

URGENT!!

R22

SERVICE BULLETIN #69

DATE: 27 February 1992

TO: All R22 Owners and Service Centers

SUBJECT: Replacement of suspect NAS1304-16 AF Bolts

ROTORCRAFT AFFECTED: R22 Helicopters S/N 1880 thru S/N 2060 and S/N 2073. Also any R22 which has been overhauled or repaired by RHC since 09 July 1991 and all NAS1304-16 AF bolts shipped from RHC as spares after 09 July 1991.

TIME OF COMPLIANCE: Within the next 10 flight hours or by 30 March 1992, whichever occurs first.

BACKGROUND: Robinson Helicopter experienced a failure of an NAS1304-16 AF bolt installed in the Tail Rotor controls of an R22 helicopter. Examination indicated the bolt failed due to Hydrogen Embrittlement which occurred during cadmium plating. In-flight failure of this bolt could be catastrophic.

COMPLIANCE PROCEDURE:

Visually inspect the heads of all NAS1304-16 bolts for the raised identifying markings "AF" opposite the NAS number. Immediately remove from service or stock any bolts with the above markings which may have been installed by or obtained from the RHC factory after 09 July 1991. Replace with NAS1304-16 bolts with head markings other than "AF" or replace with NAS6604-16 bolts.

NAS 1304-16 bolts are used in the following locations:

A) Tail Rotor Controls connecting the Tail Rotor Blade Pitch link to the Tail Rotor Pitch control cross head (slider) arms. In some cases, depending on balance weight required, the bolt may also be used to attach the Tail Rotor Pitch link to the Tail Rotor Blade, refer to (IPC) Illustrated Parts Catalog figure 6-5 items 27 and 28.

(OVER)

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B) Lower rear corners of cabin to both left and right lower steel tube frames, refer to IPC figure 2-7 item 29. (Note, left side bolt is omitted from drawing.)

C) Main Rotor balance weights to Chord Arm Yoke refer to IPC figure 7-15 item 29.

Suspect NAS1304-16 AF bolts may be returned to RHC and exchanged for NAS6604-16 bolts (only the heads need to be returned if desired to save shipping cost). Suspect NAS1304-16 AF bolts not returned to RHC must be destroyed.

APPROXIMATE COST:

Labor: Up to 2 manhours if all bolts replaced

Material: Nil if suspect bolts are returned to RHC for credit prior to 30 June 1992.

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