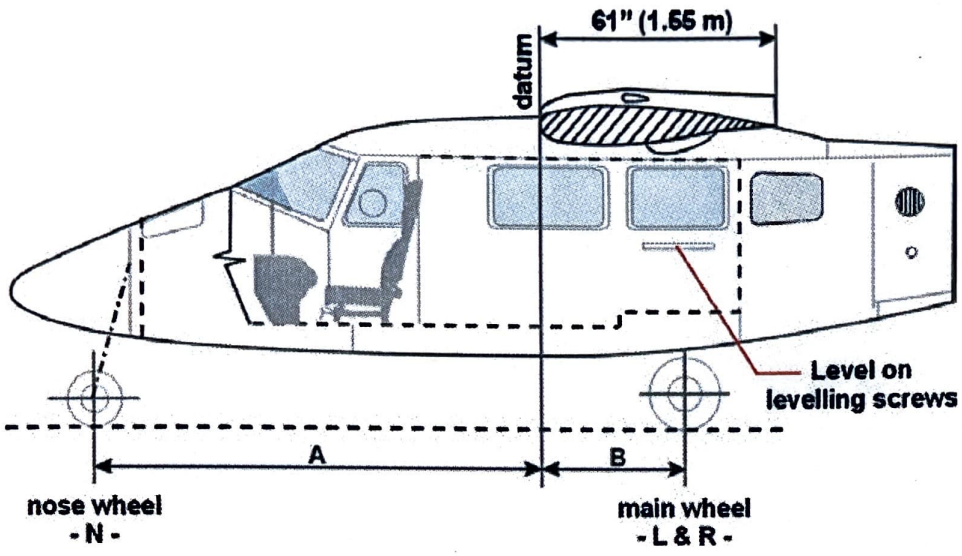
WEIGHING ON WHEELS



WEIGHING POINT	1 SCALE READING (kg)	2 TARE (kg)	3 = 1 - 2 NET WEIGHT (kg)	4 ARM (m)	5 = 4 × 3 MOMENT (kg m)
N	152	/	152	- 2.783	-423.016
L	637	/	637	0.818	521.066
R	629	/	629	0.818	514.522
TOTAL			W 1418	C.G. 0.431	M 612.572
C.G. = M/W % MAC = (C.G./1.550) × (100) = 27.8 %					

Figure 6-1
Sheet 1 of 2
WEIGHING FORM

Aircraft Serial Number ...450/C...
Registration Marks ..N89LT....

AIRCRAFT ACTUAL BASIC EMPTY WEIGHT

ITEM	Weight × C.G. Arm = Moment (Aft of Datum)
Basic Empty Weight* (From Figure 6-2)	
Optional Equipment (If not on board when factory weighed)	
Actual Basic Empty Weight	

* Aircraft Basic Empty Weight includes full (7.5 litres) engine oil, full brake fluid, 18 litres of unusable fuel for the STD Range Configuration plus a further 8 litres of unusable fuel for the Long Range Configuration.

AIRCRAFT USEFUL LOAD
NORMAL CATEGORY OPERATION

(Max Ramp Weight) - (Actual Basic Empty Weight) = Useful load

(4630 lbs) - (...3168... lbs) = ...1462... lbs

(2100 kg) - (...1437... kg) = ...663... kg

THIS ACTUAL BASIC EMPTY WEIGHT, C.G. AND USEFUL LOAD ARE FOR THE AIRCRAFT AS DELIVERED FROM THE FACTORY.
REFER TO WEIGHT AND BALANCE RECORD (Figure 6-4) WHEN ALTERATIONS HAVE BEEN MADE.

Figure 6-3
WEIGHT AND BALANCE DATA FORM

6.4 WEIGHT AND BALANCE DETERMINATION FOR FLIGHT

NOTE

It is the responsibility of the pilot and/or aircraft owner to ensure that the aircraft is properly loaded.

WARNING

When no passengers or baggage are loaded behind crew seats, fill the fuel tanks sufficiently to meet approved C.G. limits.

(a) Use the Loading Form (Figure 6-6) and add the weight of all items to be loaded to the Basic Empty Weight. Observe Maximum Zero Fuel Weight Limitation.
(b) Determine the moment of all items to be carried in the aircraft.
(c) Add the moment of all items to be loaded to the Basic Empty Weight moment.
(d) By using the figures of item (a) and item (c) (above), locate a point on the Centre of Gravity Moment Envelope (Figure 6-5). If the point falls within the Envelope and the aircraft zero fuel weight limit is not exceeded, the loading meets weight and balance requirements.

ITEM	WEIGHT ×	ARM =	MOMENT
	kg	m	kgm
a. Weight (as weighed)	–	–	–
+			
b. Unusable Fuel for STD Range Configuration	13	0.770	10.010
+			
c. Further Unusable Fuel for Long Range Configuration	6	0.770	4.620
=			
Basic Empty Weight	–	–	–

Figure 6-2
BASIC EMPTY WEIGHT

STANDARD CONFIGURATION

ITEM	WEIGHT (kg)	ARM (m)	MOMENT (kgm)
Basic Aircraft			
Revised Aircraft			
Pilot's Seat		- 0.950	
Copilot's Seat		- 0.950	
Seat No. 3		- 0.146	
Seat No. 4		- 0.146	
Seat No. 5		0.870	
Seat No. 6		0.870	
Baggage (Max 180 Kg)		1.542	
Fuel		0.770	
TOTAL WT		TOTAL MOMENT	

CLUB SEATING CONFIGURATION

ITEM	WEIGHT (kg)	ARM (m)	MOMENT (kgm)
Basic Aircraft			
Revised Aircraft			
Pilot's Seat		- 0.950	
Copilot's Seat		- 0.950	
Seat No. 3		- 0.186	
Seat No. 4		- 0.186	
Seat No. 5		0.870	
Seat No. 6		0.870	
Baggage (Max 180 kg)		1.542	
Fuel		0.770	
TOTAL WT		TOTAL MOMENT	