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## AIRWORTHINESS DIRECTIVE

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For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires 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.

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### Columbia (formerly Lancair) LC40, LC41 and LC42 Series Aeroplanes

**AD/LC40/1****Thermawing Deice System****2/2007****TX**

**Applicability:** Model LC41-550FG and LC42-550FG aeroplanes, all serial numbers, equipped with Kelly Aerospace Thermal Systems Thermawing Deice System (also known as E-Vade) under United States Federal Aviation Administration (FAA) Supplemental Type Certificate (STC) SA02260CH.

**Requirement:**

1. Deactivate the Thermawing Deice System installed under STC SA02260CH using the procedures detailed in Kelly Aerospace Thermal Systems Service Letter Bulletin No. SL-06-001, dated 15 November 2006.
2. Fabricate a placard that incorporates the following words using at least 6 mm (¼-inch) black letters on a white background and install this placard in clear view of the pilot.

**“DEICE SYSTEM INOPERABLE”**

*Note: FAA AD 2006-25-08 Amdt 39-26400 refers.*

**Compliance:** For Requirements 1 and 2 - Before further flight after 21 December 2006.

This Airworthiness Directive becomes effective on 14 December 2006.

**Background:** The FAA has received reports of problems with the installation of the Kelly Aerospace Thermal Systems Thermawing Deice System on Columbia Aircraft Manufacturing Models LC41-550FG and LC42- 550FG aeroplanes following incorporation of STC SA02260CH.

A short circuit condition at the deice heater connector to the copper mesh material imbedded in the composite aeroplane structure (for lightning protection) caused burning of the wings and horizontal stabilizer, which created holes in the structure. The short circuit was caused by insufficient removal of copper mesh when the deice heater connectors were installed.

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AD/LC40/1 (continued)

This condition, if not corrected, could cause damage to the wings and horizontal stabilizer resulting in reduced structural integrity of the aeroplane.

A handwritten signature in black ink, appearing to read 'James Coyne', with a stylized flourish at the end.

James Coyne  
Delegate of the Civil Aviation Safety Authority

12 December 2006