PROPOSED AIRWORTHINESS DIRECTIVE

This Proposed Airworthiness Directive (PAD) is issued by the Civil Aviation Safety Authority with a view to address the unsafe condition detailed below. The Airworthiness Directive (AD) will require that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Cessna 400 Series Aeroplanes

PAD/CESSNA 400/92 Amdt 2 — Wing Front Spar Lower Attachment Fittings

Applicability: All 400 series aircraft, except for models 404 and 441.

Requirement:

1. Remove the fairing between the wing and carry-thru and gain access to the wing front spar lower attachment fittings Cessna P/N 0822550 or J&R fitting P/N JRA-445-1.
2. Visually inspect the upper and lower edges of the lug of each wing fitting, looking for fatigue cracks as shown in the figure.
3. From inside the wheel well, visually inspect each visible wing fitting for stress corrosion cracks and associated surface pitting in the area shown in figure A. Also observe the end of the fitting for evidence of crack initiation as shown by the arrow.

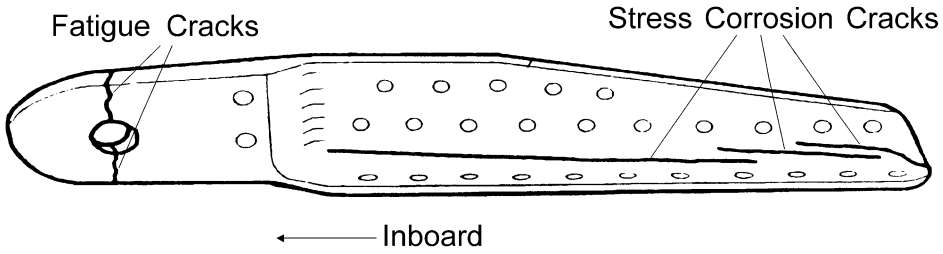
Note: It is not necessary to remove the primer for any of the above inspections.

Compliance: For OEM (Cessna) fittings (P/N 0822550):

Prior to exceeding 5000 hours component time in service, or prior to the issue of the next Maintenance Release, whichever is the later. Thereafter, re-inspect at each scheduled inspection for issue of a new Maintenance Release.

For J&R fittings (P/N JRA-445-1)

Prior to exceeding 2500 hours component time in service, or prior to the issue of the next Maintenance Release, whichever is the later. Thereafter, re-inspect at each scheduled inspection for issue of a new Maintenance Release.



Note: Fitting shown removed from aircraft (one lug of fitting represented for clarity).

Figure A

Cessna 400 Series Aeroplanes

PAD/CESSNA 400/92 Amdt 2 (continued)

Figure B – Actual failed fitting showing crack location

Cessna 400 Series Aeroplanes

PAD/CESSNA 400/92 Amdt 2 (continued)

Background: The Initial Issue of this AD covered Stress Corrosion Cracking in aircraft with only OEM (Cessna) wing fittings.

This Amendment is proposed after a Cessna 402C aircraft was found to have an approximately 4 inch crack extending from the outboard end of the fitting. The fitting was a J&R Aerospace (non-OEM) fitting with a time since new of 2831 hours. Consequently, due to the failure time of this fitting, the threshold for initial inspection of this fitting has been reduced to 2,500 hours (to allow some margin for detection). Further laboratory analysis of the failed fitting revealed that the material and process used to manufacture the fitting renders the fitting more susceptible to stress corrosion cracking in service.

This amendment would require an initial and repetitive visual inspection of J&R manufactured wing fittings, which is also a requirement for the OEM (Cessna) fittings.

Remarks: This Proposed AD will be closed for consultation on 28 April 2017.

Enquiries/Feedback regarding this PAD should be referred to the AD Cell, email airworthiness.directives@casa.gov.au