# AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CAR 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.

## Bell 212 Series Helicopters

## AD/BELL 212/64 Vertical Fin Spar 13/2002 DM

Applicability: Model 212 helicopters, with a vertical fin spar cap, part number (P/N) 212-030-125-001, with retrofit kit, P/N 212-704-087 installed; vertical fin left-hand spar cap (spar cap), P/N 212-030-125-001, without the retrofit kit installed; or spar cap, P/N 212-030-447-001 or P/N 212-030-447-101, installed.

Requirement:

1. Modify and visually inspect each spar cap, P/N 212-030-125-001, not modified by retrofit kit, P/N 212-704-087 or spar cap P/N 212-030-447-001, for a crack, loose fasteners, or corrosion in accordance with Part I (A1), paragraphs 1, 2, 3, 4, 6, and 7 of Bell Helicopter Textron Alert Service Bulletin (ASB) No. 212-00-110 Revision A, dated 15 February 2001. Thereafter, visually inspect each affected spar cap in accordance with Part I (A2), paragraphs 1, 2, 3, 5, and 6 of ASB 212-00-110 Revision A.

   Before further flight, repair any loose fastener or corrosion.

   Before further flight, replace any cracked or disbonded spar cap with a serviceable spar cap.

2. For each spar cap, P/N 212-030-125-001, modified by retrofit kit, P/N 212-704-087, or spar cap, P/N 212-030-447-101:

   a. Modify and inspect each spar cap for a crack, loose fastener, corrosion, or disbanding in accordance with Part II (A1), paragraphs 1, 2, 3, 4, 5, 7, 8, 9, and 10 of ASB 212-00-110 Revision A. Thereafter, visually inspect each affected spar cap in accordance with Part II (A2), paragraphs 1, 2, 3, 5, and 6 of ASB 212-00-110 Revision A.

   b. Inspect each spar cap for disbonding using a hammer in accordance with Part II (B), paragraphs 1 through 13 of ASB 212-00-110 Revision A.

   c. Modify the vertical fin, and fluorescent penetrant inspect each spar cap in accordance with Part II (C1), paragraphs 1 through 8, and 10 through 12 of ASB 212-00-110 Revision A. Thereafter, fluorescent penetrant inspect each spar cap in accordance with Part II (C2), paragraphs 1 through 9, and 11 through 14 of ASB 212-00-110 Revision A.

## Bell 212 Series Helicopters

AD/BELL 212/64 (continued)

Before further flight, repair any loose fasteners or corrosion.

Before further flight, replace any cracked or disbonded spar cap with a serviceable spar cap.

3. Replace each affected spar cap with a cold expansion spar cap, P/N 212-030-447-117S, in accordance with the Accomplishment Instructions, paragraphs 1 through 35, and 37, and Attachments A, B, and C of Bell Helicopter Textron Technical Bulletin No.212-00-184, Revision A, dated 23 April 2001.

*Note 1: This Directive does not apply to tailbooms with spar cap part number 212-030-447-117 or 117S installed.*

*Note 2: Replacement of each spar cap in accordance with the requirements of this Directive is terminating action for further compliance with this Directive.*

*Note 3: FAA AD 2002-19-05 Amdt 39-12885 refers.*

Compliance:

1. Within 25 hours time in service after 30 October 2002, unless already accomplished. Thereafter at intervals not to exceed 8 hours time in service.

2.a. Within 25 hours time in service after 30 October 2002, unless already accomplished. Thereafter, at intervals not to exceed 8 hours time in service.

2.b. Within 50 hours time in service after 30 October 2002, unless already accomplished. Thereafter at intervals not to exceed 300 hours time in service.

2.c. Within 50 hours time in service after 30 October 2002, unless already accomplished. Thereafter, fluorescent penetrant inspect at intervals not to exceed 300 hours time in service.

3. Within 24 months after 30 October 2002.

This Airworthiness Directive becomes effective on 30 October 2002.

## Bell 212 Series Helicopters

AD/BELL 212/64 (continued)

Background: The FAA received reports of an accident and four failures of the vertical fin spar cap (spar cap) involving helicopters of the same type design. Fatigue cracks originated from the rivet holes in the area of fin station 60 to 75. Loose rivets, disbonding of the doublers and corrosion contributed to cracking of the spar cap. This Directive establishes additional inspection requirements for the spar cap, and eventual replacement of certain spar caps.

David Alan Villiers
Delegate of the Civil Aviation Safety Authority

24 October 2002

The above AD is notified in the *Commonwealth of Australia Gazette* on 30 October 2002.