

---

## 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 Helicopter Textron 214 Series Helicopters

**AD/BELL 214/4**

**Tail Rotor Yoke**

**2/2003  
DM**

**Applicability:** Model 214B and 214B-1 helicopters, serial numbers 28001 and subsequent.

- Requirement:**
1. Review the historical records of the tail rotor yoke assembly (yoke assembly), part number 214-011-802-105 or 214-011-802-111, for any recorded static or dynamic incidents that could have imposed a bending load on the yoke, but did not require replacing the yoke assembly; for example, an incident in which a damaged tail rotor blade was replaced due to a blade strike. If such a history exists, replace the yoke assembly with a serviceable yoke assembly.
  2. Unless Requirement 3 has already been accomplished, accomplish the following:
    - a. Install a Never Exceed Velocity (Vne) red line at 130 knots indicated airspeed (KIAS) on the pilot and co-pilot airspeed indicators using red tape or paint, and a slippage indicator on the instrument case and glass.
    - b. Install a placard made of material that is not easily erased, disfigured, or obscured on the instrument panel in clear view of the pilot and co-pilot with the following words:

“Observe temporary Maximum Never Exceed (Vne) airspeed red line (marked at 130 knots indicated airspeed (KIAS). Vne is the greater of 10 KIAS less than the value presented on the airspeed limits placard or 68 KIAS for each ambient condition”.
    - c. Insert the applicable Bell 214B or 214B-1 Temporary Revision for Airspeed Restriction, dated 16 August 1996, which is attached to Bell Alert Service Bulletin (ASB) No. 214-96-57 dated 26 August 1996, into the Limitations section of the applicable Model 214B or 214B-1 Rotorcraft Flight Manual (RFM).
  3. Accomplish the following:
    - a. Remove the yoke assembly part number 214-011-802-105 or 214-011-802-111, and replace it with a serviceable yoke assembly with zero hours time in service, or a serviceable yoke assembly (regardless of time in service) that has passed a one-time x-ray diffraction inspection in accordance with ASB 214-96-57.

## Bell Helicopter Textron 214 Series Helicopters

AD/BELL 214/4 (continued)

- b. Install a serviceable tail rotor flapping stop, part number 214-011-809-109.
- c. After Requirements 3a. and 3b. are accomplished, remove the 130 KIAS red line from the pilot and co-pilot airspeed indicators, remove the Vne airspeed restriction placard, and remove the Bell 214B or 214B-1 Temporary Revision for Airspeed Restriction, from the RFM.
4. After accomplishing Requirement 3, inspect the yoke assembly and tail rotor flapping stop in accordance with Part III, Recurring 25 Hour Special Inspection and Conditional Inspection Requirement, of ASB 214-96-57.

*Note: FAA AD 99-02-17 Amdt 39-11009 refers.*

- Compliance:
1. Before further flight after 11 December 2002, unless already accomplished.
  2. Before further flight after 11 December 2002, unless already accomplished.
  3. Within 6 months after 11 December 2002, unless already accomplished.
  4. After accomplishment of Requirement 3, and thereafter at intervals not to exceed 25 hours time in service.

This Airworthiness Directive becomes effective on 11 December 2002.

Background: The FAA received reports of in-flight failures of tail rotor yokes installed on civilian and military helicopters of similar type design. The actions required by this Directive are intended to prevent fatigue failure of the tail rotor yoke that could result in loss of the tail rotor and subsequent loss of control of the helicopter.



David Alan Villiers  
Delegate of the Civil Aviation Safety Authority

5 December 2002