H. Streifeneder Glasfaser-Flugzeug-Service GmbH Hofener Weg D-72582 Grabenstetten	**Technical Note** **No. 206-19**	Type Certificat Data Sheet No. 304

Subject:	Mass and residual moment of elevator exceeding current established values/limits
Affected:	Sailplane model " Hornet C "
Urgency:	Not later than on the occasion of the next periodic inspection
Reason:	Checks of elevator masses and residual moments as per Technical Note No. 206-18 gave evidence of heavier elevators, necessitating a new flutter calculation and a re-determination of the permissible values.
Action:	Installation of additional mass balance on elevator halves if values shown on page 47a of the Service Manual are exceeded: Remove existing mass balance and install cast lead strips in original position (use a two-component bonding agent and, after curing, secure strips by means of 3 aluminium rivets. Reinstall elevator halves and check for an equal travel over the previous range. If necessary, trim front edge of lead strips. Finally check total elevator mass and residual moment for compliance with revised values and complete installation. Page 47 a of the Service Manual may be altered as follows: Elevator: Mass (without mass balance): 1,5 - 2,4 kg (3,31-5,29 lb) stat. moment (") : 20 - 68 Ncm Mass (") : 1,6 - 2,6 kg (3,53-5,73 lb) stat. Moment("): 18,5-65 Ncm At the tip of each elevator a mass balance weight of 0.1 kg (0-22lb) is to be installed at y/s =0,8-1,1m (41,5-43,3 in.) with a lever arm of 15 mm (0,59 in.)

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Material: The revised page 47a of the Service Manual and cast lead strips may be obtained from

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Note: Accomplishment of actions to be entered in the Sailplane's log book by a licensed inspector

Grabenstetten, 22.07.1998

H. Streifeneder

LBAanerkannt

LUFTFAHRT-BUNDESAMT 10 BRAUNSCHWEIG

04. Nov. 1998

For the control surfaces the following values and tolerances are applicable:

Allerons (configuration without water ballast)

Mass	: 1,90-2,60 kg	(without mass balance)
stat. moment	: 70-95 Ncm	(without mass balance)
Mass	: 3,20-4,50 kg	(with mass balance)
stat. moment	: 0-45 Ncm	(with mass balance)

Mass balance to be installed spanwise from 0.58 to 2,32 m

Allerons (configuration with water ballast)

Mass	: 1,90-2,60 kg	(without mass balance)
stat. moment	: 70-95 Ncm	(without mass balance)
Mass	: 3,20-4,50 kg	(with mass balance)
stat. moment	: (-10)-27 Ncm	(with mass balance)

Mass balance to be installed spanwise from 0.58 to 2,32 m

Elevator (both halves ind. U-shaped bracket)

Mass	: 1,5-2,4 kg	(without mass balance)
stat. moment	: 20-68 Ncm	(without mass balance)
Mass	: 1,6-2,6 kg	(with mass balance)
stat. moment	: 18,5-65 Ncm	(with mass balance)

A mass balance weight of 0,1 kg is to be installed at the tip of each elevator half at y/s = 0,8-1,1 with a lever arm of 15mm
Flutter calculation additionally take into account the balancing effect of the vertical elevator actuating rod of 0,26kg and a concentrated mass balance in the symmetrical plane of 0,22 kg (i.e. 0,48 kg with a lever arm of 72 mm).

Rudder

Mass	: 1,7-2,1 kg	(without mass balance)
stat. moment	: 85-110 Ncm	(without mass balance)
Mass	: 2,7-3,7 kg	(with mass balance)
stat. moment	: 0-45 Ncm	(with mass balance)

Rudder mass balance weights (average values) are to be installed as follows:

Section	1	2	3	4
Lenght (mm)	300	300	300	300
Weight of mass balance (kg)	-	0,65	0,65	-
Distance to hinge axis (mm)	-	-50	-44	-

Numbering of section commences at fuselage center line