

LAA/AWA/19/05
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Rotorsport UK – Calidus Front Fork – Top Steering Plate Replacement and Rotorsport UK Gyroplanes (All Marks)

LAA Engineering has received details of two inspection instructions published by Rotorsport UK, the manufacturer of the popular MT-03, MT-03 (Sport), Calidus and Cavalon two-seat gyroplanes; this Airworthiness Alert provides access to these and other associated documents.

Rotorsport Calidus

The first issue relates to a Rotorsport Service Bulletin (SB-127 Issue 1) entitled 'Calidus front fork top steering plate replacement' issued in June 2018. This SB was mandated by the publication of a Mandatory Permit Directive (MPD 2018-009-E) issued by the UK CAA in October 2018.

It should be noted that the MPD only directly applies to Calidus aircraft fitted with rear seat rudder pedals. This is because it's possible to damage the steering plate if there's a conflict between inputs between the front and rear rudder pedals. Recent advice received from LAA Inspectors suggest that the steering plate can also be damaged by excess rudder movement when steering the aircraft when outside the aircraft using the rudder.

MPD 2018-009-E can be downloaded [HERE](#)

SB-127 Issue 1 can be downloaded [HERE](#)

Rotorsport – All Marks

Rotorsport UK has recently issued a Service Information Letter (SIL-026) which highlights the need for close inspections of the upper body mounting attachment to the airframe and in the in the area of the suspension bow mounting plate.

SIL-026 can be downloaded [HERE](#)



Fig 1. (Left) This picture shows the result of an overload to the top steering plate which has significantly bent; this was most probably caused because of an incorrect rudder application by a student being forcibly corrected by the instructor. Since this failure the steering brackets on aircraft equipped for training have been strengthened.



Fig 2. (Right) shows a complete breakage (without a bend) and it is thought that this type of failure results from steering the aircraft around on the ground using the rudder.



Fig 3. The recent Rotorsport SIL gives examples of cracks that engineers have spotted in welded joints in the structure; the crack shown was found in the right hand upper body bracket. Cracks like this, when spotted early, can be easily repaired, but if left can result in expensive structural repairs.