

Sunair

FLIGHT TRAINING

Fuel Considerations



Contains useful information to help you during the beginning of your training.

Calculate Safe Endurance

Safe endurance is calculated by subtracting unusable fuel, and reserve fuel from the total fuel onboard.

For example:

Total dipped fuel = **85L**

Unusable = **15L**

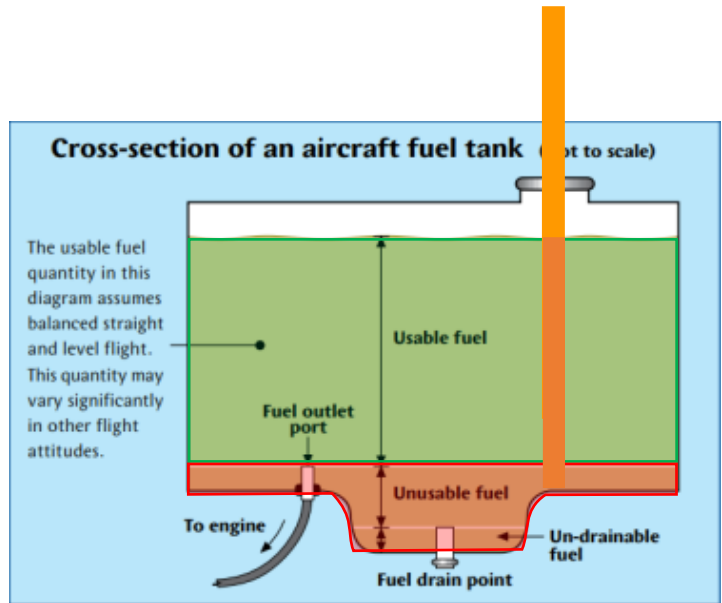
Total usable = **70L**

Fuel burn = **35L** per hour

$70 \div 35 = 2.0\text{hrs}$ Total endurance

Reserve = 30min (day)
= 45min (night)

$2.0 - 0.5 = 1.5\text{hrs}$ Safe endurance



Calculate Fuel Weight

Convert Litres to Kilograms:

Usable fuel = **70L**

Conversion factor = **0.72**

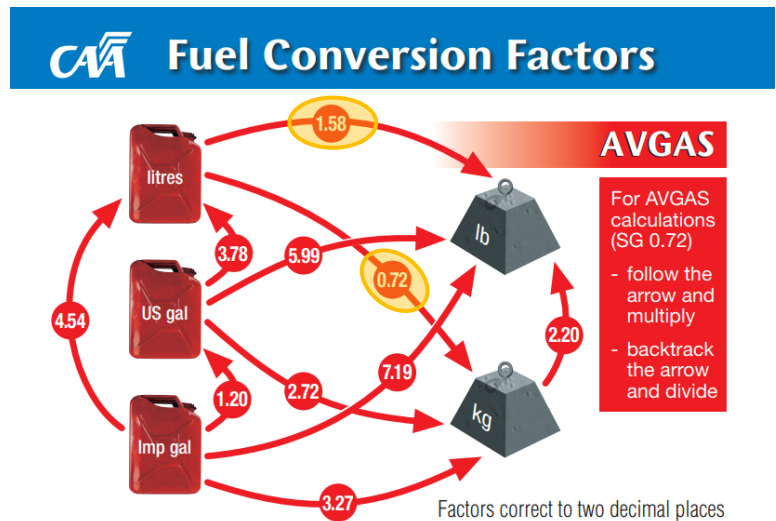
$70 \times 0.72 = 50.4 \text{ kg}$

Convert Litres to Pounds:

Usable fuel = **70L**

Conversion factor = **1.58**

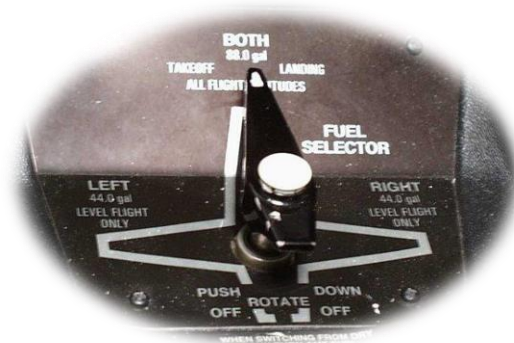
$70 \times 1.58 = 110.6 \text{ lbs.}$



Fuel Selector

Most Cessna aircraft have one fuel selector that can be selected to LEFT, RIGHT or BOTH. Normally the aircraft is always operated on BOTH as this means no need to change tanks in-flight.

Note: Many light aircraft have only LEFT or RIGHT selections. This means careful monitoring of fuel consumption, and planning when to swap tanks.



Fuel Cards

During your pre-flight inspection make sure the fuel cards are onboard (usually inside pocket attached to ignition key), particularly if about to fly cross-country!

