
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/BELL 47/61 Amdt 22 and issues the following AD under subregulation 39.1 (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.

Bell Helicopter Textron 47 (All Variants) Series Helicopters

**AD/BELL 47/61
Amdt 23**

Retirement Life - Critical Components

**1/2004
DM**

Applicability: All Bell 47 and Kawasaki 47 models.

Requirement: All components listed in the following references, as applicable to each helicopter model, shall be retired from service at or before the times quoted therein, with the exceptions and additions specified in this Directive.

1. For 47D-1, 47G and 47G-2 Series:
 - (a) Mandatory Retirement Schedule, Bell Maintenance and Overhaul Instructions dated 15 August 1969 incorporating Revision No. 4, dated 1 June 1975.
 - (b) Bell Service Bulletin 47-05-73-1, Revision A.
 - (c) Bell Service Bulletin 47-76-3, Revision A.
2. For 47G-3B and 47G-3B-1 Series: Airworthiness Limitations Schedule, Bell Maintenance and Overhaul Instructions dated 1 June 1965 incorporating Revision No. 9 dated 1 June 1981.
3. For Kawasaki Model 47G3B-KH4: Maintenance and Overhaul Instruction Manual, Section 1 - Mandatory Retirement Schedule, page 1-56, as revised March 10, 1997.
4. For 47G-3B-2 Series: Airworthiness Limitations Schedule, Bell Maintenance and Overhaul Instructions dated 15 January 1968 incorporating Revision No. 9 dated 1 July 1981.
5. For 47G-3B-2A Series: Mandatory Retirement Schedule, Bell Maintenance and Overhaul Instructions dated 1 July 1974 incorporating Revision No. 4 dated 31 May 1978.
6. For 47G-4 and 47G-4A Series: Mandatory Retirement Schedule, Bell Maintenance and Overhaul Instructions dated 1 May 1966 incorporating Revision No. 7 dated 1 June 1981.

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7. For 47G-5 Series: Mandatory Retirement Schedule, Bell Maintenance and Overhaul Instructions dated 1 May 1966 incorporating Revision No. 6 .
8. For 47G-5A Series: Mandatory Retirement Schedule, Bell Maintenance and Overhaul Instructions dated 1 December 1971 incorporating Revision No. 8 dated 15 May 1981.
9. For 47J Series: Mandatory Retirement Schedule, Bell Maintenance and Overhaul Instructions dated 1 November 1965 incorporating Revision No. 5 dated 1 November 1974.
10. For 47J-2 and 47J-2A Series: Mandatory Retirement Bell Maintenance and Overhaul Instructions dated 1 March 1964 incorporating Revision No. 7 dated 15 July 1981.
11. For all models, replace P/N 47-642-102 tail rotor blades with improved blades P/N 47-642-117 prior to 1 July 1981.
12. For aircraft fitted with Texas Helicopter Corporation modified control system in accordance with US FAA STC SH2772SW, the retirement life for the weld assembly P/N 74-150-117-13M shall be 5000 hours.
13. For aircraft re-engined in accordance with US FAA STC SH657NW (held by Siam Hiller Holdings, Inc.), the retirement lives of the Adapter plate (P/N Soloy 660-2101), Drive shaft (P/N Soloy 660-2408) and Engine Mount (P/N Bell 47-612-171-123) shall be as specified in US FAA STC SH657NW as amended 30 June 1999.
14. Retire tail rotor yokes P/N 74-641-057-9 from service before 1 January 1987.

Note: Operators of aircraft engaged in operations which involve unusual manoeuvres, such as agricultural, or cattle mustering or operations where consistently more than four rotor full stop flights per hour are achieved must consult the manufacturer giving full details including previous history of all operations for possible life revision and must advise the Authority accordingly. For the purposes of notification two flights concluding with the rotors turning while on the ground and the engine at idle or greater power setting shall be counted as equivalent to one flight to rotor full stop.

Compliance: As specified in the Requirement references and text.

This Amendment becomes effective on 3 December 2003.

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AD/BELL 47/61 Amdt 23 (continued)

Background: This amendment is issued to amend requirement 13 to reflect the retirement lives as listed in FAA STC number SH657NW.

Amendment 19, effective 9 April 1987, incorporated the effect of AD/BELL 47/93 which was cancelled.

Amendment 20 effective on 9 April 1987, cancelled all of the retirement life data previously specified in the various models' Maintenance and Overhaul Instructions and consolidated all current Airworthiness Life Limitations into the one document.

Amendment 21, effective 11 August 2000, was issued as a result of information received from Bell Helicopter Textron by Information Letter 47-00-6 which advised that several errors had been discovered concerning the component retirement lives published in Alert Service Bulletin (ASB) 47-00-24 (the Requirement document of AD/BELL 47/61 Amdt 20), as well as authorised installation of certain components on specific 47 series helicopters. The content of AD/BELL 47/61 Amdt 19 has been reinstated until such time as a revised copy of ASB 47-00-24 is received, whereupon this Directive will be amended. As of the date of effect of Amendment 22 of this AD, service bulletin ASB 47-00-24 had not been revised. The requirements and compliance of this amendment are unchanged from Amendment 21, except for the inclusion of the Kawasaki 47G3B-KH4 model in part 3 of the requirement section.

Amendment 22 added the Kawasaki 47G3B-KH4 model to the AD applicability and requirement section. Previously the AD did not refer to this model, which was made under licence in Japan. Now that several helicopters of this model operate in Australia in various roles including aerial work, the AD was updated to include this model. The Kawasaki 47G3B-KH4 helicopter has its own set of component life limits published in the Maintenance and Overhaul Manual, which differ from those of the Bell 47G-3B model.

The original issue of this Directive became effective on 5 September 1968.



David Villiers
Delegate of the Civil Aviation Safety Authority

26 November 2003