

Safety Regulation Group
Applications and Certification Section

11 February 2004

Our Ref 9/97/CtAw/151

LETTER TO OWNERS/OPERATORS NO 2502
CFM SHADOW, STREAK SHADOW AND STARSTREAK SHADOW MICROLIGHT AEROPLANES
UNDERCARRIAGE

The undercarriage of the CFM Shadow, Streak Shadow and Starstreak Shadow microlight aeroplane consists of a steel framework attached to the composite fuselage. The outer section of the main undercarriage consists of two GRP pultrusion rods.

There have been 18 recorded undercarriage failures on these microlight aeroplane types and the CAA has been working with the British Microlight Aircraft Association (BMAA) and the Popular Flying Association (PFA), who are now responsible for continued airworthiness support for these types, to address this problem. Although to date there has been no serious injury or fatality resulting from these undercarriage failures, the CAA remains concerned about the safety risk associated with undercarriage failure and is working to address this continued airworthiness issue as a priority.

Some microlight aeroplanes have been fitted with an under-fuselage 'slipper' fuel tank, either as an optional modification or as part of the basic build standard. There have been four recorded occurrences of rupture of the fuel tank following undercarriage failure. Although there has been no post crash fire in recorded accidents to date, the CAA considers operation of microlight aeroplanes using this slipper tank, and with an undercarriage with a poor service history to present an unacceptable safety risk. As a result, operation of microlight aeroplanes using the slipper tank has been prohibited by Mandatory Permit Directives (MPDs) 2003-019 R1 and 2004-002. This action is an interim measure pending resolution of the undercarriage problem. It is expected that when a modified/new approved undercarriage is installed, operation with the slipper tank will then be permitted.

The safety risk associated with continued operation of these microlight aeroplanes with the existing undercarriage design is unacceptable. Following a meeting with BMAA and PFA, it was agreed that a modified/new undercarriage must be available and installed on all affected microlight aeroplanes by 31 March 2004 in order to allow their continued operation.

BMAA and PFA are currently working with the Shadow Flight Centre and a number of UK A1 approved microlight companies to develop a modified/new undercarriage for these microlight aeroplanes.

Any enquiries regarding this LTO should be referred to Mrs J Barratt, Programmes Department (Telephone number 01293 573945) at the address below.

Civil Aviation Authority

Floor 1E Aviation House Gatwick Airport South West Sussex England RH6 0YR
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Further information concerning the proposed design changes may be obtained from the BMAA or PFA at the following addresses:

British Microlight Aircraft Association (BMAA)
Bullring
Deddington
Banbury
Oxfordshire
OX15 0TT

Tel: 01869 336006
Fax: 01869 337116
Email: cto@bmaa.org

Popular Flying Association
Turweston Aerodrome,
Nr Brackley, Northants
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