

Bell Helicopter Textron 212 Series Helicopters

**AIRWORTHINESS DIRECTIVE**

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/BELL 212/4 Amdt 21 and issues the following 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.

**AD/BELL 212/4  
 Amdt 22**

**Airworthiness Limitations**

**10/2000  
 TX**

Applicability: For Requirement 1: All Model 212 helicopters.

For Requirement 2: Model 212 helicopters with main rotor mast, part number 204-011-450-001, -007, -105, -113, or -119, or main rotor trunnion part number 204-011-105-001, or -103, installed.

Requirement: 1. Retire components from service at the times specified in the Mandatory Airworthiness Limitations Schedule, Section 4, of the Bell 212 Maintenance Manual (Revision 5 or later), with the following exceptions and additions:

Part Description	Part Number	Retirement Life
Skid landing gear aft cross tube	205-050-400-035	500 hours
Skid landing gear aft cross tube	205-050-400-053	1000 hours
Drive link to rotating swashplate bolts	20-057-5-30D	500 hours
Float landing gear crosstube assembly	205-050-114-001	Not eligible for service on Australian helicopters
	-003	
	-005	
	-007	
	-009	
	-011	
	-013	
	205-706-050-005	
	-007	
	-009	
	-013	

2. For the main rotor mast and trunnion, determine the accumulated Retirement Index Number (RIN), inspect and action in accordance with the technical requirements of FAA Emergency Airworthiness Directive 2000-15-52.

*Note: A copy of FAA AD 2000-15-52 may be obtained from the FAA Internet site <http://av-info.faa.gov/ad> or from the Authority.*

Compliance: For Requirement 1: At the times specified in the Requirement document.  
For Requirement 2: Before further flight after 9 August 2000 for paragraph (a) of the Requirement document, unless already accomplished. As specified in the Requirement document for compliance times of other required actions.

This Amendment becomes effective on 9 August 2000.

Background: This Airworthiness Directive mandates life limits and inspections for critical components, to prevent their failure in service from metal fatigue.

Amendment 22 is issued in response to a new FAA AD which was prompted by a report of another cracked main rotor mast. Metallurgical inspection revealed that the mast cracked as a result of fatigue in snap ring groove radii that were smaller than the 0.020 inch minimum allowable dimension. The FAA has concluded that several corrections to the RIN counting procedure are required based on a review of the fatigue data and previously issued Directives.

Amendment 21 added Requirement 2, developed by Bell and the FAA to better control fatigue in the main rotor mast and trunnion following a fatigue-related accident. Requirement 1 was reformatted slightly, without technical change and became effective on 28 April 2000.

Amendment 20, which updated the amendment status of the Bell 212 Maintenance Manual, became effective on 25 February 1999.

Amendment 19, which introduced the Retirement Index Number limitation for the main rotor mast and trunnion, became effective on 11 September 1997.

Amendment 18 of this Airworthiness Directive became effective on 5 September 1991.

The original issue of this Airworthiness Directive became effective on 31 December 1975.



David Alan Villiers  
Delegate of the Civil Aviation Safety Authority

8 August 2000