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## **R44**

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## **SERVICE BULLETIN SB-33**

**DATE:** 3 May 1999

TO: All R44 Owners, Operators, and Service Centers

SUBJECT: C051-1 or -2 Belt Tension Actuator

ROTORCRAFT AFFECTED: R44 Helicopters S/N 0001 thru 0598 and 0600.

<u>TIME OF COMPLIANCE:</u> Within next 100 flight hours or by 31 July 1999, whichever occurs first.

BACKGROUND: RHC has received C051 actuators which have buckled due to overtensioning of the drive vee-belts. Normally, the actuator fuse will prevent an overtension due to a malfunction. However, in some cases, a vibrating switch may allow the actuator to gradually overtension without blowing the fuse. Switch vibration can be aggravated by an out-of-balance cooling fan. RHC has designed an electronic time delay which prevents the actuator motor from running until the switch contacts have been closed for approximately 1/4 second. The time delay will prevent the actuator from overtensioning and also prolong actuator switch life.

## **COMPLIANCE PROCEDURE:**

- 1. Order KI-145 kit.
- 2. Install D602-1 Actuator Time Delay per kit instructions.
- Verify correct actuator fuse is installed. Buss AGC 3 fuse for C051-1 actuator (14 volt) or Buss AGC 1 1/2 fuse for C051-2 actuator (28 volt) are the only RHC-approved fuses. Operating with any other fuse significantly increases the risk of actuator malfunction.
- 4. Verify fan balance per R44 Maintenance Manual Section 6.240.
- 5. Make appropriate maintenance record entries.

## **Approximate Cost:**

Parts:

\$40.00

Labor:

1.5 manhours.

THE DESIGN ENGINEERING ASPECTS OF THIS BULLETIN HAVE BEEN SHOWN TO COMPLY WITH APPLICABLE FEDERAL AVIATION REGULATIONS AND ARE FAA APPROVED.