



# THE GLIDING FEDERATION OF AUSTRALIA

BUILDING 130, WIRRAWAY ROAD, ESSENDON AIRPORT, VICTORIA 3041.

## AIRWORTHINESS DIRECTIVE GLIDERS/POWERED SAILPLANES

GFA/AD 221

SZD 24

24.11.1981

Issue 1

Sheet 1 of 2

TYPE AFFECTED: Cobra, SZD-36, SZD36A, SZD39 (Gliders)

SUBJECT: Longitudinal cracking of the leading edges of the wings and horizontal tailplane.

BACKGROUND: PZL Bulletin BR-004/80 details the inspection for and repair of cracks found, in the leading edges. Cracking is largely caused by exposure of the glider to moisture under inadequate storage conditions.

ACTION REQUIRED: (1) Inspection.

Inspect all leading edges for condition, cracks etc. If cracking is evident then one of two courses of action are open:-

(a) If cracking is found, shallow, no more than approx. 100mm long, essentially surface paint cracks, they can be filled and painted to prevent moisture penetrating into the leading edge block.

(b) If more severe cracking is evident, over 2mm deep, which will indicate splitting of the leading edge block, then the following repair method (Drawn on Sheet 2) should be carried out as soon as possible.

(2) Repair Procedure

The following procedure can be restricted to the immediate area around the cracks found. If cracking is extensive, then it may be more practical to sheath the entire leading edge.

(a) Remove surface paint from the area, then remove the glass fabric back to the wood, (Ref. to Fig 1.) scarfeing the edges to achieve proper bond of the new overlapping glass.

(b) Before proceeding ensure there is no excess moisture in the leading edge timber; excessive moisture content will prevent bonding of the repair.

(c) Fill the cracks with an epoxy filling compound, i.e. resin & micro ballon, etc. This is best done standing the surface vertical.

(d) After profiling the filled areas, apply 2 layers of Interglass 92110 fabric or equivalent, over the area to Fig 1, using epoxy resin.

(e) After curing, profile, filling with epoxy filling compound as necessary and re-paint.

(f) Enter details of repair in the log book.

IMPLEMENTATION: Repair work to be carried out by 1109 holder and endorsed wood or FRP repair-minor.

COMPLIANCE DATE:

(1) Before next flight

(a) Carry out leading edge inspection.

(2) Before February 28th, 1982

(a) Repair cracks found in accordance with this Directive.

(3) Form 2 inspections.

The inspection/repairs detailed above should be included in all future Form 2 inspections.

COMPLIANCE The requirements of this Airworthiness Directive are mandatory, issued pursuant to Air Navigation Regulations under delegation from the Secretary of Department of Transport Australia.

*M. P. Burns*

M.P. BURNS.

G.F.A. CHIEF TECHNICAL OFFICER AIRWORTHINESS.



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Fig. 1.

