

**Subject:** Inspection of the trim tab hinges

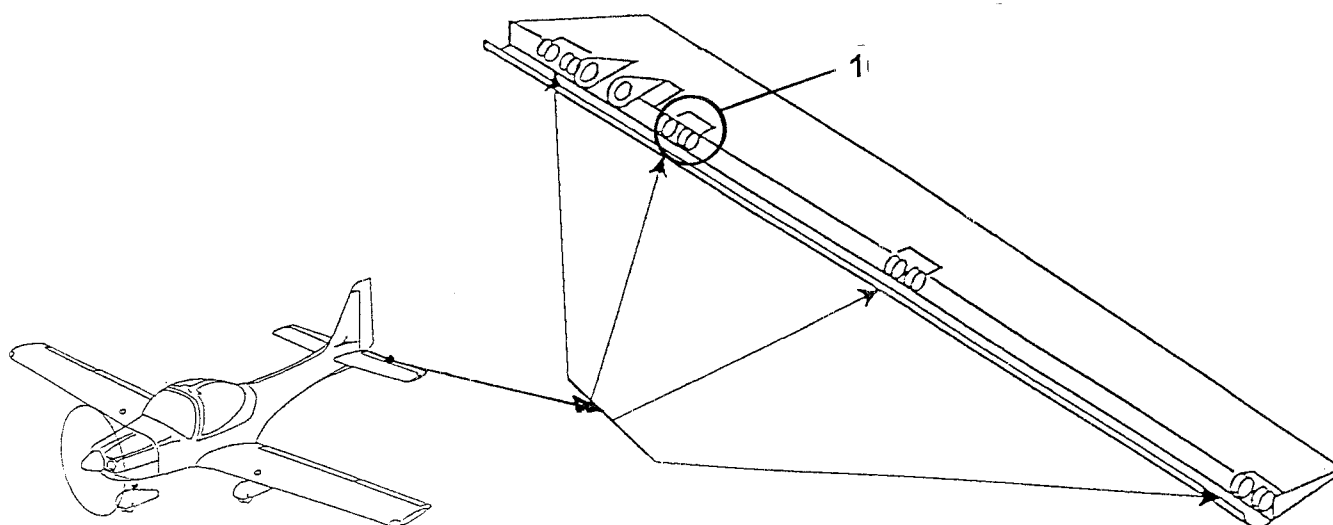
**Concerned:** G 115/ G 115A/ G 115B, all S/N's  
G 115C, G 115C2, G 115D, G 115D2, all S/N's

**Urgency:** before the next flight

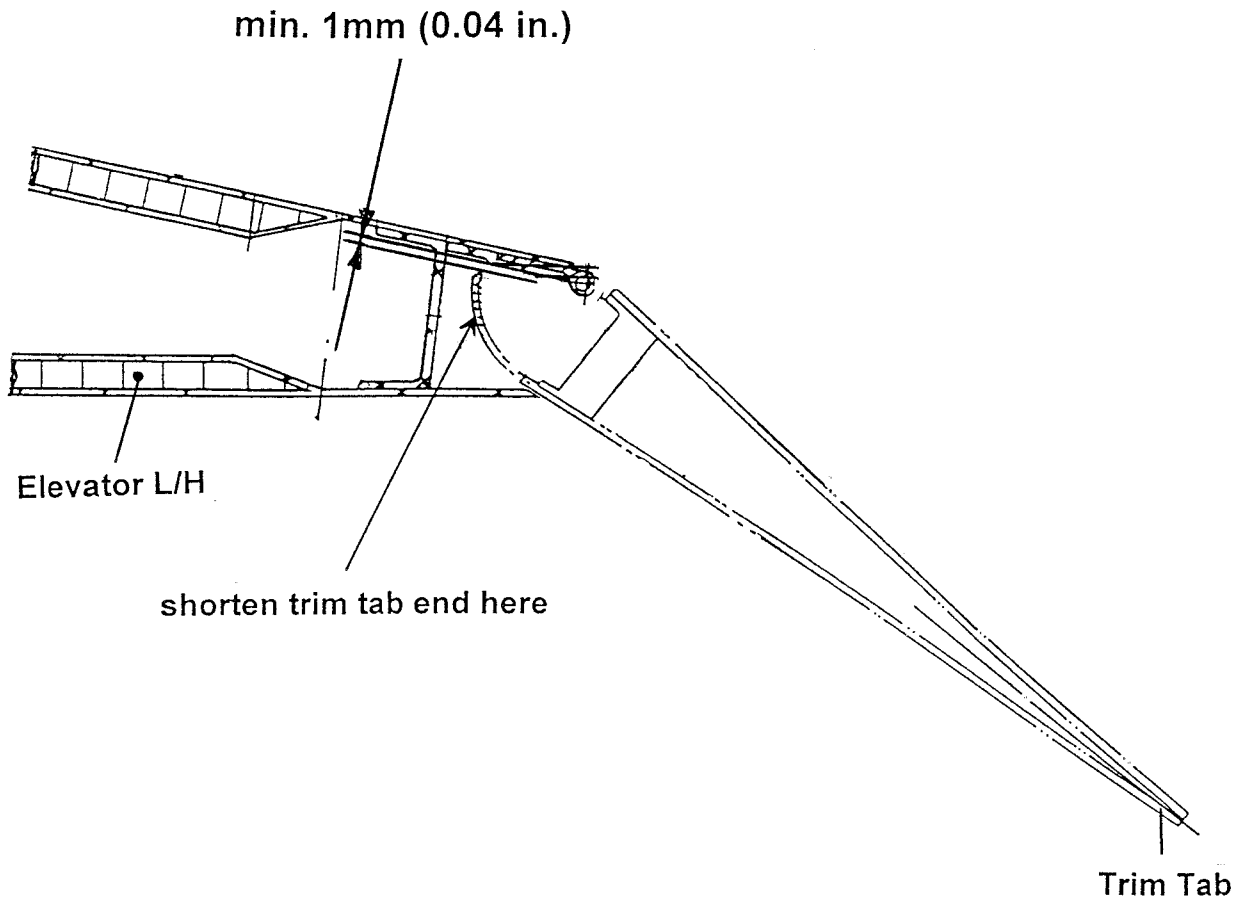
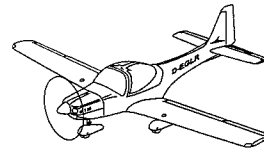
**Background Information:** It was reported to GROB, that on some aircraft of the series G 115C2, cracks were found in the area of the elevator trim tab hinges. As a precautionary measure the trim tab hinges of the G 115 series must be checked for possible cracks and tight fit in the laminate. The cracks could be caused by the trim tab end is touching the upper elevator shell at fully deflection.

