ALERT SERVICE BULLETIN



NO. 222-09-107

DATE April 07, 2009

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DATE

REV

MODEL AFFECTED: 222 and 222B

SUBJECT: STAKED BEARINGS, ONE-TIME INSPECTION

OF.

HELICOPTERS AFFECTED: Model 222 helicopters serial number 47006

through 47089 and all spares.

Model 222B helicopters serial number 47131

through 47156 and all spares.

Spare parts delivered after the release of this

bulletin are not affected.

COMPLIANCE: Part I: Within the next 5 flight-hours or 30 days,

whichever comes first.

Part II: Within the next 150 flight-hours or 12

months, whichever comes first.

DESCRIPTION:

Bell Helicopter received two reports where a bearing had migrated out of a flight control lever. Investigation revealed that, although the inspection witness mark was applied to the part, the bearing had not been staked during manufacturing. Affected parts were associated with a single Bell Helicopter supplier. Review of the supplier's manufacturing and quality process indicates inspection of additional components is necessary.

Bell Helicopter issues this bulletin to accomplish a one-time inspection of various parts that could potentially exhibit the same defect. The affected parts are separated in Table 1 and Table 2 based on installation characteristics and criticality. Parts in service and all spare parts are affected. When serialized, only parts with serial number prefix TI or TIFS are affected. However, affected part not serialized, may have Supplier marking as shown on Figure 1.

APPROVAL:

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved.

MANPOWER:

Approximately 2.0 man-hours are required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

Warranty does not apply to this bulletin.

MATERIAL:

None required

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-222-IPB Illustrated Parts Breakdown Manual BHT-222B-IPB Illustrated Parts Breakdown Manual BHT-222/222B-MM-1 Maintenance Manual BHT-222-CR&O Component Repair and Overhaul Manual BHT-ALL-SPM Standard Practices Manual

PUBLICATIONS AFFECTED:

None affected

ACCOMPLISHMENT INSTRUCTIONS:

Part I: Inspection of parts in Table 1

- 1. Gain access to the affected parts. See Table 1 for a list.
- 2. Using a 10X magnifying glass or other suitable means such as a boroscope, inspect parts for bearings that have not been staked. Refer to Standard Practices Manual (SPM). If a bearing is not visible, apply hand pressure to the part to detect any axial movement. If still in doubt, remove the part from the aircraft to inspect.
- 3. Should you find a part with a discrepant bearing, replace the bearing or the assembly and contact Product Support Engineering to report finding.
- 4. Make an entry in the helicopter historical records indicating compliance with Part I of this Alert Service Bulletin.

Part II: Inspection of parts in Table 2

- 1. Gain access to the affected parts. See Table 2 for a list.
- 2. Using a 10X magnifying glass or other suitable means such as a boroscope, inspect parts for bearings that have not been staked. Refer to Standard Practices Manual (SPM). If a bearing is not visible, apply hand pressure to the part to detect any axial movement. If still in doubt, remove the part from the aircraft to inspect.
- 3. Should you find a part with a discrepant bearing, replace the bearing or the assembly and contact Product Support Engineering to report finding.
- 4. Make an entry in the helicopter historical records indicating compliance with Part II of this Alert Service Bulletin.

Table 1: Affected Parts (See Part I)

Part Number Description

222-010-419-110 Cyclic link assy.

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Table 2: Affected Parts (See Part II)

Part Number	Description
222-001-734-001	Bellcrank assy. Directional controls
222-001-736-005	Bellcrank assy. Directional controls



Figure 1. Affected part Supplier marking.