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Technical Note 10/91

Type: Sailplane PHOEBUS
Version: A1, B1, B2
Applicability: sailplanes of an empty mass of more than 240 kg
Subject: empty mass and corresponding center of gravity

Reason(s): As a result of repairs and maintenance actions several sailplanes have reached empty masses not covered by the diagram showing the allowable empty masses and corresponding centers of gravity on page 11 of the Flight and Operations Manual. For these sailplanes, page 11 is to be replaced by a table covering a larger range of empty masses. By this action neither the maximum allowable flight mass nor the maximum allowable mass of the non-supporting parts will be changed.

Actions: For sailplanes of empty masses exceeding 240 kg, page 11 of the Flight and Operations Manual is to be replaced by the table enclosed herewith.

Stuttgart, 23.10.1991

signed: Prof. Dr. Richard Eppler

LBA-approved:

The German original of this Technical Note was approved by the LBA on October 06, 1992, and has been signed by Mr. Kopp. The translation has been accomplished to our best knowledge and judgement. In case of doubt, the German original is authoritative.

EMPTY MASSES AND CORRESPONDING ALLOWABLE CENTER OF GRAVITY POSITIONS
(C.G. POSITIONS) FOR PHOEBUS A, B

MAXIMUM FLIGHT MASS 350.0 kg MINIMUM PAYLOAD 80.0 kg
C.G. POSITION IN FLIGHT BETWEEN 223.00 AND 244.00 cm
C.G. POSITION OF PAYLOAD 155.00 cm
FIXED BALLAST AT 45.50 cm

XF, XA = ALLOWABLE FOREMOST AND AFTMOST C.G. POSITIONS OF EMPTY MASS
X = EVALUATED C.G. POSITION OF EMPTY MASS

M(EMPTY) (kg)	XF (cm)	XA (cm)	X FOR FIXED BALLAST REQUIRED				
			1 kg	2 kg	3 kg	4 kg	5 kg
220	263.18	276.36	277.27	278.17	279.07	279.97	280.88
222	262.21	276.07	276.97	277.86	278.75	279.65	280.54
224	261.25	275.79	276.67	277.56	278.44	279.33	280.22
226	260.31	275.50	276.38	277.26	278.14	279.02	279.90
228	259.39	275.23	276.10	276.97	277.84	278.71	279.58
230	258.48	274.96	275.82	276.68	277.55	278.41	279.27
232	257.59	274.69	275.55	276.40	277.26	278.11	278.97
234	256.71	274.43	275.28	276.12	276.97	277.82	278.67
236	255.85	274.17	275.01	275.85	276.69	277.53	278.38
238	255.00	273.92	274.75	275.58	276.42	277.25	278.09
240	254.17	273.67	274.49	275.32	276.15	276.98	277.80
242	253.35	273.42	274.24	275.06	275.88	276.70	277.52
244	252.54	273.18	273.99	274.81	275.62	276.43	277.25
246	251.75	272.94	273.75	274.56	275.36	276.17	276.98
248	250.97	272.71	273.51	274.31	275.11	275.91	276.71
250	250.20	272.48	273.27	274.07	274.86	275.66	276.45
252	249.44	272.25	273.04	273.83	274.62	275.40	276.19
254	248.70	272.03	272.81	273.59	274.38	275.16	275.94
256	247.97	271.81	272.59	273.36	274.14	274.91	275.69
258	247.25	271.60	272.37	273.14	273.91	274.67	275.44
260	246.54	271.38	272.15	272.91	273.67	274.44	275.20