

R E V I S E D

Robinson Helicopter Company

24747 CRENSHAW BLVD., TORRANCE, CA 90505 TELEPHONE (213) 539-0508

MANDATORY SERVICE BULLETIN

DATE: February 9, 1981

TO: All Owners and Operators of Robinson R22 Helicopters

SUBJECT: Inspection of Long Tail Rotor Drive Shaft

ROTORCRAFT AFFECTED: R22 Serial No. 0002 thru 0099

TIME FOR COMPLIANCE: At next daily pre-flight inspection

BACKGROUND: Internal stresses in the long tail rotor drive shaft have caused some of the shafts to lose their straightness after 15 or 20 hours of service. In two cases, this was the probable cause of the shafts whipping, resulting in substantial damage to the helicopter.

INSPECTION PROCEDURE:

- 1) Remove the five inspection plug covers from the sides of the tailcone.
- 2) Visually inspect tail rotor drive shaft for marks indicating contact with the tailcone bulkheads.
- 3) Manually rotate drive system and check the tail rotor drive shaft at all inspection points for runout using a dial indicator or other suitable device. The maximum ** runout should not exceed .030 inches. If it exceeds .030 inches at any point, the shaft must be removed and returned to the factory for straightening.
- 4) With a mechanic observing the shaft thru the inspection holes, start the helicopter and vary the RPM up and down from 95% to 106%. If excessive or unstable vibration is observed, contact the factory.
- 5) Visually inspect flex couplings and damper. Damper should move very little, if any, while performing items 3 and 4 above.

FAA APPROVED: February 10, 1981

** REVISED AND FAA APPROVED: February 18, 1981