

**ALERT SERVICE BULLETIN
REVISION NOTICE**



DATE Dec 1, 2009

TO: All Owners/Operators of Bell UH-1H Helicopters

**SUBJECT: REVISION "A" TO ALERT SERVICE BULLETIN UH-1H-09-05:
205-030-856-157/-159 ELEVATORS, ONE TIME INSPECTION OF.**

Revision "A" to this bulletin list elevator serial numbers that have been inspected by Bell Helicopter Textron and will not require ASB compliance. The inspection procedures have been rewritten for simplicity. Operators who have previously performed ASB UH-1H-09-05 and found no discrepant elevators do not need to reinspect the elevators .

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

ALERT SERVICE BULLETIN



A Textron Company

NO. UH-1H-09-05

DATE Oct. 5, 2009

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REV	A

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MODEL AFFECTED: UH-1H

SUBJECT: 205-030-856-157/-159 ELEVATORS, ONE TIME INSPECTION OF.

HELICOPTERS AFFECTED: Model UH-1H HELICOPTERS with 205-030-856-157/-159 ELEVATORS, S/N A-1587 THROUGH A-1862 INSTALLED IN ACCORDANCE WITH SPECIAL USE TECHNICAL BULLETIN SU-06-05 ON NON-TYPE CERTIFICATED AND NON-US MILITARY HELICOPTERS. THE FOLLOWING S/N WHILE IN THIS RANGE HAVE BEEN PREVIOUSLY INSPECTED AND WILL NOT REQUIRE ASB COMPLIANCE.

Serial Numbers:

- A-1736 A-1781 A-1807 A-1830 A-1861
- A-1751 A-1786 A-1808 A-1831 A-1862
- A-1755 A-1787 A-1810 A-1832
- A-1757 A-1788 A-1811 A-1835
- A-1758 A-1789 A-1812 A-1836
- A-1759 A-1790 A-1814 A-1838
- A-1761 A-1792 A-1815 A-1839
- A-1762 A-1793 A-1816 A-1841
- A-1765 A-1795 A-1818 A-1842
- A-1768 A-1796 A-1819 A-1843
- A-1769 A-1797 A-1821 A-1844
- A-1771 A-1798 A-1822 A-1845
- A-1772 A-1800 A-1823 A-1846
- A-1774 A-1802 A-1824 A-1847
- A-1775 A-1804 A-1825 A-1849
- A-1776 A-1805 A-1827 A-1856
- A-1778 A-1806 A-1829 A-1857

COMPLIANCE: Within 100 flight-hours but no later than 12 months.

DESCRIPTION:

There is a built-in angle difference of 3.00 +/- 0.75 degrees between the LH and RH Elevators on the aircraft. Bell Helicopter has learned that some p/n 205-030-856-157/-159 elevators were incorrectly assembled at manufacture. Due to tooling discrepancies, some elevators could have an offset exceeding the angle tolerance. This bulletin explains how to measure the angles to detect discrepant elevators. This angle must be measured while the elevators are installed on the aircraft. Because of the drawing tolerances, the RH Elevator Assy must be good in order to confirm the condition of the LH Elevator. For this reason, this bulletin has been divided into two parts, between which the aircraft may be released for flight, while the parts are procured.

APPROVAL:

The engineering design aspects of this bulletin is Bell Helicopter approved.

MANPOWER:

Approximately 1.0 man-hour is required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

Owners / Operators of Bell Helicopters who comply with the instructions in of this Bulletin will be eligible to receive a one time credit towards the cost of replacement elevator part number 205-030-856-157 or 205-030-856-159.

To receive this credit:

- Comply with the instructions contained in this Bulletin no later than the applicable hours in the "compliance section" of this ASB, or before 30 September 2010.
- Purchase a replacement elevator from a Bell approved source.
- Submit an MMIR to the Bell Warranty Department referencing this ASB.

Customers who fail to comply with the instructions in this Bulletin before 30 September 2010 are not eligible for the special warranty credit listed above. There is no labor associated with this bulletin.

MATERIAL:

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>
205-030-856-157	Elevator	A/R
205-030-856-159	Elevator	A/R

SPECIAL TOOLS:

Lucas Anglestar DP45 Digital Protractor or equivalent

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

TM 55-1520-210-23P Illustrated Parts Breakdown (IPB)
TM 55-1520-210-23 Maintenance Manual (MM)
UH-1H-SU-06-05 Special Use Technical Bulletin

PUBLICATIONS AFFECTED:

TM 55-1520-210-23
TM 55-1520-210-23P

ACCOMPLISHMENT INSTRUCTIONS:

1. Prepare helicopter for maintenance.
2. Confirm elevator is within serial number range by referring to its bonded and riveted dataplate near the trailing edge.
3. Remove tailboom access panel just aft of Boom Station (BS) 101.38.
4. Remove L/H Elevator.
5. Place digital protractor on elevator horn fitting, zero protractor and record as Angle "A". (ref Fig.1)

-NOTE-

Digital Protractor must be located and installed on the R/H elevator exactly in the same direction and as positioned on the LH elevator horn fitting. (do not rotate protractor)

6. Move protractor to top skin of RH elevator second rib, edge of protractor should be aligned with the 8th rivet from the leading edge of the elevator. Record relative angle as Angle "B". (ref Fig. 2)
7. Install L/H Elevator per Maintenance Manual.
8. Position protractor to top skin of RH elevator second rib, edge of protractor should be aligned with the 8th rivet from the leading edge of the elevator. Zero protractor and record as Angle "C". (ref Fig. 3)

-NOTE-

Digital Protractor must be located and installed on the LH elevator exactly in the same direction and orientation as positioned on the RH elevator. (do not rotate protractor)

9. Position protractor to top skin of LH elevator second rib, edge of protractor should be aligned with the 8th rivet from the leading edge of the elevator. Record relative angle as Angle "D". (ref Fig 4)

NOTE

The allowable difference from A to B = $2.0^\circ \pm 0.3^\circ$

The allowable difference from C to D = $3.0^\circ \pm 0.75^\circ$

Example of Three Sets of Measurements					
A	B	Diff	C	D	Diff
-0.00	-2.05	-2.05	0.00	3.33	3.33
-0.03	-2.13	-2.10	-0.06	3.40	3.46
0.00	-2.04	-2.04	0.05	3.42	3.37

- a. If the difference between Angle "A" and Angle "B" is not within the allowable difference ($2.0^\circ \pm 0.3^\circ$), replace the RH elevator as per Maintenance Manual within the next 100 flight-hours.
 - b. If the difference between Angle "C" and Angle "D" is not within the allowable difference ($3.0^\circ \pm 0.75^\circ$) replace the LH elevator as per Maintenance Manual within the next 100 flight-hours.
10. Make an entry in helicopter historical records indicating compliance of this bulletin.



Figure 1
Angle A



Figure 2
Angle B



Figure 3
Angle C



Figure 4
Angle D