



EMERGENCY MANDATORY PERMIT DIRECTIVE



Number: 2016-004-E

Issue date: 28 June 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:

Fuselage – Main Fuselage Tube – 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

Reason:

High hours examples of C42 aircraft have exhibited cracks emanating from the corners of the cut-outs in the main fuselage tube where the nose undercarriage leg and the A-strut are attached.

The problem appears primarily to affect high hours early examples of the C42 on which the affected cut outs were made manually. Later models have machined cut-outs which are thought less likely to exhibit the cracking problem. More recently the A-strut attachment has been re-designed and there are no cut-outs for this item in the fuselage tube. At least for the initial issue of the service bulletin, all C42 aircraft must be inspected regardless of the build standard and manufacturing standard of the fuselage tube.

If such cracks were allowed to propagate, the structural integrity of the nose undercarriage leg, A-strut and engine mountings may be compromised.

Effective Date:

29 June 2016

Compliance/Action:	<p>Compliance is required as follows, unless previously accomplished:</p> <ol style="list-style-type: none"> 1. For aircraft with over 2000 hours of operation, carry out the inspection in paragraph 5 of this MPD before further flight. 2. For aircraft with over 1000 hours of operation, carry out the inspection in paragraph 5 of this MPD at the next annual inspection or the next 100 hour inspection, whichever occurs first. 3. Repeat the inspection carried out under paragraph 1 or paragraph 2 of this MPD at 500 hour intervals. 4. If the main fuselage tube has been replaced in an aircraft, the requirements in paragraphs 1, 2 and 3 of this MPD are applicable from the time of installation. 5. Visually inspect the main fuselage tube, inside and outside surfaces, in the vicinity of the nose undercarriage leg and A-strut (if applicable) attachment cut-outs for cracking. See example photographs in the referenced Owner's Service Bulletin. To facilitate the inspection the upper and lower cowlings must be removed as well as the sound deadening foam on the cockpit side of the firewall. If there is doubt whether there is cracking, dye penetrant crack detection may be used in addition to the visual inspection. 6. The aircraft owner may carry out the inspection in paragraph 4, if they consider themselves capable. Alternatively, a BMAA or LAA inspector may carry out the inspection. 7. 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 Owner's Service Bulletin Number 29, Issue 1, dated 16 June 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.
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