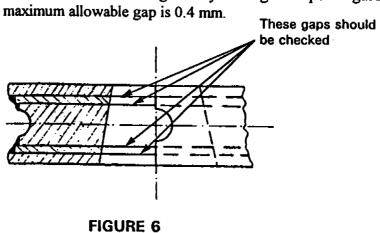


FIGURE 3

The main fuselage carry through must be inspected for cracks taking special care to inspect the places shown in Figure 4 and Figure 5.



As for the wing fittings check for separation of the laminates in the fuselage carry through as per Figure 6. The



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7. As per item 3 the main conical pin contact area with the fuselage fittings must be measured and must not be less that 70% of the possible area.

REPAIR:

Any cracks found must be repaired before further flight.

PZL Bielsko have prepared bulletin BE-27/86 Bocian which set down the maximum crack length and position which may be repaired. If cracks are found outside these dimensions then the part must be replaced.

The correct materials and technique for welding is contained in "Procedure of local cracks of main fittings repair" except that only TIG welding is permitted. Copies of these documents are available from the GFA Secretariat.

WEIGHT AND BALANCE: The effect on weight and balance of any repairs must be considered.

**IMPLEMENTATION:** 

Inspections 1 to 7 may be performed by persons Authorised for Annual Inspections any type.

If welding is require it must be performed by CASA approved welders.

Any wood work required to remove or replace damaged components must be performed by persons rated Minor or Major Repairs Wood as appropriate to the level of work required.

COMPLIANCE:

The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.