

2901 Airport Drive, Torrance, California 90505

Page 1 of 3

R66 SERVICE BULLETIN SB-14

DATE: 25 June 2015

TO: R66 Owners, Operators, and Maintenance Personnel

SUBJECT: Tail Rotor Drive Shaft Forward Bearing

ROTORCRAFT AFFECTED: R66 Helicopters S/N 0003 thru 0630 except S/N 0522, 0542, 0543, 0575, 0587, 0590, 0592, 0595, 0596, 0597, 0602, 0603, 0604, 0605, 0607, 0608, 0609, 0614, 0616, 0617, 0618, 0626, 0627, and 0629.

NOTE: Spare D224-3 tail rotor drive shaft assemblies are also affected. D224-4 tail rotor drive shaft assemblies are not affected. D224-3 tail rotor drive shaft assemblies with B900-11 modification data plate are not affected.

<u>TIME OF COMPLIANCE</u>: Part A: Within next 10 flight-hours. Part B: At each 100-hour inspection.

BACKGROUND: RHC has received reports of overheating F172-1 bearing assemblies (installed on the D224-3 tail rotor drive shaft assembly's forward yoke). This bulletin requires installing a Telatemp temperature recorder on the F172-1 bearing assembly and inspecting the Telatemp during preflight checks and during each 100-hour inspection. If the Telatemp shows that the bearing is running hot, a kit is available to upgrade the bearing to a newer design.

COMPLIANCE PROCEDURE:

Part A – Telatemp installation:

- 1. Refer to Figure 1. Using a black, permanent-ink marker, draw a line between the 170°F and 180°F temperature squares on a P/N F110-2 or 110-2 Telatemp. Trim Telatemp as shown; ensure the Fahrenheit temperature scale is still legibile.
- 2. Remove tailcone cowling per R66 Maintenance Manual (MM) § 53-23.
- Refer to Figure 2. Using a lint-free cloth dampened with acetone, clean exterior of F172-1 bearing assembly. Install trimmed Telatemp on right side of F172-1 bearing assembly as shown. Ensure squares are well bonded to the bearing housing. Allow the temperature scale to overhang the aft edge of the housing if necessary. Install tailcone cowling per MM § 53-23.
- 4. Insert enclosed Special Pilot Caution (page 3 of this bulletin) as the first sheet of the Pilot's Operating Handbook.

Part B – Telatemp monitoring at each 100-hour inspection:

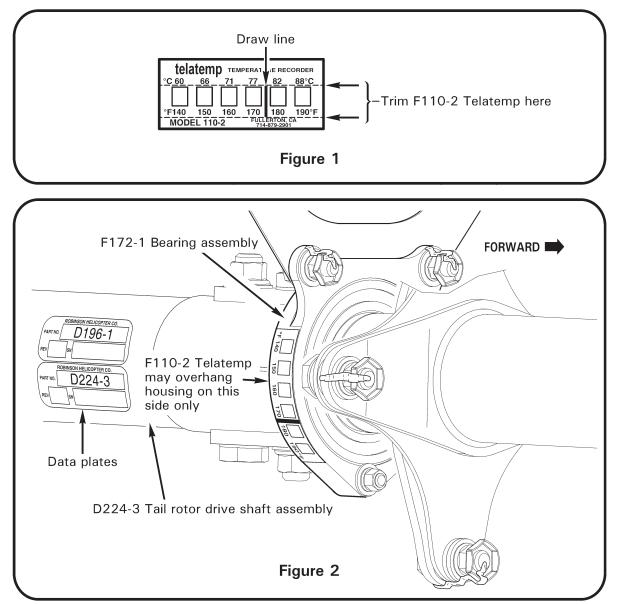
- Inspect Telatemp on F172-1 bearing assembly. If any squares have darkened beyond black line (180°F or greater), order one KI-235 kit and install per <u>kit</u> <u>instructions</u>.
- 2. Make appropriate maintenance record entries.

APPROXIMATE COST:

Parts: No charge for one (1) P/N F110-2 or 110-2 Telatemp (included with SB mailing). \$4.00 for each additional Telatemp.

Procure parts from any R66 Dealer or Service Center, or order directly from <u>RHC Customer Service</u> via email, fax, or phone.

Labor: 0.5 man-hour for Part A.



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

SPECIAL PILOT CAUTION

FOR R66 SB-14

()

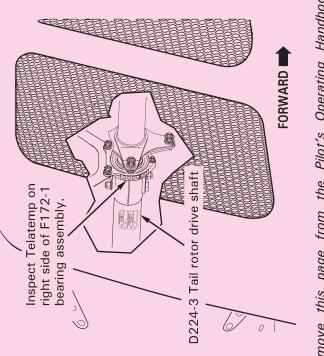
To be inserted as the first sheet of the R66 Pilot's Operating Handbook per R66 Service Bulletin SB-14.

Also distribute to all pilots flying affected aircraft.

Date: 25 June 2015

RHC has received reports of overheating F172-1 bearing assemblies.

During each preflight check, inspect Telatemp on right side of F172-1 bearing assembly. If any squares have darkened beyond black line ($180^{\circ}F$ or greater), have aircraft serviced prior to further flight.



Remove this page from the Pilot's Operating Handbook following installation of KI-235 kit or D224-4 tail rotor drive shaft assembly.

()

Cut or fold along this line

()