

THE GLIDING FEDERATION OF AUSTRALIA

GFA AD 445
(ISSUE 1)

GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED: LS 3, LS 3a, LS 3-17.

SUBJECT: Air brake drive mechanism inspection and modification.

BACKGROUND: Overseas experience has shown that excessive play in the air brake bevel gear at the root rib or in the fuselage drive may cause the retaining bolt of the gear drive plate to fail.

DOCUMENTATION: Rolladen Schneider Technical Bulletin 3044 which forms part of this AD.

ACTION REQUIRED:

1. Before next flight and at each Annual Inspection inspect the air brake bevel drive gear and the fuselage air brake drive for freeplay in accordance with Items 1 and 2 in Technical Note 3044.
2. At the next Annual Inspection after 30 March, 1996 the air brake bevel gear must be modified in accordance with the procedure in Item 3 of Technical Note 3044.

WEIGHT AND BALANCE: Not affected.

IMPLEMENTATION: Compliance with this AD may be certified for by persons rated for "Issue of Maintenance Releases" any type.

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.

SIGNED:


CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

THE GLIDING FEDERATION
OF AUSTRALIA

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SUBJECT : Air brake drive

EFFECTIVITY : Sailplane model LS3, all versions (LS3, LS3-a and LS3-17)

ACCOMPLISHMENT : immediately

REASON : With excessive play in bevel gear drive at root rib or at fuselage drive between root ribs, the retaining bolt of the gear drive plate may fail.

MATERIAL and INSTRUCTIONS :

- 1) Check play in bevel gear drive at root ribs:
The bevel gear drive plate must be axially free from play, but should be unbraced. Compensation of play by shims 16*12 mm (When this play is excessive, the plate may skip over one or more teeth, resulting in air brake being either not completely retractable or extendable).
See also drawing on page 2.
- 2) After rigging the plane - check spanwise play of fuselage air brake drive between bevel gears with air brakes not locked. Also, this value must be free from play, but unbraced.
Compensation of play by shims 14*10 mm.
(When this play is excessive, the root rib is being deformed during locking, resulting in possible failure of the bevel gear plate retaining bolt and also air brake being either not completely retractable or extendable).
- 3) Modification of the air brake bevel gear unit to version "a" (Drawing 1BF-4a), identifiable by locking nut M8, width over flats 13 mm at the gear drive plate, instead of locking nut M6, width over flats 10 mm.
Disassembly of bevel gear units as follows:
 - a. Mark bevel gear meshed using permanent marker, eventually after degreasing with white spirit.
 - b. Mark gear unit with serial number of plane and R or L for left or right unit.
 - c. Dismount units from wings and send them to the manufacturer for modification.

WEIGHT AND BALANCE : Not affected

REMARKS : Inspection by operator, modification by manufacturer or manufacturer-assigned national authority approved repair station.
Accomplishment of inspection (TB 3044, measure 1 and 2) to be checked by inspector and signed in logbook.
Accomplishment of modification (TB 3044, measure 3) to be checked by inspector and signed in logbook until 01. July 1994.

LBA-approved :



U. Föppe
20. Juli 1993

LBA-AD 93-156

Erstellt: 14. Jul. 93

Heucke

Geprüft: 14. JULI 1993

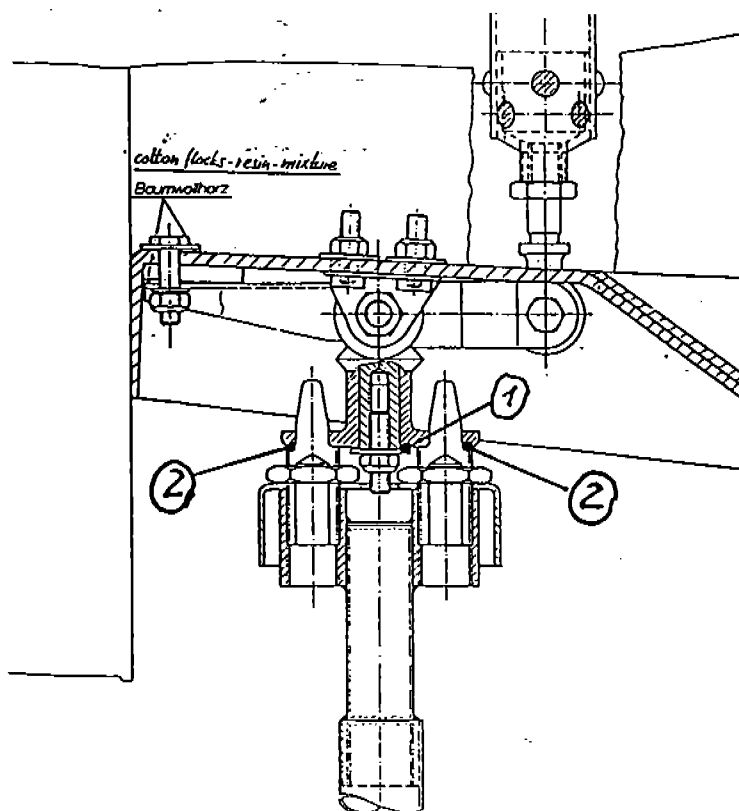
Ulrich

(TN3044)

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Zeichnung des Bremsklappenantriebs an der Wurzelrippe. Bereiche zum Spiel-
Ausgleich gekennzeichnet:
Drawing of root rib and air brake drive, indicating regions for adjustment of
play:

- <1> Teller des Kegelradgetriebes
bevel gear drive plate
- <2> rumpfseitige Antriebsbolzen
fuselage drive pins



Erstellt: 05.Jul.93 <i>Gunka</i>	Geprüft: - 0. JULI 1993 <i>Khapha</i>
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