



TIME IN YOUR TANKS...

Finding the “time in your tanks”...

- Log accurate flight times, power settings and fuel used on each trip.
- Count flight time as startup to shutdown.
- Compute fuel consumption (per hour) after a few flights under similar operating conditions.
- Determine usable fuel from pilot’s operating handbook (POH).
- Ensure proper conversion for units used: (imp gals to litres; US gals to litres; pounds to litres). Conversion charts can be found in the CFS.
- Your safe flight time limit is:

$$\frac{\text{Usable fuel} \times 3}{(\text{Fuel units})/\text{hr}} = \frac{\quad}{\times 4} \text{ hrs (resolve never to fly longer)}$$

- In flight, compute fuel used:

$$\frac{(\text{Fuel units})/\text{hr} \times \text{min flown}}{60} = \quad (\text{fuel units}) \text{ used}$$

- If fuel gauges do not agree with computed (fuel units) used, suspect inaccurate readings or a loose fuel cap.

Fuel management checklist

When computing a safe flight time limit for your flight, consider:

- Trip length
- Cruise altitude
- Engine power settings
- Wind (don’t count on forecast tailwinds)
- Regulatory and company fuel reserves
- Number of passengers and load
- If actual flight time progress lags behind planned progress you may have to land short of destination
- Use the proper grade of fuel; colour check fuel grade when refuelling; if proper grade unavailable, use the next higher grade. (Always refer to POH)
- Draincock check for water and fuel cleanliness
- Visually check quantity before startup, preferably using an accurate dipstick
- Know the fuel system—especially the tank selectors
- When selecting fuel tanks don’t rely on feel alone—look. Don’t reposition fuel tank selectors just before takeoff or landing.
- Get familiar with mixture control...

Mixture control

- A proper mixture control gives:
 - improved engine efficiency
 - fuel economy, and longer range
 - reduced maintenance costs, longer sparkplug life, less fouling
- Use the engine builder’s vast experience—consult the POH