**Action:**

1. The trim tab hinges (qty. 4, as of S/N 82078 qty. 5) must be checked visually (perhaps using a magnifying glass, 10 times magnification) for cracks and tight fit in the laminate (especially in the area of the marked hinge, item 1, because the cracks were found in this area) and the result must be filed in the attached "**Inspection Record**". In any case of doubt the trim tab has to be removed according to MM Chapter 55-20-00 and must be checked. Damages must be repaired according to the Repair Instructions No. 1078-75.



2. Check, whether the trim tab end touches the upper elevator shell as follows:
  - trim the trim tab to fully nose up
  - measure deflection and note value, if necessary adjust (refer to the corresponding MM)
  - push elevator fully
  - check whether **minimum 1 mm (0.04 in.) gap** is ensured between the end of the trim tab and the upper elevator shell using a pocket lamp and thickness gauge
  - if no or a too small gap is found, remove the trim tab and shorten the end of the trim tab as far as minimum 1mm (0.04 in.) gap exists
  - check weight and residual moment of the trim tab according to the MM Chap. 06-00-00 and file the values
  - install trim tab according to the MM Chap. 55-20-00 and check or adjust deflection according to the MM Chap. 06-00-00



Material: -----

Weight and Balance: Not concerned

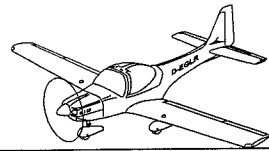
- Remarks:
1. The Inspection Record must be sent filled out **immediately** after the inspections have been performed to GROB.  
Address: GROB-WERKE GMBH & CO. KG  
AEROSPACE DIVISION  
Lettenbachstr. 9  
D-86874 Tussenhausen  
Fax: +49-(0)82 68-998190
  2. The correct performing of the actions has to be certified into the logbook by an authorized inspector.

Mattsies, 15 May 1998

  
Dipl.Ing. (FH) H. Micheler  
Manager  
Airworthiness/Certification

**LBA approved:**

This Service Bulletin is originally written in German and approved by the German LBA on the *25th May* 1998. The translation has been accomplished to the best of our knowledge und judgement.



The filled out Inspection Record must be sent back to the manufacturer after the inspection is completed !!

