Continuing Airworthiness Notice – 75-001



Alpha Aviation R2000 Aircraft Series Carburettor Heat Ducting

6 August 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.

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

CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

Alpha R2000 series aircraft, S/N 160A-06001 through to 160A-0018, S/N 120T-0001 and 120T-0002

Robin R2000 series aircraft and HR200 series aircraft fitted with carburettor heat ducting with external helical reinforcing wire similar to P/N 71.26.71.035.

Purpose:

This Continuing Airworthiness Notice (CAN) advises operators of an incident where the carburettor heat ducting collapsed when the carburettor heat was selected, which resulted in restriction of the air flow to the carburettor and a loss of engine power.

Background:

The flexible carburettor heat ducting fitted to the Alpha R2000 series aircraft at manufacture has the support spiral on the outside of the duct lining. Although the lining is bonded to the support spiral, over a period of time in service the lining tends to separate from the spiral. With carburettor heat selected on, a negative pressure is applied to the ducting which could cause the duct lining to collapse and restrict the airflow to the carburettor. An over rich mixture could result in a loss of engine power.

If the carburettor heat ducting collapsed with a missed approach at low altitude with the carburettor heat selected on, the loss of engine power could result in an emergency landing if the pilot does not quickly select the carburettor heat off.

Recommendation:

The CAA recommends the inspection of carburettor heat ducting fitted to affected Alpha R2000 series aircraft at the next scheduled maintenance inspection (unless previously accomplished), in accordance with Alpha Aviation Service Bulletin (SB) No. AA-SB-71-003. Affected carburettor heat ducting should be replaced with P/N 60-71-200-520. As an alternative Aeroduct SCAT-8 ducting (2.0" DIA) can be used in accordance with SB No. AA-SB-71-003.

Furthermore, operators of Robin R2000 and HR200 series aircraft should inspect the carburettor heat ducting at the next scheduled maintenance inspection (unless previously accomplished), in accordance with Alpha Aviation Service Bulletin (SB) No. AA-SB-71-003. If the aircraft is fitted with carburettor heat ducting with external helical reinforcing wire similar to P/N 71.26.71.035, the CAA recommends the replacement with ducting similar to Aeroduct SCAT-8 (2.0" DIA).

A copy of Alpha Aviation Service Bulletin (SB) No. AA-SB-71-003 can be obtained from http://www.alphaaviation.co.nz

Enquiries:

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

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