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AIRCRAFT WEIGHT & BALANCE REPORT

Aircraft: N201JK Type: Mooney S/N 24-0040
Model: M20J

Prior Empty Weight: 1766.0 As of: 01/27/2022

Prior Useful Load: 974.0

Prior Longitudinal Moment: 64,461.5 Prior Empty Weight CG: 36.5

Aircraft Reweighed IAW Mooney Maintenance Manual

New Final Figures:

Empty Weight: 1784.5 Gross Take-off Weight: 2740.0

Useful Load: 955.5

Longitudinal Moment: 70,612.67 Empty Weight CG: 39.57

This document supersedes all versions prior to this date.


John Burden A&P 3126767 IA

Date: 03/24/2024

11. Record weights and measurements and compute basic weight and CG as follows:

$$LC/G = LM/R - 5 - LM$$

a. CG Forward of Main Wheels

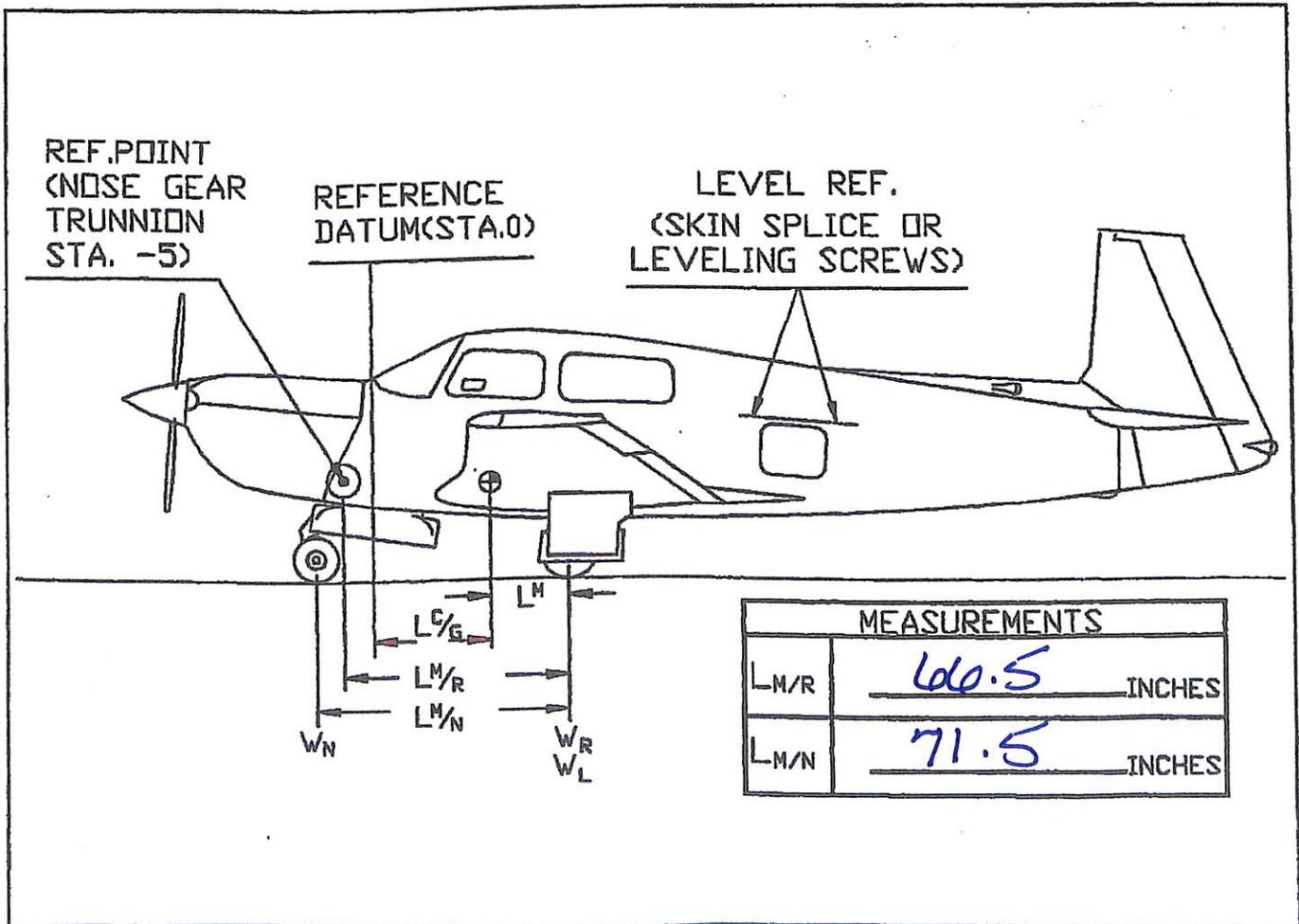
$$\frac{547.5 \text{ LBS}}{\text{Weight of Nose}} \times \frac{71.5 \text{ IN.}}{\text{Distance Between Main and Nose Wheel Axle Centers (LM/N)}} = \frac{1784.5 \text{ LBS.}}{\text{Total Weight of Aircraft}} = \frac{21.93 \text{ IN.}}{\text{CG Forward of Main Wheels (LM)}}$$

(WN) (LM/N) (WT) (LM)

b. CG Aft of Datum (Station 0).

$$\frac{666.5 \text{ IN.}}{\text{Distance from Center Nose Gear Trunion to Center of Main Wheel Axles (Horizontal) (LM/R)}} - \frac{5 \text{ IN.}}{\text{Distance from Nose Gear Trunion to Datum CONSTANT}} - \frac{21.93 \text{ IN.}}{\text{Result of Computation Above (a.) (LM)}} = \frac{39.57 \text{ IN.}}{\text{CG (FUS STA) Distance Aft of Datum (Empty Weight CG) (LC/G)}}$$

NOTE: Empty weight includes unusable fuel and full oil and is computed with gear down and flaps up.



WEIGHT AND BALANCE DIAGRAM - FIGURE 8-1