

AIRWORTHINESS DIRECTIVE GLIDERS:

GFA/AD 180 BRASOV 3

GLIDER TYPE AFFECTED: IS 28 B2

DEFECT DETAILS: Corrosion in Wing Structure

BACKGROUND:

During a daily inspection, corrosion of the lower main spar boom was detected through the dive brake opening. Corrosion was evident in several places. The glider had been tied down in the open when not being flown, over the period of three years.

Concern was expressed that corrosion had progressed so far before being detected. However the type of corrosion of the alloy employed is not readily detected where the component is painted, since unlike some other alloys, the corrosion products do not markedly disturb the paint film until corrosion is reasonably extensive. In this case conditions conducive to corrosion occurred because the spar components were painted before drilling for rivets and because the rivets were not protected with paint. Conditions for galvanic corrosion therefore exist in the presence of moisture.

REQUIRED ACTIONS

Carry out a careful inspection for corrosion, especially in areas subjected to moisture and where components are not adequately painted. Any slight ripples in paint films should be suspect; carefully scrape with a sharp knife to determine whether corrosion exists beneath the paint. (Do not use sharp pointed tools to cause deep scores). If corrosion is detected, forward details to the C.T.O.A., Gliding Federation of Australia, Building 130, Bulla Road, Essendon Airport, 3041. Even if no corrosion is detected, paint or repaint any areas unpainted or where the painting is defective.

It is recommended that the wing structure be treated by pouring approximately ten litres of penetrating oil such as WD 40, LPS.3 etc. which displaces moisture and leaves a residue. The oil should be poured into the wings and the wings rotated and tilted to slosh the oil throughout the wing to wet out all areas then drain the excess. Tail surfaces should be treated similarly.

Gliders which are not regularly hangared are more likely to be affected by corrosion than gliders which are hangared.

Where corrosion is detected, the glider must not be flown until the extent of corrosion damage is expertly assessed.

COMPLIANCE.

The required inspection set out in this Directive is mandatory and is to be carried out within 25 hours in service after receipt of this Directive.

This Directive is issued pursuant to Air Navigation Regulations under authority delegated by the Secretary of the Department of Transport.



DOUGLAS LYON
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GLIDING FEDERATION OF AUSTRALIA

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