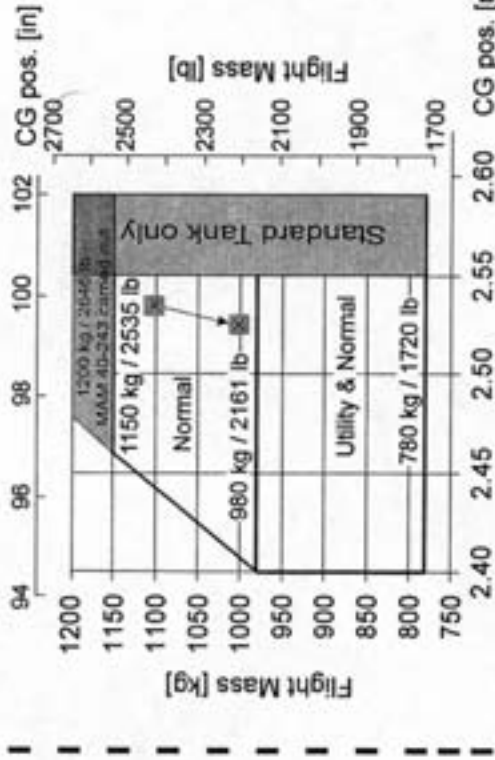


| | | DA 40 (Example) | | Your DA 40 | |
|----|---|----------------------|-----------------------------|----------------------|-----------------------------|
| | | Mass [kg] (lb) | Moment [kg m] (lb ft) | Mass [kg] (lb) | Moment [kg m] (lb ft) |
| 1 | Empty mass (from Mass and Balance Report) | 735 1620 | 1760 152,762 | | |
| 2 | Oil not added Lever arm: 1.00 m (29.4 in) | -1.7 4 | -1.7 -158 | | |
| 3 | Front seats Lever arm: 2.30 m (90.6 in) | 150 331 | 345 28,889 | | |
| 4 | Rear seats Lever arm: 3.25 m (128.0 in) | 75 165 | 243.8 21,030 | | |
| 5 | Standard baggage comp. Lever arm: 3.65 m (143.7 in) | 0 0 | 0 0 | | |
| | Baggage Tube Lever arm: 4.32 m (170.1 in) | 0 0 | 0 0 | | |
| 6 | Fwd. extended baggage compartment Lever arm: 3.89 m (153.1 in) | 27 60 | 105 8,186 | | |
| | Aft extended baggage compartment Lever arm: 4.54 m (178.7 in) | 18 40 | 81.7 7,148 | | |
| 7 | Total mass & total moment with empty fuel tanks (Total of 1.-6.) | 1003.3 2212 | 2533.8 220,047 | | |
| 8 | Usable fuel Lever arm: 2.63 m (103.5 in) | 99.4 219 | 261.4 22,607 | | |
| 9 | Total mass & total moment including fuel (7. plus 8.) | 1102.7 2431 | 2795.2 242,714 | | |
| 10 | The total moments from rows 7 and 9 (2533.8 and 2795.2 kgm) (220,047 and 242,714 lb-ft) must be divided by the related total mass (1003.3 and 1102.7 kg respectively) (2212 and 2431 lb) and then located in Diagram 6.4.4 PERMISSIBLE CENTER OF GRAVITY RANGE. | | | | |

As in our example CG positions (2.525 m and 2.535 m respectively) (99.49 and 99.84 in) and masses fall into the permitted area, this loading condition is allowable.

6.4.4 PERMISSIBLE CENTER OF GRAVITY RANGE

The diagram is replaced by the following:



Forward flight CG limit:

The paragraph is amended to read:

2.40 m (94.5 in) aft of DP from 780 kg to 980 kg (1720 lb to 2161 lb)

2.46 m (96.9 in) aft of DP at 1150 kg (2535 lb)

linear variation between these values

If MAM 40-227 is carried out:

2.40 m (94.5 in) aft of DP from 780 kg to 980 kg (1720 lb to 2161 lb)

2.48 m (97.6 in) aft of DP at 1200 kg (2646 lb)

linear variation between these values