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## <u>R44</u>

## SERVICE BULLETIN SB-53

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## DATE: 27 May 2004

- TO: All R44 Owners, Operators, and Service Centers
- SUBJECT: C046-18 Frame Tube
- ROTORCRAFT AFFECTED: R44 Helicopters S/N 1160 thru 1395 except 1161, 1165, and 1198. R44 II Helicopters S/N 10001 thru 10381 except 10376 thru 10379.
- <u>TIME OF COMPLIANCE:</u> Within next 25 flight hours or by 23 July 2004, whichever occurs first.
- **BACKGROUND:** RHC has received reports of cracking of the aft tab of the C046-18 frame tube. Cracks may be due to a resonant vibration in the tube. Removing the short support tube at the forward end of the C046-18 tube will reduce vibratory loads in the tube. (Older frames do not have the short support tube.)

COMPLIANCE PROCEDURE: (Refer to figure on page 2)

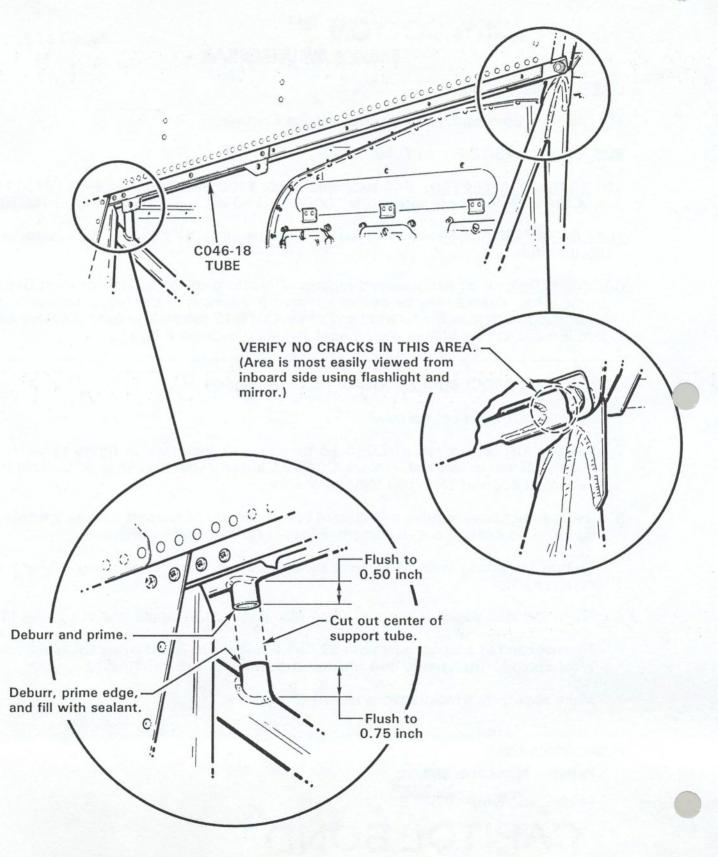
- 1. Remove left-hand engine cowl.
- Visually inspect aft tab of C046-18 tube in area indicated in figure to verify no cracks. If tab is cracked, replace C046-21 lower frame assembly or contact RHC Technical Support for repair instructions.
- 3. Using a hacksaw, remove and discard center section of support tube as indicated in figure. Use caution not to damage adjacent tubes or cabin structure.
- 4. De-burr remaining ends of support tube and clean inside ends using acetone and cotton swab.
- 5. Prime exposed edges of support tube. Also prime inside upper end of support tube.
- 6. Fill lower end of support tube with B270-1 (Pro-Seal) or B270-9 sealant (3M Scotch-Weld Epoxy). (Reference R44 Maintenance Manual Section 1.480.)
- 7. Make appropriate maintenance record entries.

## Approximate Cost:

Parts: None required.

Labor: 0.5 man-hour.

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