



Civil Aviation Authority

EMERGENCY MANDATORY PERMIT DIRECTIVE



Number: 2016-006-E

Issue date: 15 July 2016

In accordance with Article 22(1) of The Air Navigation Order 2009, 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 Approval Holder's Name:
Malcolm Stewart t/a Red Aviation

Type/Model Designation(s):
Ikarus C42

Title: Propeller – Forward Hub – Inspection for Cracking

Manufacturer: Various

Applicability:
Ikarus C42 FB UK
Ikarus C42 FB100 VLA
Ikarus C42 FB80
Ikarus C42 FB100
Ikarus C42 FB80 Bravo
Ikarus C42 FB100 Bravo

aircraft fitted with a Neuform Ground Adjustable Propeller

Reason: Cracks have occurred starting from the centre hole in the forward hub on some Neuform propellers. Three aircraft have been affected with hours flown ranging from 400 to 1050.

The cause of the cracking is unknown, but several propellers have done over 3,000 hours and one example with 6,500 hours with no problem. It also seems to be only occurring in the UK as the problem has not been reported to Comco-Ikarus on any C42's in Europe, where there are many more flying with Neuform propellers.

If such cracks were allowed to propagate, the structural integrity of the propeller may be compromised, possibly resulting in the loss of one or more blades.

Effective Date: 15 July 2016

Compliance/Action:	<p>Compliance is required as follows, unless previously accomplished:</p> <ol style="list-style-type: none"> 1. Before further flight, carry out the inspection in paragraph 3 below of this MPD. 2. Repeat the inspection in paragraph 3 below of this MPD at annual intervals. 3. Remove the propeller spinner and visually inspect the front hub for evidence of cracking from the centre hole. If there is doubt whether there is cracking, dye penetrant crack detection may be used in addition to the visual inspection. 4. The aircraft owner may carry out the inspection in paragraph 3 if they consider themselves capable. Alternatively, a BMAA or LAA inspector may carry out the inspection. 5. If any cracks are found, ground the aircraft then inform Red Aviation and obtain and implement a repair scheme before further flight.
ENSURE COMPLIANCE WITH THIS MPD IS RECORDED IN THE AIRCRAFT LOGBOOK	
Reference Publications:	Malcolm Stewart t/a Red Aviation Service Bulletin Number 30 Issue 1 dated 5 May 2016.
Remarks:	<ol style="list-style-type: none"> 1. This MPD was not posted for consultation because of the urgency of the requirement. 2. Enquiries regarding this Mandatory Permit Directive should be referred to: GA Unit, Civil Aviation Authority, Safety and Airspace Regulation Group, Aviation House, Gatwick Airport South, West Sussex, RH6 0YR.
	Tel: +44 (0)1293 573988
	E-mail: ga@caa.co.uk