

**Ace Pilot Training
Weight and Balance Computation
N55264 C172P**

Item	Weight (lbs)	Arm (in.)	Moment (in-lbs)
Licensed Empty Weight	1508.18	38.7	58,371.13
Pilot and Front Passenger		37.00	
Passengers (Rear Seats)		73.00	
Fuel (40 Gal. Max at 6 lbs per gallon)		48.43	
Baggage Area 1 (120 lbs. Max)		95.00	
Baggage Area 2 (50 lbs. Max)		123.00	
Total Loaded Airplane (2400 lbs. Max)		*****	

Instructions For Computing Total Weight and Center of Gravity

1. Enter all weights as applicable in the "Weight" column
2. Multiply each weight that was entered by its corresponding arm from the "Arm" column and put the result in the "Moment" column.
3. Add all weights to find total weight and fill in below.
4. Add all moments to find total moment.
5. Divide total moments by total weight to find center of gravity (CG) and fill in below.
6. Verify that the total weight and CG fall within the "Weight vs. CG envelope" prior to conducting any flight.

Total Weight (lbs)

Center of Gravity (CG) (in.)

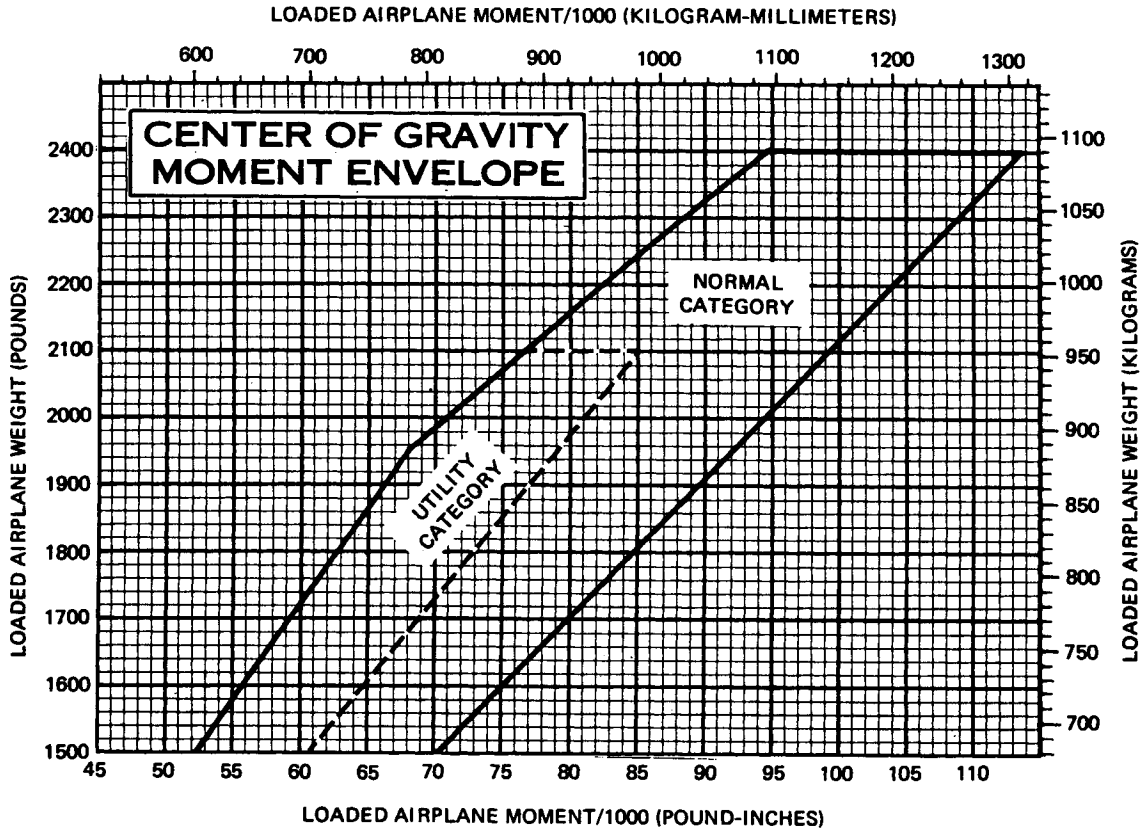
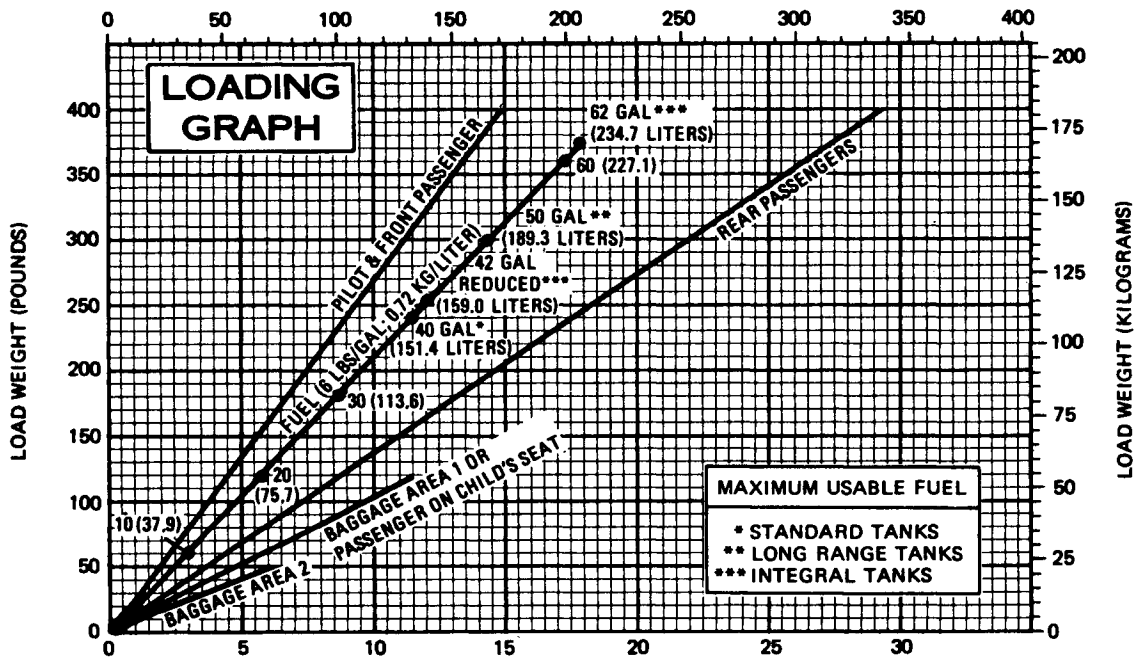


