

SAFETY ADVISORY NOTICE

01-2021 Issue 4 - 8 March 2023

Bristell Light Sport Aircraft Self-Certified by BRM Aero Ltd

This Safety Advisory Notice is an advisory document that provides safety-related information to aviation industry participants about identified potential risks. The notice seeks to give participants operating in a scheme that relies on informed participation access to critical information.

1. This Safety Notice (Issue 4) replaces Safety Notice (Issue 3) dated 21 June 2021 and all previous issues

In September 2020 and December 2022, BRM Aero issued updates to the Aircraft Operating Instructions for the BRM Aero NG5 to correct weight and balance information while also amending the longitudinal datum. It is important that pilots and operators are aware of these changes.

2. The Light Sport Aircraft Regulatory Scheme

Manufacturers of LSA (whether registered with CASA or otherwise) can certify or make a self-declaration that the aircraft meets accepted published standards, such as the ASTM standards when applying to CASA for a Special Certificate of Airworthiness (SCoA) as an LSA.

This scheme – adopted by the FAA, NZ CAA, and CASA – lowers manufacturer compliance costs, reduces the time to bring a design to market, and enables a timelier response to design and technology change. It is less rigorous than schemes that require a manufacturer to hold a production certificate issued by a National Aviation Authority such as CASA, EASA, or the FAA. It is essential to understand that the self-certification of these aircraft is not verified by any NAA, as would be the case for a manufacturer with a production certificate.

3. Safety Recommendation for affected Pilots and Operators

- a) Pilots of affected aircraft should ensure that they are using the most recent weight and balance information provided by BRM Aero in December 2022 or such later information as may be provided by BRM Aero.
- b) Pilots and operators should pay particular attention to the aft movement of the centre of gravity with fuel burn. Depending on the aircraft's empty weight and CoG, the corrected arm, and the effect of an aft moving CoG with fuel burn during flight this may significantly change the revised permitted loading of the aircraft as a result of the revised weight and balance information provided by the manufacturer.
- c) Pilots should check that the loading of the aircraft is within the published limits, both at the proposed take-off weight and at a zero-fuel or minimum fuel weight. It is possible under the new W&B data that the aircraft CoG will move beyond the aft limit as fuel is burnt during flight.
- d) CASA recommends that the parcel shelf at the rear of the fuselage is not used. Any items on the parcel shelf are not taken into account in CoG calculations IAW the POH. Articles in this area will have the effect of a further aft CoG that will not be known or identified in CoG calculations.