



AIRWORTHINESS ADVICE NOTICE

TYPE AFFECTED: LS 1 series.

SUBJECT: Miscellaneous airworthiness information.

BACKGROUND: This AN records airworthiness information which is not mandatory but which is useful to know. This information includes lists of approved modifications.

APPROVED MODIFICATIONS:

1. LS 1f. Rolladen Schneider technical bulletin No. 29 describes the optional modification of the instrument panel to improve visibility. Parts and drawings should be obtained from Rolladen Schneider or their Australian Agent.
2. LS 1f. Rolladen Schneider technical bulletin No. 30 describes the optional modification of the control column to change the ratio of control column travel for aileron to elevator. Parts and drawings should be obtained from Rolladen Schneider or their Australian Agent.
3. LS 1f. Rolladen Schneider technical bulletin No. 31 describes the optional installation of tail ballast. If tail ballast is installed the increase in minimum and decrease in maximum pilot weights must be determined by the holder of a DA1109 Glider Inspectors Certificate endorsed for weight and balance and the placards altered accordingly. Copies of this technical note may be obtained from the GFA secretariat. Parts and drawings should be obtained from Rolladen Schneider or their Australian Agent.
4. LS 1f. Rolladen Schneider technical bulletin No 51 describes the optional installation of a later model tailplane locking device featuring a spring loaded ratchet. Copies of this technical note may be obtained from the GFA Secretariat. Parts may be obtained from Rolladen Schneider or their Australian agent.

MAINTENANCE INSTRUCTIONS:

1. LS 1 (a-b-c-d-e-ef-f). Rolladen Schneider technical bulletin No. 45 describes the method of determining whether the dive brake freeplay is excessive. The test may be performed as follows.

Apply a load of about 25 kg in the flight direction to each airbrake lever, this corresponds to an inflight load of approximately 120 kts.

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For and on behalf of:

**THE GLIDING FEDERATION
OF AUSTRALIA**

Under this load each lever may touch the wing shell cutout but should not be obstructed.

Should the upper bolt or nut interfere with the cover blade support, an appropriate portion of the support may be cut away.

POSSIBLE DEFECT:

1. There have been defect reports received both here and overseas relating to canopy support structure failures in LS1, LS3 and LS4 type sailplanes.

The canopy when extended is supported on a structure which is subjected to in service fatigue loads caused by opening in windy conditions and tow-out with canopy unlocked (causing bouncing on the strut).

The fatigue accumulates and can result in failure of the lower 25 x 25 mm square (fore and aft) structure anchored to the floor. This tube is thin walled (<1 mm) and generally fails towards the rear end of the central tube. Refer photos.



Repair welding work requires the four floor mounting points to be jugged to ensure the geometry is maintained and the part fits back in place. The repair should be carried out in accordance with an engineering order or approved data equivalent.

In the case of LS1, the canopy attachment does not latch with pins along the front of the canopy frame. In the event of an inflight failure of the frame, the canopy could suddenly separate from airframe.



It is highly recommended that the affected area be inspected for defects or cracking at every Daily Inspection.