Figure 6-7. Center of Gravity Moment Envelope



LOAD MOMENT/1000 (POUND - INCHES)

NOTE: Line representing adjustable seats shows the pilot or passenger center of gravity on adjustable seats positioned for an average occupant. Refer to the Loading Arrangements diagram for forward and aft limits of occupant C.G. range.

Figure 6-6. Loading Graph

AIRPLANE C.G. LOCATION - MILLIMETERS AFT OF DATUM (STA. 0.0)

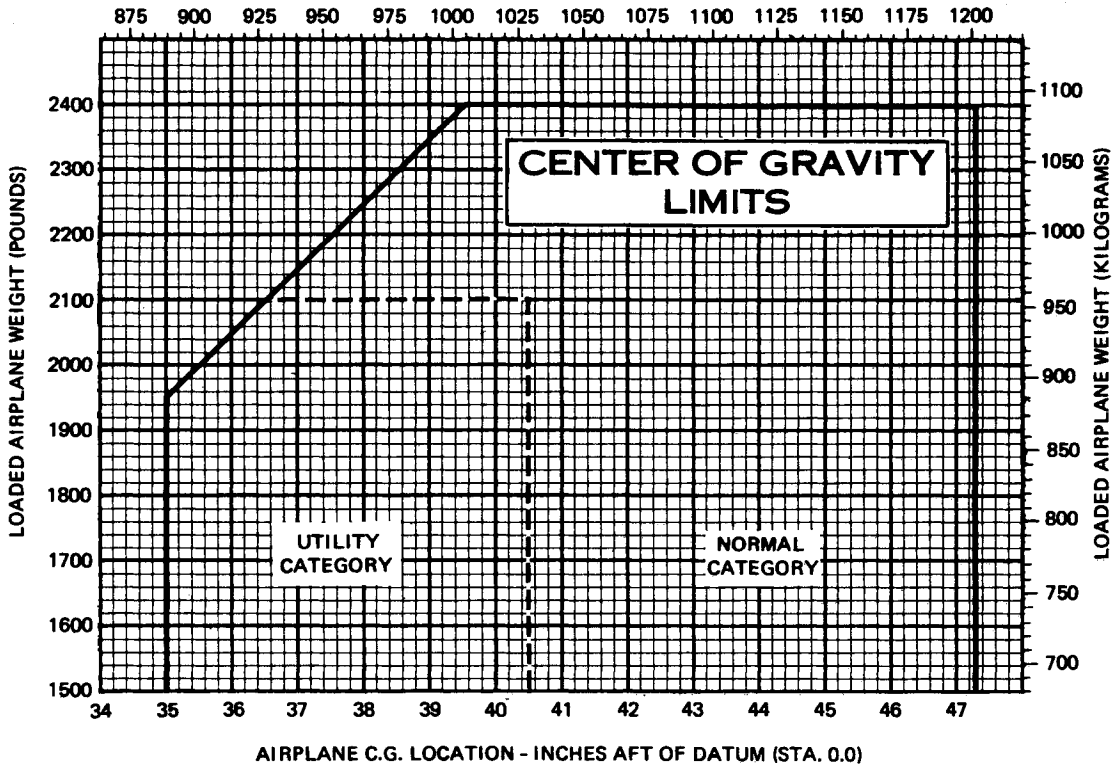


Figure 6-8. Center of Gravity Limits