

SAFETY ADVISORY NOTICE

01-2020 Issue 2 - 28 July 2020

Bristell Light Sport Aircraft Self-Certified by BRM Aero Ltd

This Safety Advisory Notice is **an advisory document** that provides information and makes recommendations to aviation industry participants about identified risks to aviation safety. The notice seeks to ensure aviation participants are reasonably informed.

1. Update to Safety Notice dated 19 February 2020

On 19 February 2020 CASA issued a safety notice to pilots and operators of Bristell Light Sport Aircraft (LSA). The safety notice advised that further information would be provided as it became available.

This updated safety notice provides further information and should be read in conjunction with the safety notice of 19 February 2020. The information contained in the safety notice of 19 February 2020 remains applicable and a copy is available for viewing on CASA's website. (https://www.casa.gov.au/sites/default/files/safety_notice_-_bristell_lsa_-_20_feb_2020_-_accessible.pdf).

On 28 July 2020 CASA issued operational limitations under regulation 262APA(4) of the *Civil Aviation Regulations 1988* (CAR 1988) in relation to particular activities associated with any **flying training operation** performed by BRM Aero Ltd, NG4 and NG5 LSA operating with a Special Certificate of Airworthiness.

The **operating limitations** that apply to **flying training operations** are described below.

- 1. A pilot in command of or student under instruction in, a BRM Aero Light Sport Aircraft (including the NG4, NG5 and TDO design variants) engaged in a flight training operation, is prohibited from conducting an intentional stall of the aircraft, or from performing any flight training activities that could reasonably lead to an unintended stall (for example, performance limit turns which occur at high angle of bank, high angles of attack and low airspeed).
- 2. A copy of these operating limitations must be attached to the Special Certificate of Airworthiness, be carried at all times in the aircraft and be readily accessible.

Notes:

- 1. The operational limitations remain in effect until such time as written notice from the Civil Aviation Safety Authority is issued advising to the contrary.
- 2. Nothing in these operating limitations are intended to prevent the conduct of a normal landing.
- 3. A flight training operation includes any training operation, regardless of whether that operation is administered by a Sport Aviation Body (SAB), an Approved Self-administering Organisation (ASAO) under CASR Part 149, or an operator who holds a CASR Part 141 or CASR Part 142 certificate authorising the operation.



The purpose of this update is to sufficiently inform aviation participants who conduct recreational and private operations in the affected aircraft, of the potential risks performing certain activities, so they are able to make informed decisions.

2. Safety Issues

Several fatal accidents have occurred worldwide (including in Australia) where Bristell aircraft appear to have entered a 'flat' spin (including during stall flight training) and failed to recover.

CASA has previously sought confirmation from the manufacturer as to compliance with the ASTM LSA standards and, in particular, spin compliance flight testing. At the present time, CASA has not received sufficient assurance as to the extent of such testing, including testing covering each design variant.

CASA also holds concerns as to the reliability of some of the information already provided.

3. Further Information

There are four known and different design variants of the affected aircraft. These include a long-wing variant (9.1m wingspan), short-wing variant (8.1m wingspan), a TDO tailwheel long-wing variant and the NG4. In regards to the NG4 variant, only those aircraft certified by BRM Aero Ltd on CASA Form 681 are affected.

CASA has sought from the manufacturer independent flight testing certification for each of the four design variants.

CASA has engaged with other national aviation regulators in relation to Bristell LSA currently operating within their national fleets. It should also be noted that the Australian circumstances for operations differ from other jurisdictions, most notably due to Bristell LSA being used for flight training in Australia.

CASA has provided a copy of the operational limitations and a statement of reasons explaining why they have been imposed to all Registered Operators of the affected aircraft as it is required to do so by regulation 262APA(5) of the CAR 1988

CASA is satisfied that by reason of the safety notice issued on 19 February 2020 and this update, that pilots performing **recreational and private activities are sufficiently on notice** of CASA's concerns, in particular, as to the spin recovery characteristics of the aircraft.

4. Recommendations

CASA recommends in accordance with the original Safety Notice that private and recreational pilots not intentionally stall the aircraft or perform any manoeuvres that could reasonably lead to an unintended stall. CASA also recommends that all pilots should inform any passenger of the details of this notice before commencement of a flight.

5. Enquiries

Enquiries with regard to the content of this safety notice should be made via the direct link email address: sport@casa.gov.au