SCHWEIZER 269 SERIES

SCHWEIZER SERVICE BULLETIN

MANDATORY MANDATORY MANDATORY

SUBJECT: ONE-TIME INSPECTION OF MAIN ROTOR HUB AND SHAFT, AND NEW ASSEMBLY PROCEDURE

MODELS AFFECTED: All Model 269C-1 Helicopters Serial Numbers 001 thru 082

All spare oil filled main rotor hub and shaft assemblies P/Ns 269A5305-109, -123, -115, and -131 received from SAC prior to 24 Jun 1998

TIME OF COMPLIANCE: At next removal of main rotor hub and/or main rotor drive shaft.

REFERENCE: Model 269C-1 Handbook of Maintenance Instructions (Issued 14 Jul 1995, revised 14 Jul 1998)

PREFACE: ● Wear patterns indicate a possibility of parts looseness related to the oil filled hub and shaft assembly instructions. This Service Bulletin, along with revised HMI pages, increases the hardware torque, eliminates the application of grease in shaft cavity and on hub bolts, removes packing from hoisting eye, and emphasizes the requirement for assembly with zinc chromate primer.

PROCEDURE

WARNING

IF SUDDEN, UNUSUAL OR EXCESSIVE VIBRATIONS OCCUR DURING FLIGHT, LAND AS SOON AS PRACTICAL AND HAVE MAINTENANCE PERSONNEL INSPECT THE MAIN ROTOR DRIVE SHAFT FOR CRACKS.

1. Disassemble and remove main rotor hub in accordance with HMI, Section 8.
2. Clean all grease and gasket sealant from hub, interior and exterior of shaft, hoisting eye, threaded areas of hoisting eye, hub attach bolts and washer plates; discard packing from hoisting eye.
3. Clean and inspect the shaft and holes for cracks in the area of the six hub attach bolt holes. Use a 10X glass and strong light; no cracks allowed. If cracks are suspected, remove bearing and magnaflux hub end of drive shaft in accordance with ASTM E1444 (see Attachment A).
4. Install serviceable drive shaft and assemble the rotor system in accordance with Model 269C-1 Handbook of Maintenance Instructions Sections 8 and 10.
5. After torqueing, seal the exterior of the hub bolts and washers with a corrosion preventative compound.
6. Record compliance with this Service Bulletin in the aircraft records.

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WEIGHT AND BALANCE

Weight and Balance are not affected.

ATTACHMENT A

Magnetic Particle Inspection Procedure For Service Bulletin C1B-007.

Inspect by Magnetic Particle methods per ASTM Standard No. E1444 using either direct or indirect magnetization according to following:

Those areas to be inspected and in direct contact with magnetizing unit must be free of paint films, contaminates and residual magnetic fields. Solvent clean and demagnetize as necessary.

1. DIRECT MAGNETIZATION

Use AC, DC or AC/DC wet continuous method with fluorescent or non fluorescent particles

a. CIRCULAR (Head Shot) - 1100 amperes

Look for Longitudinal cracks

b. LONGITUDINAL (Coil shot) - Because of variations in coil design only length to diameter ratio based on effective diameter and inspection region length are provided.

Effective Diameter- 1.279 inches

Length - 6.00 inches

L/D Ratio - 5

Look for circumferential cracks

2. INDIRECT MAGNETIZATION

Use alternating (AC) current Electromagnetic Yoke (Magnaflux Product No. Y-6 or Equivalent)

Set spacing and angle to suit the external diameter of the shaft. Magnetize each of quantity of 6 hole areas by applying the yoke circumferentially across the hole. During each magnetization apply dry color contrasting particles to the inspection area and look for circumferential cracks propagating from holes. Demagnetize and repeat the inspections with poles of yoke positioned longitudinally across each hole group looking for circumferential cracks

Demagnetize and solvent wash inspection areas to remove residual particles.

Protect area as needed.