



No.	CF-2013-04	1/2
Issue Date	14 February 2013	

EMERGENCY AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to **Canadian Aviation Regulation (CAR) 521 Division X**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625, Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF-2013-04

Subject: Cracking of Wing Lower Skin

Effective: 14 February 2013

Applicability: Kelowna Flightcraft Ltd. Convair models 340 and 440 aeroplanes, all serial numbers, including aeroplanes commonly referred to as models 580, 600, 640 and 5800 powered by turboprop engines

Compliance: As indicated below, unless already accomplished.

Background: While performing a corrosion inspection of the wing internal structures, an operator discovered a crack of significant length between Wing Station (WS) 5 and 6, on the right hand wing lower skin of a Convair 580 aeroplane. Although an investigation is still ongoing to determine the cause, the crack appears to originate from a fastener located at the wing skin to wing access door doubler attachment.

Previous repetitive external inspections of the wing lower skin in accordance with Structurally Significant Detail (SSD) 57-1-4, that was mandated by FAA AD 92-06-06, did not detect the crack because the location of the crack is covered by the nacelle drag angle.

Cracking of the wing lower skin at a fatigue critical area, if not detected, could compromise the structural integrity of the wing. This AD mandates internal visual and eddy current inspections to detect cracking of the wing lower skin to mitigate this unsafe condition. Transport Canada may mandate additional corrective actions pending the outcome of the failure investigation and fleet findings.

The visual and eddy current inspections mandated by this AD are considered as Alternative Means of Compliance (AMOC) to the SSD 57-1-4 inspection that was mandated by FAA AD 92-06-06, for the locations addressed by the visual and eddy current inspections.

Corrective Actions: **Part A – Visual Inspection**

1. Within 20 hours air time from the effective date of this AD, carry out a detailed visual inspection of the left hand (LH) and right hand (RH) wing lower skin for cracking around the inboard side of WS 6-7 access panel doubler fingers and between Stringers 5 and 11, in accordance with the Accomplishment Instructions of Kelowna Flightcraft Ltd. Convair Division Service Bulletin (SB) 340-57-001, dated 12 February 2013, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Pursuant to **CAR 202.51** the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address.

To request a change of address, contact the **Civil Aviation Communications Centre (AARC)** at Place de Ville, Ottawa, Ontario K1A 0N8, or 1-800-305-2059, or www.tc.gc.ca/civilaviation/communications/centre/address.asp

Canada

2. If any crack is found, contact Kelowna Flightcraft Ltd. Convair Division for a Transport Canada approved repair and carry out the repair prior to further flight.

Part B – Eddy Current Inspection

1. Within 100 hours air time from the effective date of this AD, carry out an eddy current inspection of the LH and RH wing lower skin for cracking around Stringers 6, 8 and 10 and around the WS 6-7 access panel doubler fingers, in accordance with the Accomplishment Instructions of Kelowna Flightcraft Ltd. Convair Division SB 340-57-001, dated 12 February 2013, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
2. If any crack is found, contact Kelowna Flightcraft Ltd. Convair Division for a Transport Canada approved repair and carry out the repair prior to further flight.

Part C – Repetitive Inspection

Repeat the inspections of Part A and Part B above at intervals not exceeding 1000 hours air time. For operators with a Damage Rate Factor (DRF), a repetitive inspection interval not exceeding 1000 hours air time divided by the DRF must be used.

Part D – Defect Reporting

No later than 30 days after each inspection in accordance with Part A, Part B or Part C above, report all crack findings (positive or negative) to Kelowna Flightcraft Convair Division, in accordance with the Accomplishment Instructions of Kelowna Flightcraft Ltd. Convair Division SB 340-57-001, dated 12 February 2013, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part E – Alternative Means of Compliance (AMOC) to FAA AD 92-06-06

The inspections mandated by this AD are approved as an AMOC to the SSD 57-1-4 inspection that was mandated by FAA AD 92-06-06, only for the location addressed by the visual and eddy current inspections. Inspections at all other locations addressed by SSD 57-1-4 remain applicable.

Authorization: For the Minister of Transport, Infrastructure and Communities,

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: Philip Tang, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail ADs@tc.gc.ca or any Transport Canada Centre.