

Locate the Centre of Gravity chart (fig 11, page 21). Locate the Gross Weight of the loaded aeroplane (in KG) on the vertical scale and move horizontally to meet the vertical line representing the Total Moment Index of the loaded aeroplane. If the point of intersection, which represents the Centre of Gravity, falls in the shaded area, the aeroplane is correctly loaded.

Note: The Centre of Gravity must lie in the shaded area at ALL stages of flight.

Weight Limitations:

Maximum Take-off Weight	2950 KG
Maximum Landing Weight	2725 KG
Maximum Zero Fuel Weight	2630 KG

Balance Data:

The Mean Aerodynamic Chord (MAC) data is as follows:

Length of chord	1900 mm
Location of leading edge	2190 mm aft of datum

Centre of Gravity range is as follows:

2400 mm to 2680 mm at 2360 KG or less

2560 mm to 2680 mm at 2950 KG

Linear variation between the points given

vs should be
2900 kg
weight or less

Loading Data:

Location

Maximum Permissible Load

Load Arm (mm Aft of Datum)

Seating:

- Row 1 (Seats 1 & 2)
- Row 2 (Seats 3 & 4)
- Row 3 (Seats 5 & 7)

Cargo & Baggage Compts:

- Forward Compt
- Left wing Compt.
- Right wing Compt.
- Rear Compartment
- Floor loading intensity

Fuel:

- Left main tank
- Right main tank
- Left auxiliary tank
- Right auxiliary tank

- Pilot + 1 Passenger
- 2 Passengers
- 2 Passengers

- 55 KG
- 55 KG
- 55 KG
- 155 KG

(All Compts) 450 KG/m²

- 50 gal
- 50 gal
- 40 gal
- 40 gal

- 2290
- 3300
- 4300

- 500
- 3550
- 3550
- 5000

- 1780
- 1780
- 2800
- 2800

5.2 Structural Weight Limitations.

Maximum take-off weight.....2950 kg
 Maximum landing weight.....2725 kg
 Maximum zero fuel weight*.....2630 kg

*All weight above zero fuel weight must be made up of fuel only.

5.3 Balance data. Aircraft centre of gravity limits.

The forward limit for the centre of gravity:

2400 mm aft of the datum for gross weights of 2360 kg or less.

2560 mm at a gross weight of 2950 kg.

Linear variation applies for weights between 2360 kg and 2950 kg.

The aft limit for the centre of gravity is 2680 mm aft of the datum for all weights.

Mean Aerodynamic Chord [MAC] data.

Location of leading edge of MAC

= 2190 mm aft of the datum

Length of MAC

= 1900 mm

*The aircraft must be loaded so that the centre of gravity falls between the specified limits at zero fuel weight **and** at take-off.*

5.4 Loading data:

The arms [in millimetres aft of the datum], and limiting weights for cargo compartments are given in the table below.

LOCATION	MAX LOAD	ARM [mm]
Row 1 [seats 1 & 2]	Pilot and one passenger	2290
Row 2 [seats 3 & 4]	two passengers	3300
Row 3 [seats 5 & 6]	two passengers	4300
Cargo nose	55 kg	500
Cargo left wing	55 kg	3550
Cargo right wing	55 kg	3550
Cargo rear	155 kg	5000
Floor loading intensity	450 kg/square metre	
Main fuel tanks		
Left [useable]	50 US gallons	1780
Right [useable]	50 US gallons	1780
Auxiliary fuel tanks		
Left [useable]	40 US gallons	2800
Right [useable]	40 US gallons	2800

Passenger seats may be removed to increase the volumetric capacity of the cabin. Each passenger seat weighs 5 kg and the maximum weight of cargo that can be placed on the area otherwise occupied by a seat is 82 kg.