Continuing Airworthiness Notice – 28-003



Cirrus SR20 and SR22 Aircraft Fuel System

28 February 2008

Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91. CAN numbering is by ATA Chapter and a serial number for the next CAN in that ATA Chapter.

The contents of this notice are ADVISORY ONLY and are NOT MANDATORY.

Applicability:

All Cirrus Design Corporation SR20 and SR22 aircraft.

Purpose:

This Continuing Airworthiness Notice (CAN) alerts operators of the possibility of contamination in the fuel filters on Cirrus aircraft and recommends a fuel system inspection.

Background:

This CAN is prompted by a report of finding contaminants in the fuel system on a Cirrus SR20 aircraft. Material suspected to be lint or fibre (which possibly originates from residue left inside the fuel tank after manufacture) was found in the airframe fuel filter as well as in the fuel manifold valve gauze screen. On another aircraft the airframe fuel filter was contaminated with fuel tank sealant. If solid particles pass through the fuel filters and contaminate the fuel manifold valve this could result in blocked injectors, detonation and engine stoppage.

Furthermore, contaminated fuel filters could restrict fuel flow and result in loss of engine power.

Recommendation:

The CAA recommends inspection of the aircraft fuel system at the next scheduled maintenance inspection (unless previously accomplished), paying particular attention to the airframe fuel filter and the gauze screen filter in the fuel manifold valve. If any contaminants are found investigate the contaminant source and type, and retain a contaminant sample.

Clean the fuel filters thoroughly and refit (or replace) the filters. Accomplish these actions in accordance with the applicable aircraft maintenance documentation, taking note of any additional maintenance requirements.

Report all findings to the CAA by completing a defect report form CAA005D. Describe the findings in as much detail as possible and retain the contamination sample for further investigation.

Enquiries:

Enquiries with regard to the content of this Continued Airworthiness Notice should be sent to:

Owen Olls Airworthiness Specialist Email: <u>ollso@caa.govt.nz</u> Phone: 04 560 9569