Approved By: Date:

Service Dept. 9-24

Engineering 9-25-81

Robinson Helicopter Company

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SERVICE LETTER # 14

Date: September 16, 1981

To: All Owners and Operators of Robinson R22 Helicopters

Subject: Inspection of A197 Tail Rotor Drive Shafts

Rotorcraft Affected: All Robinson Model R22 helicopters

Time of Compliance: Each 100 hour inspection interval and after any hard landing or suspected overspeed.

Background: The following inspection procedure is to be incorporated into the standard 100 hour inspection of the rotorcraft, and after any hard landing or suspected overspeed, as a special inspection to determine servicability of the A197 tail rotor drive shaft.

Inspection Procedure:

a) Remove all the tail cone inspection covers on the tail cone right side.

b) Assemble the Robinson Tool Number 260 and a suitable dial indicator by inserting dial indicator through the center hole from the large diameter end. Attach the extention to the indicator.

N O T E

The dial indicator included in the Robinson MT 122 bolt stretch gage is recommended for this tool.

c) Insert the dial indicator through the inspection hole farthest aft on the right side of the tail cone. Press the indicator housing (Tool #MT260) firmly against the tail cone when the extension is riding on the drive shaft.

d) Have someone rotate the driveshaft of the A166 clutch shaft at least three full revolutions. The indicator may vary somewhat with each revolution so it will be necessary to take an average.

e) Repeat procedure in Step #C at the next inspection hole forward.

f) Remove the extension from the MT260 tool and using the longer extensions check the drive shaft at each of the other two inspection holes.

g) The maximum amount of run-out at any of the measured locations may not exceed .030. If the run-out is excessive, the drive shaft must be repaired or replaced. Repair must be accomplished at an RHC approved repair agency.

h) Visually inspect the A041 damper bearing for excessive lubricant leakage, and the damper support arms for cracks.