AIRCRAFT WEIGHT AND BALANCE

WEIGHTY WORDS

Match the following weight and balance terms with their definitions:

__G__ 1. Weight of aviation fuel

__J__ 2. CG Range

__A__ 3. Basic Empty Weight

__H__ 4. Maximum Gross Weight

__K__ 5. Useful Load

__B__ 6. Weight of Oil

__C__ 7. Arm

__I__ 8. Moment

__D__ 9. Maximum Landing Weight

__L__ 10. Maximum Ramp Weight

__E__ 11. Datum

__M__ 12. Station

__F__ 13. Center of Gravity (CG)

__N__ 14. Weight

A. Weight of airframe, engines, installed equipment, unusable fuel and all required fluids.

B. 1.7 lbs/quart

C. The distance from the datum to the applied force.

D. The greatest weight that an airplane is normally allowed to have at landing.

E. A line from which all measurements of arm are taken. Established by manufacturer.

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.

G. 6 lbs/gallon

H. Maximum authorized weight of the aircraft.

I. The product of the weight of an item multiplied by its arm.

J. The distance between the forward and aft CG limits.

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.

L. The total weight of a loaded aircraft, including all fuel. Higher than takeoff weight due to fuel used during taxi.

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.

N. The force exerted by an aircraft from the pull of gravity.