Aircraft S/N: \_\_\_\_\_

Registration: \_\_\_\_\_

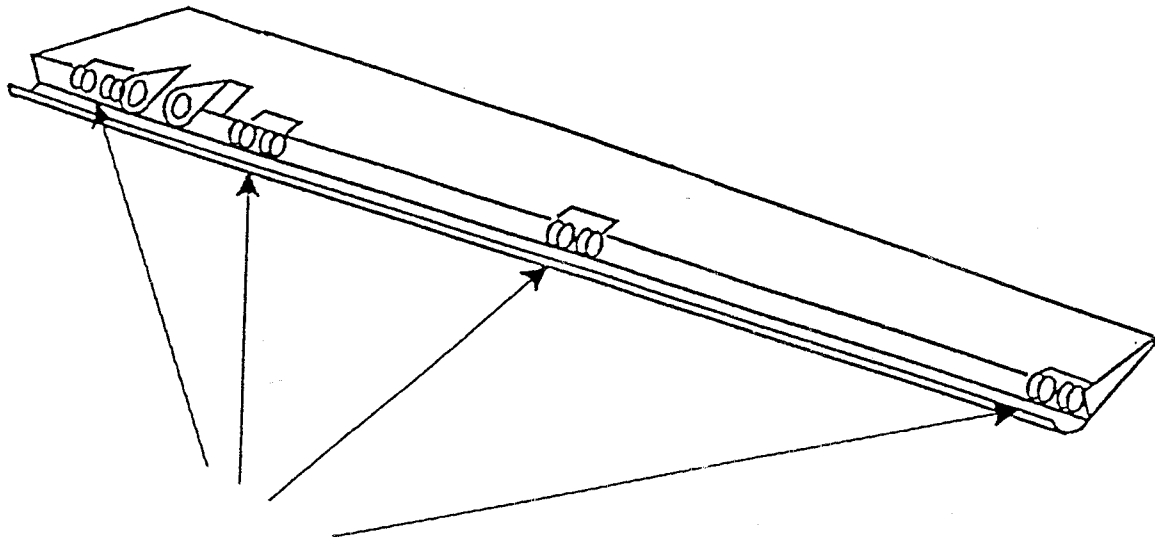
Total flight hours: \_\_\_\_\_

Landings: \_\_\_\_\_

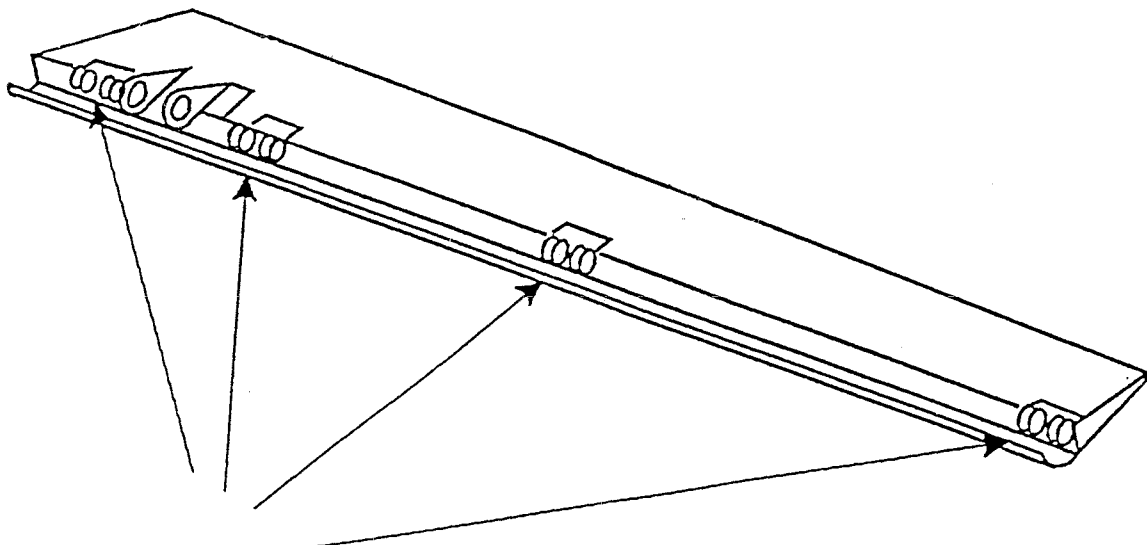
Flight hours Acro:  
(if possible) \_\_\_\_\_

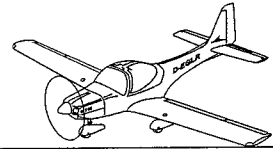
**1. Inspection of the trim tab hinges**

