

AIRCRAFT WEIGHT AND BALANCE



WEIGHTY WORDS

Name _____

Class _____

Match the following weight and balance terms with their definitions:

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| _____ 1. Weight of aviation fuel | A. Weight of airframe, engines, installed equipment, unusable fuel and all required fluids. |
| _____ 2. CG Range | B. 1.7 lbs/quart |
| _____ 3. Basic Empty Weight | C. The distance from the datum to the applied force. |
| _____ 4. Maximum Gross Weight | D. The greatest weight that an airplane is normally allowed to have at landing. |
| _____ 5. Useful Load | E. A line from which all measurements of arm are taken. Established by manufacturer. |
| _____ 6. Weight of Oil | F. The point at which an airplane would balance if it were possible to suspend it at that point. Theoretical point at which entire weight of the aircraft is assumed to be concentrated. |
| _____ 7. Arm | G. 6 lbs/gallon |
| _____ 8. Moment | H. Maximum authorized weight of the aircraft. |
| _____ 9. Maximum Landing Weight | I. The product of the weight of an item multiplied by its arm. |
| _____ 10. Maximum Ramp Weight | J. The distance between the forward and aft CG limits. |
| _____ 11. Datum | K. The Maximum Gross Weight minus the Basic Empty Weight. It is the amount of weight that can be loaded onto the aircraft, including the pilot, copilot, passengers, baggage, usable fuel and drainable oil. |
| _____ 12. Station | L. The total weight of a loaded aircraft, including all fuel. Higher than takeoff weight due to fuel used during taxi. |
| _____ 13. Center of Gravity (CG) | M. A location in the airplane that is identified by a number designating its distance in inches from the datum. The datum is station zero. |
| _____ 14. Weight | N. The force exerted by an aircraft from the pull of gravity. |