# COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

### **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 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.

#### McDonnell Douglas (Hughes) and Kawasaki 369 Series Helicopters

AD/HU 369/111	Tail Rotor Blade Pitch Horn	6/2003 TX

Applicability: Model 369A, D, E, H, HE, HM, HS, F, and FF helicopters; with tail rotor blades, part number 369D21640-501, 369D21641-501, 369D21642-501, 369D21643-501, 500P3100-101, 500P3100-301, 500P3300-501, or 500P3500-701, installed.

- Requirement: 1. Perform a one-time visual inspection of each tail rotor blade pitch horn for a crack or corrosion in the area indicated by Note 2 in Figure 1 of this Directive. Paint removal in accordance with Note 1 of Figure 1 of this Directive is not required for the visual inspection.
  - 2. This Directive establishes a new retirement life of 400 hours time in service for affected tail rotor blades. For helicopters with an affected tail rotor blade installed that has between 390 and 700 hours time in service, remove and replace the tail rotor blade with a serviceable blade.
  - 3. Revise the helicopter Airworthiness Limitations section of the maintenance manual to indicate the new retirement for affected tail rotor blades.

For helicopters with a tail rotor blade installed that has more than 700 hours time in service, a one-time special flight permit to fly to a repair facility may be issued only upon completion of an eddy current surface scan of each affected pitch horn (refer Figure 1). Paint removal in accordance with Note 1 of Figure 1 of this Directive is required for the surface scan. If a crack is found, before further flight, replace the cracked tail rotor blade with a serviceable blade.

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### McDonnell Douglas (Hughes) and Kawasaki 369 Series Helicopters

AD/HU 369/111 (continued)



Figure 1. Tail Rotor Blade Assembly Inspection

- Compliance:
- 1. Before further flight after 17 April 2003.
- 2. Within 10 hours time in service after 17 April 2003.
- 3. Before 30 April 2003.

This Airworthiness Directive becomes effective on 17 April 2003.

### COMMONWEALTH OF AUSTRALIA

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### McDonnell Douglas (Hughes) and Kawasaki 369 Series Helicopters

AD/HU 369/111 (continued)

Background: The FAA received two reports of cracked tail rotor blade pitch horns that failed during flight. In both occurrences, the pilot was able to land the helicopter without further incident. Investigation revealed that the cause of the failures was a fatigue crack in the pitch horns that developed before the tail rotor blade reached its retirement life.

David Villiers Delegate of the Civil Aviation Safety Authority

16 April 2003