

ALERT SERVICE BULLETIN

REVISION NOTICE

Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

DATE 09-13-00

To: All Owners/Operators of Bell 412 Helicopters

Subject: **REVISION "A" TO ALERT SERVICE BULLETIN 412-00-102: TAIL ROTOR COUNTERWEIGHT BELLCRANK RETENTION NUT MS14145L6 AND MS17826-6, INSTALLATION AND ONE TIME USE OF.**

Revision "A" to this bulletin corrects the part number of the counterweight bellcrank mentioned in the Description and the Accomplishment Instructions.

It also revises the Maintenance Manual number referenced in item 3 of the Accomplishment Instructions.

7851 60046 REV 1198

AN APPROPRIATE ENTRY SHOULD BE MADE IN THE AIRCRAFT LOG BOOK UPON ACCOMPLISHMENT
IF OWNERSHIP OF AIRCRAFT HAS CHANGED PLEASE FORWARD TO NEW OWNER

ALERT SERVICE BULLETIN

REVISION NOTICE

Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

DATE 09-13-00

To: All Owners/Operators of Bell 412CF Helicopters

Subject: **REVISION "A" TO ALERT SERVICE BULLETIN 412CF-00-10: TAIL ROTOR COUNTERWEIGHT BELLCRANK RETENTION NUT MS14145L6 AND MS17826-6, INSTALLATION AND ONE TIME USE OF.**

Revision "A" to this bulletin corrects the part number of the counterweight bellcrank mentioned in the Description and the Accomplishment Instructions.

It also revises the Maintenance Manual number referenced in item 3 of the Accomplishment Instructions.

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ALERT SERVICE BULLETIN

Bell Helicopter **TEXTRON**
A Subsidiary of Textron Inc.

NO. 412-00-102

DATE 05-26-00

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DATE 09-13-00

REV "A"

MODEL AFFECTED: 412 / 412EP

SUBJECT: TAIL ROTOR COUNTERWEIGHT BELLCRANK
RETENTION NUT MS14145L6 and MS17826-6,
INSTALLATION AND ONE TIME USE OF.

HELICOPTERS AFFECTED: All model 412 / 412EP helicopters

COMPLIANCE: Within the next 100 hours but no later than Aug
31, 2000

DESCRIPTION:

Bell Helicopter has recently investigated an in-flight loss of the T/R counterweight bellcrank 212-011-705-001. Investigation revealed that the retention nut MS14145L6 failed allowing the bellcrank to migrate off of the crosshead spindle resulting in severe vibration and extensive damage to the T/R blades. Further evaluation reveals that the MS14145L6 nut is susceptible to an over torque condition and corrosion cracking if not installed correctly or adequately protected from the environment. | A

This bulletin is issued to advise operators that the MS14145L6 and MS17826-6 nut, in this installation, has a "one time use". Once removed it must be discarded and a new nut installed. As well, the installation procedures and corrosion protection of the nut have been changed.

APPROVAL:

The engineering design aspects of this bulletin are FAA/DER approved.

MANPOWER:

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

MATERIAL:

7881 55192 REV 1198

Required Material:

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
MS14145L6	Nut	2

Consumable Material:

The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator's consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Reference</u>
Methyl Ethyl-Ketone	MEK	GAL	C-309
MIL-C16173 GR1 PT	CPC	A/R	C-101

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-412-IPB Illustrated Parts Breakdown Chapter 64
BHT-412-MM Maintenance Manual Chapter 64

PUBLICATIONS AFFECTED:

BHT-412MM Maintenance Manual Chapter 5 and 64

ACCOMPLISHMENT INSTRUCTIONS:

1. Remove and discard existing tail rotor counterweight bellcrank retention nuts MS14145L6 from both counterweight bellcranks 212-011-705-001. | A

-NOTE-

The MS17826-6 nut may also be used in this application. The MS17826-6 nut is an inactive standard and has been replaced by the MS14145L6 nut, however the old standard is still approved for installation.

2. Thoroughly clean the threads of the T/R crosshead spindle threads with MEK to remove any presence of CPC, grease or oil on the threads of the crosshead spindle. Acetone may be used as an alternate to MEK.
3. Install a new MS14145L6 nut in accordance with the 412 M.M. Chapter 64. Insure no oil or grease is on the threads of the new nuts. Clean if required as in step 2. Torque 100 to 170 inch pounds. | A
4. Thoroughly apply a coat of CPC MIL-C-16173 grade 1 to the nut, cotter pin, top of exposed spindle threads and washer. Allow the CPC to soak into all recessed areas for thorough coverage and protection.
5. Annotate Maintenance Manual chapter 5 and 64 with the following statements in step 6 and 7 for continued inspection of the nut and coating at a regular interval as well as the “one time use” of the MS14145L6 and MS17826-6 nut.
6. Inspect the counterweight bellcrank retention nut and CPC coating for condition and security at every 100 hours or 4th 25 hour inspection interval. Reapply the CPC coating if deficiencies are noted in the coverage and protection of the area.
7. The MS14145L6 and MS17826-6 nut is designated as “one time use” only in this application. If maintenance is required and the nut is to be removed, it is to be discarded and replaced with a new MS14145L6 nut. Reassemble as described in the preceding steps 1 through 4.
8. Annotate historical service records to reflect compliance with this bulletin.