

GFA AD-647

(ISSUE 1)

GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED:

G-102 CLUB ASTIR III Serial no's 5501 & on (with suffix "C")

G-102 CLUB ASTIR IIIb Serial no's 5501 & on (with suffix "Cb")

G102 STD ASTIR III Serial no's 5502 & on (with suffix "S")

SUBJECT:

Flight controls:- Welded components inspection / replacement.

BACKGROUND:

GROB has received isolated defect reports regarding cracks in welded components of the flight control system of the above G-102 models. The cracks progress slowly from the edges of the weld seams and may eventually result in component failure. So far no

complete failures have occurred.

DOCUMENTATION:

The LBA has issued AD2007-181, the EASA has issued EAD2007-0135-E & GROB has issued Service Bulletin MSB 306-

35 which is attached and forms part of this AD.

ACTION REQUIRED:

Carry out inspections /component replacement in accordance with MSB 306-35. The inspections / replacements may be performed by the holder of a GFA 1109 Maintenance authority endorsed for Issue of Maintenance Release, or higher authorization. Note: replacement of a flight control component requires secondary inspection & signature by the holder if a GFA maintenance authority endorsed

for replacement of components or higher authorization.

WEIGHT AND BALANCE: Nil effect

IMPLEMENTATION:

(1) Within the next 25 flight hours, 50 flight cycles or the next FORM II whichever comes first, but in any case not later than 31 December 2007.

(2) The inspection is to be repeated at each FORM II.

(3) If cracked parts are found at any inspection they are to be

replaced before further flight IAW MSB 306-35

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:

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GFA AD-647

ISSUE: 1

17 May 2007

Page 1 of 6

GFA AD-647 PAGE 2 OF 6

MSB 306-35 Page 1 of 5 27. April 2007



SERVICE BULLETIN MSB 306-35

I. TECHNICAL DETAILS

1.1 Category:

Mandatory

1.2 Airplanes affected:

G 102

CLUB ASTIR III CLUB ASTIR IIIb

STANDARD ASTIR III

from serial-no. 5501 (with suffix "C") from serial-no. 5501 (with suffix "Cb") from serial-no. 5502 (with suffix "S")

1.3 Time of compliance:

Action 1.8.1:

Within 25 flight hours, or 50 take-offs, or next annual inspection, however

not later than 31. December 2007, whichever comes first.

Action 1.8.2:

Immediately after receipt of Service Bulletin.

Action 1.8.3:

As required.

1.4 Subject:

ATA - Code:

27-00 Flight Controls

1.5 Reason:

GROB received isolated discrepancy reports regarding cracks on welded parts of the flight control system of the type G102, model CLUB ASTIR III & IIIb, and STANDARD ASTIR III. The cracks progress slowly from the welding seams periphery, and may eventually result in rupture at a matured stage. No abrupt or immediate failures of complete components were observed. As a precautionary measure, all welded parts shall be inspected, and exchanged if necessary.

GFA AD-647 PAGE 3 OF 6

MSB 306-35 Page 2 of 5 27. April 2007



1.6 Concurrent documents:

N/A

1.7 Approval Note:

The technical information contained in this document has been approved under the authority of EASA Design Organisation Approval No. EASA.21J.030.

1.8 Accomplishment/ Instructions:

1.8.1 a) Welded parts of the flight control system (as listed below) shall be inspected for development of cracks or permanent distortion. (# numbers, refer to drawing page 5):

- Aileron lever I	102C3-4225	(# 6)
- Aileron rod I	102C3-4351	(# 16)
- Air brake-trim-unit	102C3-4230	(# 7)
- Bell crank	102C3-4261/ 4262	(# 9, 10)
- Air brake lever III	102C3-4266	(# 12)
- Undercarriage lever	102S3-5214 (only G	102 STANDARD III) (# 1)

- b) The visual inspection may be executed with a magnifying glass (min. 1:10), whilst parts are installed. In any case of doubt, the affected parts shall be removed for inspection.
- c) In case no cracks or permanent deformations are observed during inspection, the inspection shall be repeated at regular intervals. (Refer to Maintenance Manual, section "Regular Service").
- d) In case cracks or permanent deformations are observed during inspection, the affected welded part shall be replaced with a new part before the next flight.

