

# Ace Pilot Training

## Weight and Balance Computation

### N760A                      BE-76

Item	Weight (lbs)	Arm (in.)	Moment (in-lbs)
Licensed Empty Weight	2,660	111.870	297.575
Pilot		112.000	
Front Right Passenger		112.000	
Rear Left Passenger		144.000	
Rear Right Passenger		144.000	
Baggage (200 lbs. Max.)		167.000	
Fuel (Pounds, 1 Gal = 6 lbs.)		117.000	
Total Loaded Airplane (3900 lbs. Max)		*****	

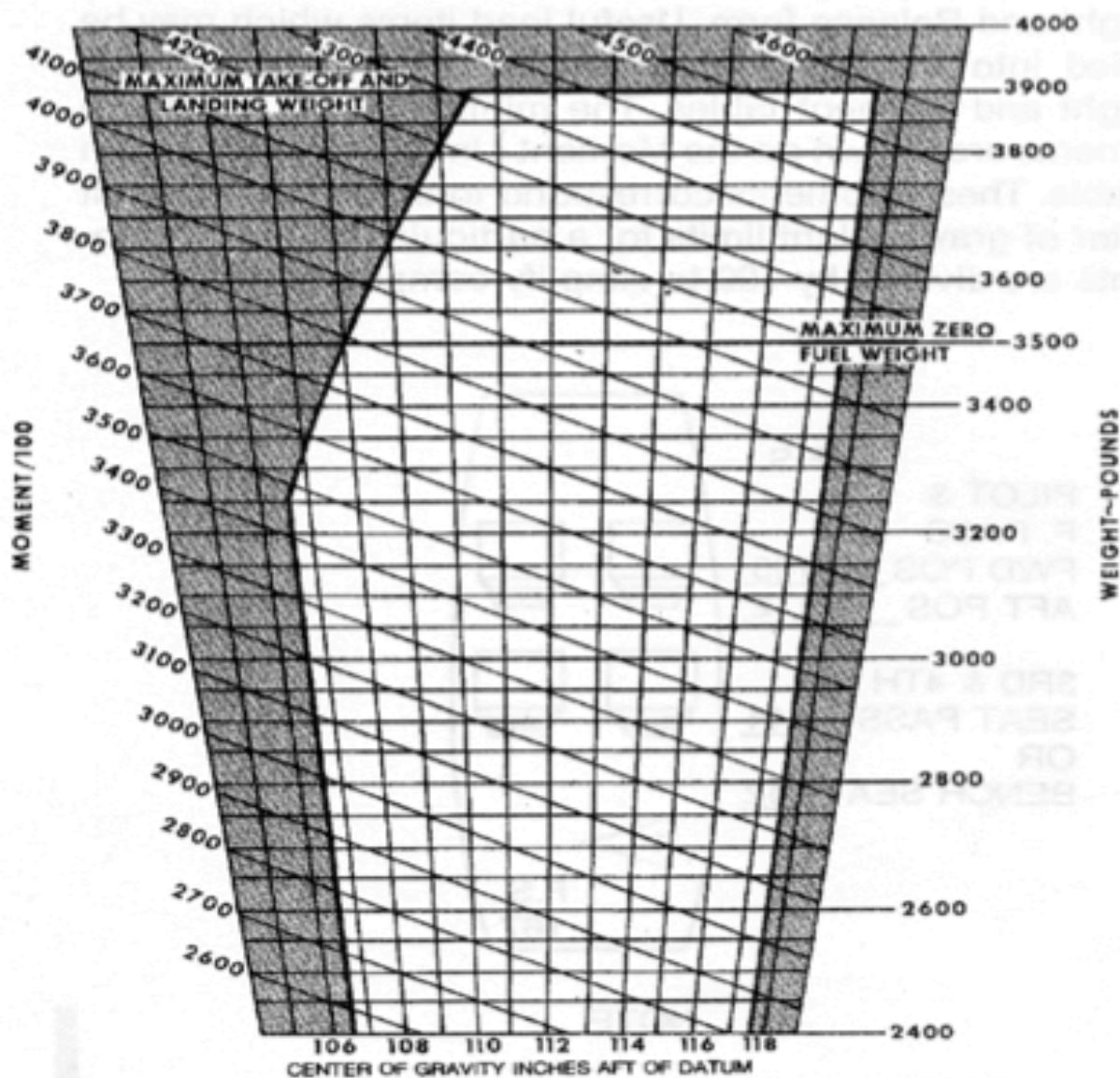
#### Instructions For Computing Total Weight and Center of Gravity

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.)**

# MOMENT LIMITS VS WEIGHT



ENVELOPE BASED ON THE FOLLOWING WEIGHT AND  
CENTER OF GRAVITY LIMIT DATA (LANDING GEAR DOWN)

WEIGHT CONDITION	FWD C. G. LIMIT	AFT C. G. LIMIT
3900 POUNDS (MAX. TAKE-OFF/LANDING)	110.5	117.5
3250 POUNDS OR LESS	106.5	117.5

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