

Civil Aviation Authority

MANDATORY PERMIT DIRECTIVE



Number: 2022-002 Issue date: 24 January 2022

In accordance with 41(1) of Air Navigation Order 2016 as amended the following action required by this Mandatory Permit Directive (MPD) is mandatory for applicable aircraft registered in the United Kingdom operating on a UK CAA Permit to Fly.

Type/Design Approval Holder's Name:

Type/Model Designation(s):

AUTOGYRO CERTIFICATION LIMITED (Formerly Rotorsport Uk Limited) MT-03, MTOsport, MTOsport 2017, Calidus and Cavalon gyroplanes

Effective Date:	07 February 2022
TADS:	BG01, BG02, BG04, BG06, and BG08
Foreign AD (if applicable):	Not Applicable
Supersedure	Not Applicable

ATA 62 – Main Rotor(s) – Rotor Blade – Inspection / Replacement / Life-Limitation Amendment

Manufacturer(s):

AutoGyro Certification Limited (AGC) (formerly Rotorsport UK Limited).

Applicability:

MT-03, MTOsport, MTOsport 2017, Calidus and Cavalon gyroplanes all models and all serial numbers.

Definitions:

None.

Reason:

The CAA has been advised of two different crack mechanisms that are occurring on rotor blades on AGC gyroplanes equipped with Rotor System II.

1. Longitudinal (i.e. spanwise) cracks from the root to the second bolt hole have been found on the top surface of rotor blades on a MTOsport equipped with Rotor System II.

Due to similarity of design, this condition may also affect other gyroplanes types from AGC with Rotor System I or Rotor System II.

2. A crack and fretting have been found at the outer attachment bolt hole of a rotor blade of a RotorSystem II installed on an MTOsport gyroplane.

Due to similarity of design, this condition may also affect other gyroplanes types from AGC equipped with Rotor System I or Rotor System II.

Cracks in the rotor blades may result in loss of the blade and consequent loss of control of the gyroplane.

This MPD has been raised to check the hours of the rotor systems installed on affected gyroplanes, align the inspection programme to the new life limits and inspection intervals, check the rotor blades for evidence of corrosion and/or cracks and replacement as required.

Required Action(s) and Compliance Time(s):

Compliance is required as follows, unless previously accomplished:

- 1. Before further flight from the effective date of this MPD, in accordance with AGC Service Bulletin (SB) SB-144 Issue 1 dated 19 August 2021:
 - a. Check accumulated flight hours of the installed Rotor System;
 - b. Align maintenance inspections with new life limits, and
 - c. Perform required actions, including inspection in accordance with the Aircraft Maintenance Manual (AMM) as identified in SB-144. If, during this inspection, any crack is detected, replace the affected part with a serviceable part before further flight and return the affected part(s) to AGC.

Additional guidance on rotor blades inspections can be found on AGC Service Information Letter (SIL) SIL-028 Issue 1 dated 17 June 2019 or later approved revisions.

2. Report any anomalies found during the inspections in paragraph 1 to both AGC and the CAA.

This can be accomplished by using Appendix 1 (Inspection Results Form) of this MPD and the contact information found on that Form.

Reference Publications:

AGC Service Bulletin SB-144 Issue 1 dated 19 August 2021.

AGC Service Information Letter (SIL) Issue 1 dated 17 June 2019 (guidance only).

The use of later approved revisions of the above-mentioned documents is acceptable for compliance with the requirements of this MPD.

Remarks:

- 1. The safety assessment has warranted immediate publication and notification without implementing the full consultation process.
- 2. Enquiries regarding this MPD should be referred to: <u>GA@caa.co.uk</u>.
- 3. For any question concerning the technical content of the requirements in this MPD or the reference publications, please contact: AutoGyro Certification Limited, Poplar Farm, Prolley Moor, Wentnor, Bishops Castle, SY9 5EJ, England. Email: <u>compliance@rotorsport.org</u>.

Appendix 1

Inspection Results Form						
E-mail completed to:			Or mail to:			
compliance@rotorsport.org and GA@caa.co.uk SUBJECT LINE: MPD 2022-002			AutoGyro Certification Limited Poplar Farm, Prolley Moor, Wentnor Bishops Castle, Shropshire, SY9 5EJ, England and Civil Aviation Authority / General Aviation Unit Aviation House, Gatwick Airport South, West Sussex, RH6 0YR, England			
Include photos, if applicable						
Aircraft Type/Model (i.e. MTOsport)	:	•	Aircraft Serial Number:			
RotorSystem Total Hours:	Flight		Registration:	G-		
RotorSystem Type: (i.e. RotorSystem II))		Rotor Blades Serial Numbers: Note: include both rotor blades serial numbers.			
Inspection Results Inspector's Comments						
Rotor bolt hole(s) crack(s) found?	If positive, provide more details on location(s), dimensions, etc.					
Rotor bolt hole(s) fretting found?	If positive, provide more details on location(s), dimensions, etc.					
Rotor blade longitudinal crack(s) found?	If positive, provide more details on location(s), dimensions, etc.					
Inspector's Information						
Name (print): Signature:						
Certificate No .:			Date:			