THE GLIDING FEDERATION OF AUSTRALIA

GFA AD-624
(ISSUE 1)

GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED: VENTUS-2c S/No. 1 to 51. (German TCDS: 349)
VENTUS-2cT S/No 1 to 49. (German TCDS: 825)
VENTUS-2cM S/No 1 to73. (German TCDS: 825)

SUBJECT: Horizontal Stabilizer, damage to upper side of the leading edge.

BACKGROUND: Three horizontal stabilizers damaged during landing accidents have revealed hollow areas between the outer laminate and the inner reinforcement.

DOCUMENTATION: The LBA has issued AD-2005-136, and Schempp Hirth has issued Technical Note No 349-29/853-34 & Appendix to TN 349-29/853-34 which are attached and form part of this AD.

ACTION REQUIRED: In accordance with TN 349-29/853-34 & its Appendix carry out an inspection on the upper side of the leading edge and, if necessary, perform a reinforcement modification.

WEIGHT AND BALANCE: Mass increase of the Stabilizer will depend on the extent of repairs necessary. Carry out a W & B if required.

IMPLEMENTATION: At the next Form 2 inspection, but not later than 31st December 2005. The inspection may be carried out by a person holding a GFA endorsement for Form 2 inspector FRP, or higher, rating. If repairs are required these are to be carried out by a person holding a GFA endorsement for Major Repairs FRP.

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: John G Vicary GFA STOA
SENIOR TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:
THE GLIDING FEDERATION OF AUSTRALIA

SCHEMPP-HIRTH Flugzeugbau GmbH. Kirchheim/Teck	**Technical Note** **No. 349 - 29** **No. 825-34**	Page No: 01 No of pages.: 02

SUBJECT: Horizontal stabilizer

AFFECTED: Sailplane Ventus-2c (TC-No. 349)
Serial No. 1 through 51

Powered sailplane Ventus-2cT (TC-No. 825)
Serial No. 1 through 49

Powered sailplane Ventus-2cM (TC-No. 825)
Serial No 1 through 73

URGENCY: At the occasion of the next annual inspection
but not later than December 31, 2005

REASON: Three horizontal stabilizers damaged during landing accidents showed on the upper side of the leading edge hollow parts between the outer laminate and the inner reinforcement.
A check method and reinforcement procedure is stated.

ACTIONS:

1. The upper side of the leading edge has to be checked for hollow parts according the instructions in the appendix.

2. The leading edge with identified hollow parts has to be reinforced according the instructions in the appendix.

MATERIAL: See working instructions in the appendix of this Technical Note.

WEIGHT: Mass increase of the horizontal stabilizer is dependent from an executed reinforcement of the leading edge.
Establish a weight and balance if required..

C/G POSITION: See weight and balance.

REMARK:

1. **The action 1 can be accomplished by an experienced person and must be entered in the log book.**
2. **The action 2 must be accomplished by a certified repair station and entered in the log book.**

Kirchheim/Teck, 20.01.2005 Issued: ..... (Treiber)	LBA-approved: The German original has been approved by the LBA under the date of.....24. JAN. 2005..... and is signed of by Mr. .....Blume..... The translation into English has been done by best knowledge and judgement.	EASA approved on: 22. April 2005 under Approval No.: 2005 - 3739

I. Check method for hollow parts of the leading edge of the horizontal stabilizer

1. Apply a thin tape i.e. tesa tape (width minimum 15 mm (0,59 in) from the leading edge on the upper surface over the whole length or draw a line in a distance of 15 mm (0,59 in) from the leading edge.

2. Fix the horizontal stabilizer i.e. on stands.

3. Tap intire length of the leading edge in line stripes with a distance of 0 mm (0 in), 5 mm (0,20 in), 10 mm (0,39 in) and 15 mm (0,59 in) from the middle of the leading edge on the upper surface.

   Remark: It is recommended to use a metall stick (weight approximately 0,1 kg (0,22 lb) through 0,2 kg (0,44 lb) i.e. a bolt with 6 mm (0,23 in) through 8 mm (0,31 lb) or a similar device. Hollow areas show a deeper sound.

4. Areas which sounds hollow, should be marked and tapped also from the leading edge backwards (in flight direction).

5. If hollow areas with a size of more than 25 mm (0,98 in) could not clearly be identified apply a check bore with a diameter of 3 mm (0,12 in) and a depth of not more than 3 mm (0,12 in). Take in mind that the outer laminate has a thickness of 2 mm (0,078 in). With the aid of a thin wire the side walls of the bore can be checked for hollow areas.

   Remark: If no hollow areas are identified close the bore with gelcoat.

6. Mark the affected areas with hollows and apply a reinforcement according section **II.**

II. Reinforcement of the leading edge with hollow areas

1. In the marked area (with hollows) sand the gelcoat down 25 mm (0,98 in) on either side of the leading edge on the upper and lower surface.

2. Laminate 3 layers of glasfibre (quality 92110, crosswise) with a width of 50 mm (1,97 in), 40 mm (1,58 in) and 30 mm (1,18 in) symmetric on the leading edge. Cover the laminate with tear off material.

   Remark: Use resin systems L20/H91 or L285/H286 or L285/H285. Hardening at room temperature is sufficient for this purpose.

3. Sand the cured laminate and do the paint work