

WEIGHT AND BALANCE DATA

MODEL PA-28-151 CHEROKEE

Airplane Serial Number 28-7615373

Registration Number N6844J

Date 6/22/76

AIRPLANE EMPTY WEIGHT

Item		Weight (Lbs)	× C. G. Arm (Inches Aft of Datum)	= Moment (In-Lbs)
*Empty Weight	XXXXXX Computed	1309.0	85.4	111737
Unusable Fuel (2 gal.)		12	103	1236
Standard Empty Weight		1321.0	85.5	112973
Optional Equipment		103.7	100.4	10415
Licensed Empty Weight		1424.7	86.6	123388

*Empty weight is defined as dry empty weight (including paint and hydraulic fluid) plus 1.8 lbs undrainable engine oil.

AIRPLANE USEFUL LOAD

(Gross Weight) - (Licensed Empty Weight) = Useful Load

Normal Category: (2325 lbs) - (1424.7 lbs) = 900.3 lbs

Utility Category: (1950 lbs) - (1424.7 lbs) = 525.3 lbs

THIS LICENSED EMPTY WEIGHT, C. G. AND USEFUL LOAD ARE FOR THE AIRPLANE AS DELIVERED FROM THE FACTORY. REFER TO APPROPRIATE AIRCRAFT RECORD WHEN ALTERATIONS HAVE BEEN MADE.

C. G. RANGE AND WEIGHT INSTRUCTIONS

1. Add the weight of all items to be loaded to the licensed empty weight.
2. Use the loading graph to determine the moment of all items to be carried in the airplane.
3. Add the moment of all items to be loaded to the licensed empty weight moment.
4. Divide the total moment by the total weight to determine the C.G. location.
5. By using the figures of Item 1 and Item 4, locate a point on the C.G. range and weight graph. If the point falls within the C.G. envelope, the loading meets the weight and balance requirements.

SAMPLE LOADING PROBLEM (Normal Category)

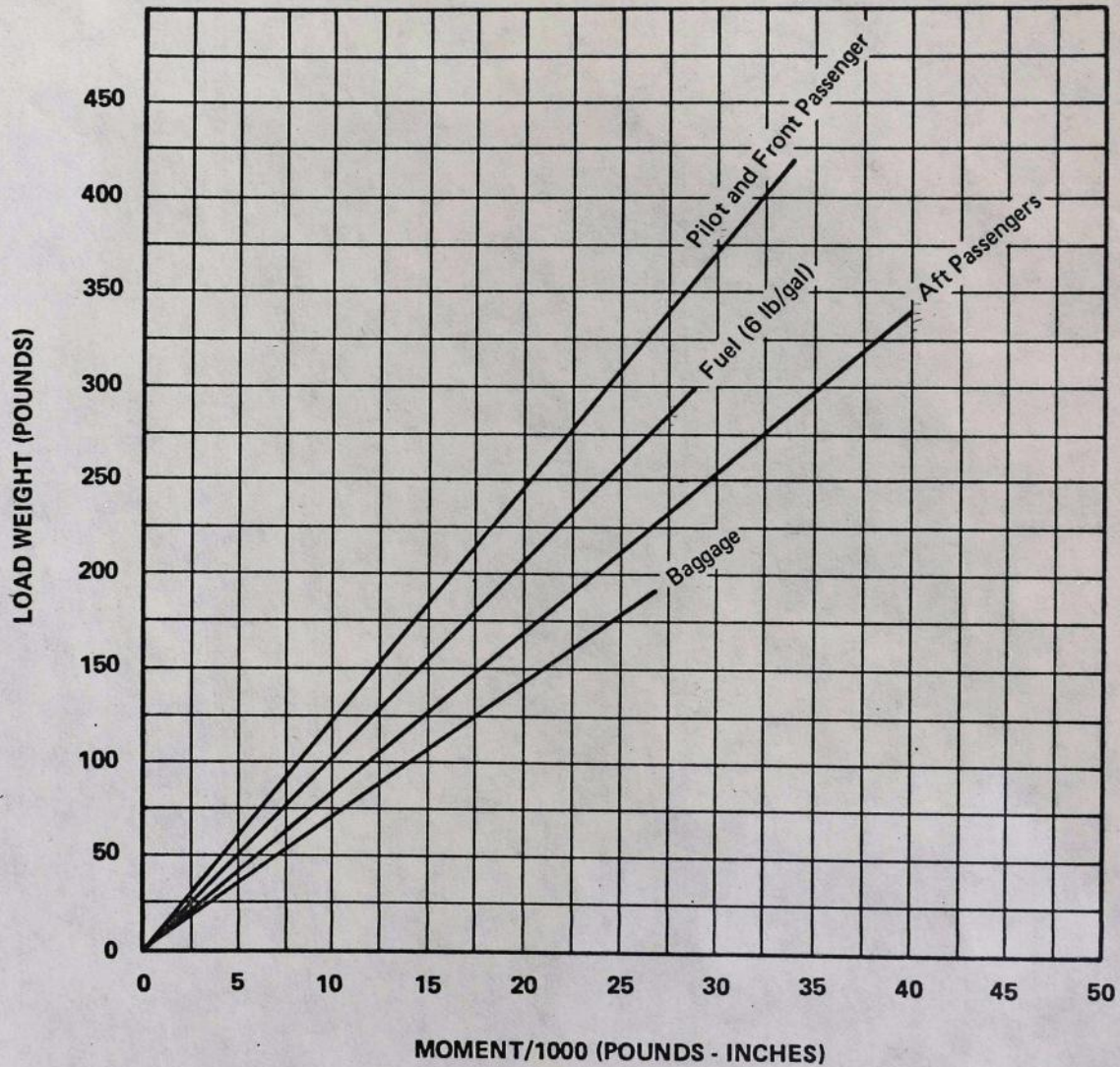
	Weight (Lbs)	Arm Aft Datum (Inches)	Moment (In-Lbs)
Licensed Empty Weight	1424.7	86.6	123388
Oil (8 quarts)	15	27.5	413
Pilot and Front Passenger	340	80.5	27370
Passengers, Aft* (Rear Seat)	340	118.1	40154
Fuel (48 Gal. Maximum)	205.3	95.0	19504
Baggage*		142.8	7000
Total Loaded Airplane	2325	90.7	210829

The center of gravity (C.G.) of this sample loading problem is at 90.7 inches aft of the datum line. Locate this point (90.7) on the C.G. range and weight graph. Since this point falls within the weight - C.G. envelope, this loading meets the weight and balance requirements.

IT IS THE RESPONSIBILITY OF THE PILOT AND AIRCRAFT OWNER TO INSURE THAT THE AIRPLANE IS LOADED PROPERLY.

*Utility Category Operation - No baggage or aft passengers allowed.

LOADING GRAPH



C. G. RANGE AND WEIGHT

