

LAA/AWA/18/01
3rd January 2018

Jabiru J400, Jabiru J430 Aircraft & Jabiru J160

Mogas Prohibition

A number of 'wet wing' Jabiru aircraft types, all of which feature similar forms of construction and materials, have suffered some external softening and rippling of their wing skins in the vicinity of the installed composite fuel tanks. The manufacturers have advised that this rippling, when confined to small areas of the wing skin, does not affect the structural integrity of the wings of these aircraft. However, if allowed to progress through large areas of the aircraft skin or to the underlying structure, the integrity of the wings structure might be adversely affected.

In all known cases where wing skins have been affected the aircraft have been stored for a long period of time with Mogas fuel left in the wing tanks. It is known that Mogas is less stable over time than certified aviation fuel and it is felt likely that the negative effect on the composite wing's structure is due to some of the many reactive breakdown products produced by this fuel, most likely held in the fuel vapour.

On 1st November 2017 Jabiru Aircraft Pty Ltd issued Service Letter JSL 007-7, this Service Letter advises that Mogas must not be used in certified examples of Jabiru aircraft. This Service Letter can be downloaded [HERE](#)

Because of the recent issues with Jabiru wet wing aircraft in the UK, seemingly connected to fuel vapour generated by Mogas, and the advice from the manufacturer, the LAA has withdrawn the former permission to use Mogas in all wet wing Jabiru aircraft. The AIL mandating this change for J400 aircraft can be downloaded [HERE](#). The AIL mandating this change for J430 aircraft can be downloaded [HERE](#). The AIL mandating this change for J160 aircraft can be downloaded [HERE](#).



Fig 1. This picture shows the top surface of a Jabiru UL-D wing that's been affected by Mogas that's been left in the tank for some time. The UL-D is a factory built microlight and therefore considered a 'certified' type by the manufacturers and the UK CAA – it is therefore not approved automatically to use Mogas.



Fig 2. Though difficult to see in this picture rippling can be seen in the top surface of this J400 wing. The recent AIL withdraws any previous approval for Mogas use.