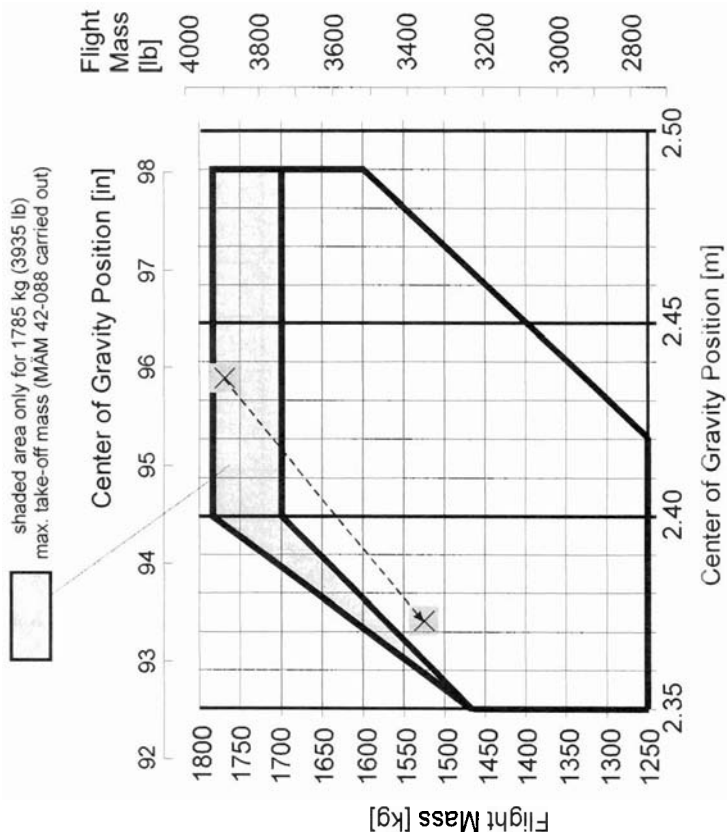


The CG's shown in the following diagrams are those from the example in Section 6.4.3 'CALCULATION OF LOADING CONDITION', rows 8 and 11.

#### 6.4.4 PERMISSIBLE CENTER OF GRAVITY RANGE



CALCULATION OF LOADING CONDITION	DA 42 (Example)		Your DA 42	
	Mass	Moment	Mass	Moment
	[kg] [lb]	[kgm] [in.lb]	[kg] [lb]	[kgm] [in.lb]
1. Empty mass (from Mass and Balance Report)	1250 2756	2937.5 254,965	2864.4	271475.2
2. Front seats Lever arm: 2.30 m (90.6 in)	160 353	368.0 31,982		
3. Rear seats Lever arm: 3.25 m (128.0 in)	70 154	227.5 19,712		
4. Nose baggage compt. Lever arm: 0.60 m (23.6 in)	5 11	3.0 260		
5. Cabin baggage compt. Lever arm: 3.89 m (153.1 in)	10 22	38.9 3,368		
6. Baggage extension Lever arm: 4.54 m (178.7 in)	5 11	22.7 1,966		
7. De-icing fluid (if installed; see NOTE on previous page) (1.1 kg/liter) (9.2 lb/US gal) Lever arm: 1.00 m (39.4 in)	27.5 61	27.5 2,403		
8. Total mass & total moment with empty fuel tanks (Total of 1. through 7.)	1527.5 3368	3625.1 314,656		
9. Usable fuel, main tanks (0.84 kg/liter) (7.01 lb/US gal) Lever arm: 2.63 m (103.5 in)	159 351	418.2 36,329		
10. Usable fuel, auxiliary tanks (if installed; OÄM 42-056) (0.84 kg/liter) (7.01 lb/US gal) Lever arm: 3.20 m (126.0 in)	84 185	268.8 23,310		
11. Total mass & total moment with fuel & de-icing fluid (Total of 8. through 10.)	1770.5 3904	4312.1 374,295		

