No. 1/2 CF-2011-44R1 Issue Date 1 February 2012

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 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.

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TRANSPORT CANADA EMERGENCY AIRWORTHINESS DIRECTIVE PLEASE FORWARD IMMEDIATELY TO THE PERSON RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF YOUR AIRCRAFT

Number: CF-2011-44R1

Subject: Main Rotor Blade

Effective: **Upon Receipt**

Supersedes Airworthiness Directive CF-2011-44 Revision:

Applicability: Bell Helicopter Textron Canada Models 206L, L-1, L-3 and L-4 helicopters equipped

with a main rotor blade part number 206-015-001-107, -109, -111, -115, -117,

-119 or -121.

Compliance: As indicated below, unless already accomplished.

An investigation into a Model 206L-1 accident has revealed that a main rotor blade has **Background:** fractured as a result of fatigue. This Airworthiness Directive (AD) was originally issued

with the understanding that the fatigue crack may occur if the following conditions are present: residual stress in the blade's spar and a significant void in the adhesive between the inertia weight and the spar, between stations 100 and 145. The presence of a crack

in the spar could lead to the total failure of the blade and the loss of the helicopter.

Subsequent investigation into a second accident on a Model 206L helicopter has led to the following conclusions:

Presently, there is no reliable inspection method to detect the crack on the blade before blade failure, and

To insure continued airworthiness, a reduced life limit is necessary, irrespective of the size of an adhesive void.

Revision R1 of this AD introduces a life limit of 1400 hours air time on all affected main rotor blades regardless of previous inspections performed.

Corrective Actions:

Part I - Verification

Before next flight from the effective date of this AD, verify the part number and the serial number of each main rotor blade to determine if the blade is affected by this AD, in accordance with the Accomplishment Instructions Part I of the Bell Alert Service Bulletin (ASB) 206L-09-159 Rev. A dated 13 November 2009, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.



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Part II – Introduction of a lower life limit

From the effective date of this AD, all affected main rotor blades are subject to a life limit of 1400 hours air time. Consequently, all affected main rotor blades must be removed from service prior to the accumulation of 1400 hours air time. For those main rotor blades that are already at or above 1400 hours air time, remove the blades from service before next flight.

Authorization: For the Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Derek Ferguson

Chief, Continuing Airworthiness

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613-996-9178 or e-mail CAWWEBFeedback@tc.gc.ca or any Transport Canada Centre.