a. Have cracks been detected (mark length and position) ? YES NO



b. Were hinges delaminated (mark position)? YES NO





**2. Check of the gap between trim tab end and upper elevator shell**

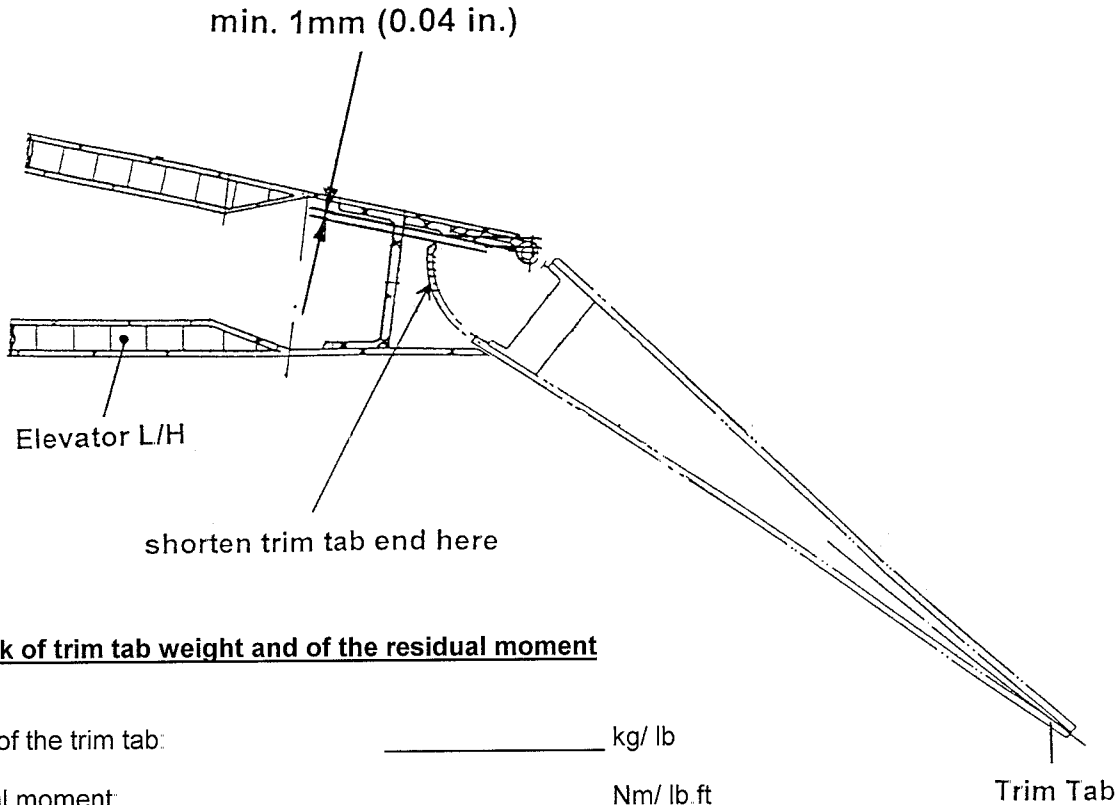
Gap minimum 1 mm (0.04 in.)?

YES NO

Trim tab end was shortened:

YES NO

for \_\_\_\_\_ mm



**3. Check of trim tab weight and of the residual moment**

Weight of the trim tab:

\_\_\_\_\_ kg/ lb

Residual moment:

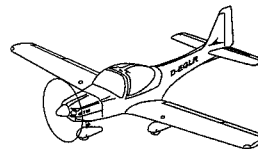
\_\_\_\_\_ Nm/ lb.ft

Values within the ranges given in the Maintenance Manual

YES NO

Remarks:

Inspector Signature \_\_\_\_\_



**The Installation Instruction 1078-75 is part of Service Bulletin 1078-75 and contains the repair of delaminated trim tab hinges and the repair of cracks in the laminate.**

**Material:** The following material is required to embody this change.

	Qty.	P/N
Hinge	AR	115-3531.01
Glass fabric (92110)	AR	WL 8 4548 60
Resin	AR	L20
Hardener	AR	VE2723
Cotton flocks	AR	Type F 1f
Paint	AR	refer to MM

**CAUTION: Only delaminated hinges or cracks in the laminate must be repaired !!**

**Procedure:**

1. Remove trim tab, according to MM Chapter 55-20.
  2. Lay down the trim tab in a proper jig with the upper side upside.
  3. Fix the concerned hinges to fix the exact position for the reinstallation.
  4. Grind carefully the laminate in the area of the hinges down to the metal latches: minimum 80 mm x 40 mm, semi-circular, grind always 20 mm larger than the delamination is.
  5. Remove carefully the hinge.
  6. Grind carefully the upper elevator shell in the hinge area.
  7. Install new hinge according to the position of the old hinge using thickened resin (mixture from resin/ hardener/ cotton flocks).
  8. Apply minimum 5 layers of glass fabric WL 8.4548 60 (92110), cut diagonal, graded to the upper side of the hinge.
  9. Let the repair area harden.  
Curing: 24 hours at room temperature  
Post-curing: 15 hours at 40°C - 60°C (recommended)
- Caution: Too high temperature causes bubbles in the glueing area.
10. After curing grind the repair area even.
  11. Repaint the trim tab.
  12. Weigh trim tab and determine the residual moment according to MM Chap. 06-00.
  13. Install trim tab according to MM Chap. 55-20.
  14. Check the deflections according to MM Chap. 06-00, if required adjust.
  15. Perform a check flight.

**The correct execution has to be certified in the log book by an authorized inspector.**

