COMMONWEALTH OF AUSTRALIA DEPARTMENT OF TRANSPORT

AIRWORTHINESS DIRECTIVE GLIDERS:

G.F.A. AD/119 FFA 3

GLIDER TYPE AFFECTED: FFA DIAMANT ALL MODELS.

BACKGROUND:

Information has been received of an in flight structural failure of a Diamant glider. Investigation has revealed the presence of a defect in the "tongue" spar extension of the "tounge and forks" wing spar joint; this defect was in the form of of a crack extending vertically up from the main rigging pin hole. Propagation of this crack led to delamination of the spar flanges and failure of the wing.

Investigation of the wing structure revealed other defects which were not primarily the cause of failure.

PRECAUTIONARY INSPECTION:

1. Derig the glider and examine with the aid of a magnifying glass the rigging pin hole in both the "tounge" and "fork" spar ends of each wing. If any evidence of cracks or bearing pressure failure around the hole is detected notify the C.T.O.A. Suff.A. Building 130 Bulla Road Essendon Airport Victoria.

The glider's Maintenance Release is to be suspended and the glider declared unairworthy until such time as further assessment is made.

2. Re-rig the glider and with the fuselage supported in a cradle place a spirit level transversely across the the cockpit coaming and level the glider. Measure the wing tip clearance from the ground then apply simultaneous equal upward loads of approximately 30 kg. force at each wing tip using spring balances to ensure equal loading. Check with spirit level to ensure no rolling of the fuselage has occurred and measure wing tip clearance from the ground while the wings are under load. Compare the deflections measured between each wing and if the measured deflections vary by more than 10% notify the C.T.O.A. as above giving details.

NOTE: It is most important to ensure that no rolling movement of the glider fuselage occurs when carrying out loading or wing tip measurements as this will make measurements meaningless.

COMPLIANCE:

The requirements of this directive are to be carried out before further flight of the glider. The airspeed and load limitations set out in AD 114 remain in force. This directive is mandatory and is issued pursuant to Air Navigation Regulations under the delegated authority of the Secretary of the Department of Transport.

DOUGLAS LYON

CHIEF TECHNICAL OFFICER AIRWORTHINGSS

GLIDING FEDERATION OF AUSTRALIA

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