

**Ace Pilot Training
Weight and Balance Computation
N6887U M20C**

Item	Weight (lbs)	Arm (in.)	Moment (in-lbs)
Licensed Empty Weight	1,665.53	45.71	76,138.94
Oil (8 quarts)	15.00	-7.40	-111.00
Pilot and Front Passenger		40.25	
Passengers (Rear Seats)		70.00	
Fuel (47.434 Gal. Max at 6 lbs per gallon)		48.40	
Baggage Area (120 lbs. Max)		93.00	
Hat Shelf (10 lbs. Max)		114.70	
Total Loaded Airplane (2575 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.)

N6887U – Weight & Balance

C.G. Range (Landing gear extended)	(+46.5) to (+49.0) at 2575 lbs. (+42.0) to (+49.0) at 2100 lbs. or less (Straight line variation between points given). Retraction moment 588 in. -lbs.
Empty Weight C.G. Range	None
Maximum Weight	2575 lbs.
No. of Seats	4 (2 at +36.5 to +44.0, 2 at +70.0)
Maximum Baggage	120 lbs. (+93.0), 10 lbs. (+114)
Fuel Capacity	Serial No. 1852, 1940, through 2622 - 48 gals. (Two integral tanks in wings at +48.4)

