Preventing Gipsy Major Engine Failures

Are you checking your engine?

After analysis, the CAA have identified information that suggests the use of AVGAS (100LL) fuel in these engines could cause reliability problems particularly with cylinder heads, valves and valve seats, especially where bronze cylinder heads have not been modified to incorporate stainless steel valve seats and result in a reduction of component life.

- UL91 is the most appropriate fuel to be used by your Gipsy Major engine.
- AVGAS (100LL) can be used, but this may affect the longevity of the components
- **The CAA recommends Unleaded MOGAS should not be used in Gipsy Major powered aircraft** due to it containing octane enhancers, notably ethanol, which can cause damage to your engine, particularly non-metallic components including the carburettor floats, rubber pipework, seals etc.

For more details on the above points please reference the engine technical manual.

Whilst the CAA recognises that a rough running engine or engine failure can be caused by a multitude of factors, one remedial action is to ensure the most appropriate fuel is used where available and that the engine is regularly checked by a qualified engineer.

It is recommended that ALL operators (whether on National Certificate of Airworthiness or Permit to Fly) of Gipsy Major engines ensure routine checks on these engines are carried out by a company/person experienced on this engine type. To ensure the engines are in a good and serviceable condition you should also have your engine properly checked if the:

- **Engine is found to be running rough, or**
- **Low compression is noticed when turning the propeller by hand.**

As ever, good maintenance is the key for a reliable engine.
The Gipsy Major engine is a widely used engine found in a variety of aircraft including Tiger Moths, Chipmunks and Austers. The engine is generally simple and reliable and with the right amount of care should provide operators with hours of trouble free use.

Have fun and fly safe!