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# **SERVICE BULLETIN**

**1<sup>st</sup> February 2016**

**Owner's Service Bulletin – OSB 29 Draft Issue 1**

**Applicability – Ikarus C42 all models**

**Inspection of main fuselage tube for cracking around cut-outs**

**Classification:** Mandatory

## **Nature of Defect**

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

See example photographs on following pages.

## **Airworthiness Implications**

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

## **Aircraft Affected**

All C42 aircraft.

The problem appears primarily to affect high hours (1000hr+) early examples of the C42 on which the affected cut-outs were made manually. Later models are machine cut, and are thought less likely to exhibit the problem but they remain subject to this service bulletin until further notice.

## **Hours of Operation**

In excess of 1000 hours.



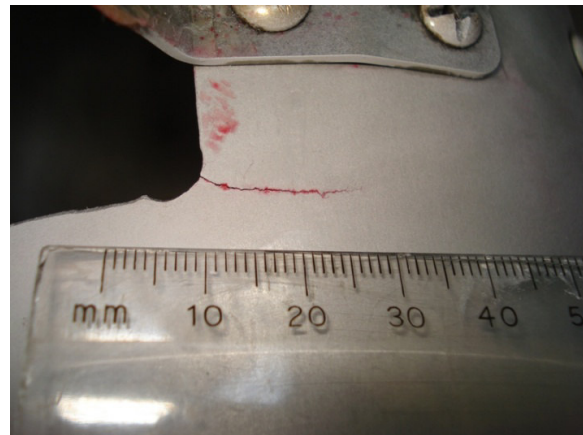
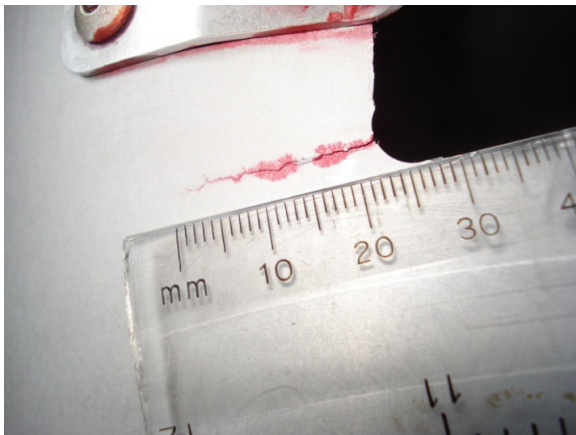
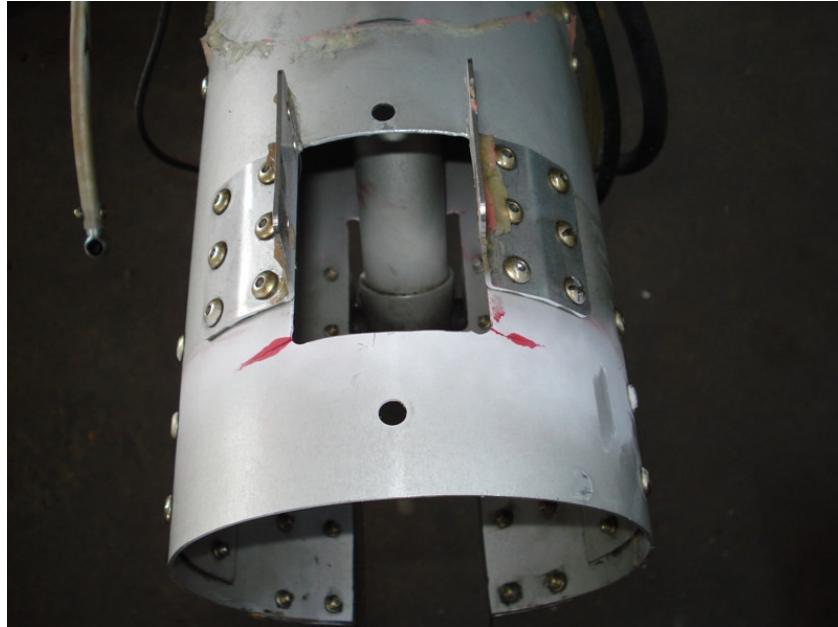
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Example cracks on upper surface of main fuselage tube around A-strut cut-out.



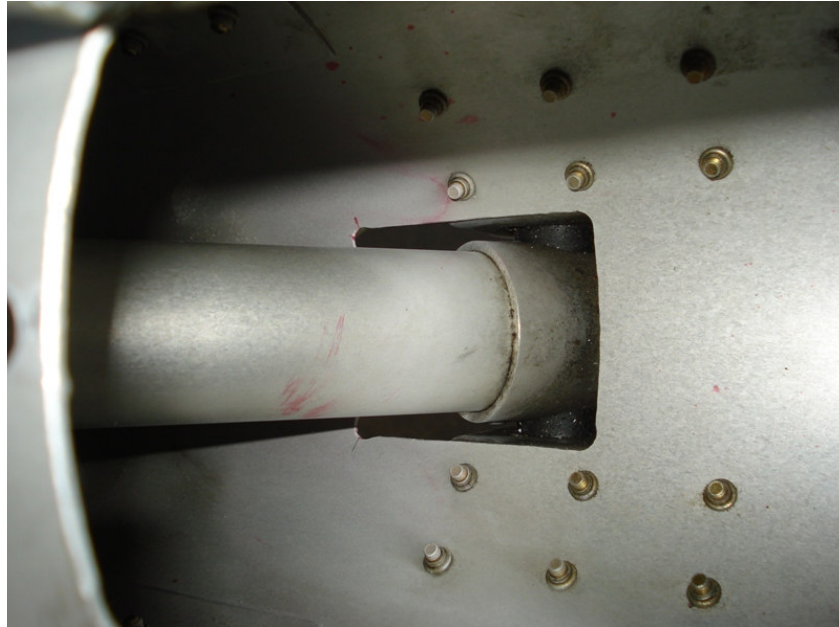
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Example cracks on lower surface of main fuselage tube around nose-leg cut-out.



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## Rectification Action Required

### (a) Inspection

For aircraft with over 1000 hours of recorded operation perform the following inspection at the next annual or 100hr inspection whichever occurs first, and at 500hr intervals thereafter:

The perimeter of the cut-outs in the main fuselage tube where the nose-leg and A-strut pass through the main fuselage tube must be visually inspected for cracking, with particular attention paid to the corners.

This may be carried out directly or by boroscope. For direct inspection the engine cowlings and lower fuselage fairing must be removed, consult the builders manual for detailed instructions.

In case of doubt, a visual inspection with the aid of dye-penetrant crack detection is recommended.

The owner may perform this inspection, but if not experienced in such inspection, and especially if using dye-penetrant, the assistance of a suitably experienced BMAA Inspector is recommended.

Record the inspection and the results in the aircraft airframe logbook.

### (b) Repair

If any cracking is found please contact Red Aviation. An approved repair scheme involving the fitment of an inner sleeve to the forward end of the main fuselage tube is available.

### (c) POH Amendment

The Pilot's Operating Handbook (POH) should be annotated on the "Inspection and Maintenance, 100hr or Annual Inspection" page to record the requirement for the above inspection. Future issues of the POH will incorporate this amendment.

### Approved by:

Position	Signature	Date
Technical Manager		
Engineering Design Consultant		