



EASA Safety Information Bulletin

SIB No.: 2009-02
Issued: 22 January 2009

Subject: **Piston Engine Powered Aircraft, Operated on Automotive- or Jet Fuel**

Ref. Publication: None.

Description: This SIB is published to inform all owners and operators of piston engine powered aircraft about operation on non-aviation fuels and about operation of compressed ignited (diesel) piston engine powered aircraft on jet fuel.

Concerns have been raised by oil companies about the use of fuels not primary intended for piston engine powered aircraft like automotive fuel (commonly known as mogas), diesel fuel or jet fuel. Automotive fuel specifications allow wider variations of several fuel parameters and in the fuel composition. The jet fuel specifications do not cover diesel engine related parameters like the cetane number, a measurement of the combustion quality of diesel fuel during compression ignition.

It is the responsibility of the engine/airframe (S)TC holders to ensure the safe operation with all approved fuels. Similar safety issues have been addressed in the type certification processes of spark and compressed ignited piston engines and aircraft (e.g. by special tests concerning vapour pressure, fuel contamination, low fuel temperature, low cetane numbers etc.). Where necessary, additional limitations have been implemented; see also EASA Safety Information Notice (SIN) 2007-01 and FAA Special Airworthiness Information Bulletin (SAIB) CE-07-06. (S)TC holders are required to monitor possible future changes in fuel parameters and composition by appropriate means, e.g. by participating in fuel standard committees and cooperating with oil industry.

Owners and operators of piston engine powered aircraft that operate on automotive or jet fuel are reminded to use only approved fuel as listed in the (S)TC holders documentation. Use of non-approved fuels, or use of approved fuels outside the approved limitations, may result in unsafe conditions.

Applicability: All aircraft powered by piston engines and approved for use of automotive or jet fuel.

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