Caution: Repair of cracked or deformed flight control elements is not approved.

- e) In case control elements were removed for inspection, the following actions need to be completed after re-installation:
 - All flight controls (including undercarriage for STANDARD III) shall be inspected for full range of travel and ease of operation.
 - All flight controls shall be inspected for correct functioning (in particular correct control surface deflection and direction of deflection, including undercarriage for STANDARD III)
 - Flight control deflections shall be inspected in accordance with the Maintenance Manual and be adjusted as required.
 - Completion of a test flight.

G 102

GFA AD-647 PAGE 4 OF 6

MSB 306-35 Page 3 of 5 27. April 2007



1.8.2 The Maintenance Manual shall be amended as follows: Section VIII "Regular Service", add hand-written note:

Complete inspection of all welded flight control elements in accordance with MSB306-35.

Note: The Service Bulletin shall be filed with the Maintenance Manual till issue of the revised pages.

1.8.3 Welded flight control elements (as per listing step 1.8.1 a) shall be replaced with new parts as required.

1.9 Repetitive Actions:

Actions in accordance with step 1.8.1 shall be repeated during the annual inspection, respectively 100-hours inspection (if mandated by national regulations).

1.10 Mass (Weight) and CG:

N/A

II. PLANNING INFORMATION

2.1 Material & Availability:

Exchange parts may be ordered from: FIBERGLAS TECHNIK LINDNER

Rudolf Lindner GmbH & Co. KG Alpenweg 11 88487 Walpertshofen

Tel.: +49-7353-2243 Fax: +49-7353-3096

E-mail: <u>H.Lindner@t-online.de</u> www.LTB-Lindner.com

2.2 Special Tools::

N/A

G 102

GFA AD-647 PAGE 5 OF 6

MSB 306-35 Page 4 of 5 27. April 2007



2.3 Labour:

Inspection (without removal): Approx. 1 hour. Inspection (with removal): Approx. 5 hours.

2.4 Reference documents:

Maintenance Manual CLUB & STANDARD ASTIR III

2.5 Credit:

N/A

III. REMARKS

- 3.1 The correct execution of the instructions may be performed by a competent person or approved aviation workshop and has to be certified in the logbook by an authorised inspector
- 3.2 The Maintenance Manual will be amended accordingly with the next revision...
- 3.3 If you have sold your aircraft in the meantime, would you kindly pass this information on to the new owner and forward his address and aircraft S/N to us.
- **3.4** For questions and assistance please contact:

Michael Reinhold,

Customer Service

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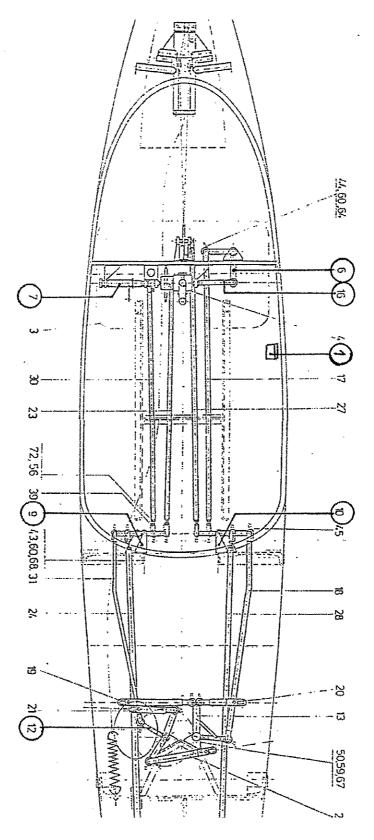
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GFA AD-647 PAGE 6 OF 6

MSB 306-35 Page 5 of 5 27. April 2007





G 102