

ALERT SERVICE BULLETIN

UH-1H-18-20

23 October 2018

MODEL AFFECTED: UH-1H

SUBJECT: MAIN ROTOR BLADE 204-011-250-113.

INTRODUCTION OF DAILY WIPE DOWN INSPECTION AND SPECIAL 25 HOUR

INSPECTION.

HELICOPTERS AFFECTED: ALL UH-1H's WITH SUBJECT BLADE INSTALLED.

COMPLIANCE: Part I: At the next daily inspection and every daily

inspection thereafter.

Part II: Within the next 25 flight hours and every 25

flight hours thereafter.

DESCRIPTION:

Bell has recently been informed of two main rotor blades P/N 204-011-250-113 with chordwise cracks originating from the extreme trailing edge outside of the current inspection area between blade station 190 and 210. Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected helicopter.

APPROVAL:

The engineering design aspects of this bulletin are Bell Helicopter Engineering approved.

CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Product Support Engineering - Medium Military Helicopters Tel: 817-280-3548 / mts-medium@bellflight.com

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MANPOWER:

Approximately 0.3 man-hour is required to complete Part 1 of this bulletin. Approximately 0.5 man-hour is required to complete Part 2 of this bulletin.

WARRANTY:

There is no warranty credit applicable for parts or 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.

Part Number	<u>Nomenclature</u>	Qty (Note)
204-011-250-113	Blade Assy	A/R (1)

NOTE 1: Only required if Blade Assy is found unserviceable.

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.

Part Number	Nomenclature	Qty (Note)	Reference *
Commercial	Cheesecloth, Cotton	A/R	C-486
2100-06673-00	Isopropyl Alcohol	1 Gallon	C-385
5300-61653-01	WD-40	12oz	C-125
5060-60154-00	Abrasive Cloth or Paper	A/R	C-406

^{*} C-XXX numbers refer to the consumables list in the BHT-ALL-SPM, Standard Practices Manual

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not Affected

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

TM-55-1520-210-23 TM Technical Manual TM 55-1520-210-23P Parts Manual

PUBLICATIONS AFFECTED:

TM 55-1520-210-23 Technical Manual

ACCOMPLISHMENT INSTRUCTIONS:

Part I: Daily Inspection

- 1. Prepare the helicopter for maintenance.
- 2. Wipe the upper and lower skin surfaces of the blades between blade station 100 to 215 with cheesecloth (C-486)

-NOTE-

Inspection of the lower surface of the blade will require supporting (lifting) the tip to remove any bow.

- 3. Inspect the area in accordance with the TM 55-1520-210-23 TM paying attention to the trailing edge and any blade surface which may have snagged the cheesecloth or caused it to fray.
- 4. All areas that may have snagged or frayed the cheesecloth require further investigation. It may be an indication of a crack or paint chip which could lead to corrosion resulting in blade cracking.
- 5. If no snag/fraying is detected, proceed to step 9.
- 6. In areas where the cheesecloth snagged or frayed, remove paint from the affected area by hand sanding in a spanwise direction only with an abrasive cloth or paper (C-406) 220 grit or smoother.
- 7. Carry out one of the following inspections of the affected area as follows:
 - a. Visually inspect the affected area using a 10X magnifying glass with a strong light source applied at an oblique angle and perpendicular to the crack orientation.
 - b. Inspect using Eddy Current method with surface probe (BHT-ALL-SPM)
- 8. If any cracks are found, remove blade from service and contact Bell Product Support.

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Part II: Recurring 25-hour Special Inspection

- 1. Prepare the helicopter for maintenance.
- 2. Inspect the upper and lower skin surfaces of the main rotor blades as follows:
 - a. Wipe the last 4 inches of the trailing edge between blade station 100 and 215 (shaded area) with an alcohol-soaked cloth (C-385) and wipe dry with a clean cloth. (Figure 1)

-NOTE-

Carry out the following step immediately after completing the above alcohol wipe procedure. (Inspection of the lower side of the blade will require supporting (lifting) the tip to remove any bow).

- b. Using a strong light source at an oblique angle, check for evidence of a dark line. A dark line represents excess alcohol bleeding out of possible cracks or edge voids. (If no defects are found during the inspection, proceed to step 2.f).
- c. Any crack in the surface finish must be investigated further by removing paint in the affected area. Remove paint by hand sanding the affected area in a spanwise direction only, with an abrasive cloth or paper (C-406) 220 grit or smoother to determine if the crack is in the skin. (Any crack in the surface finish may be indicative of a skin crack).
- d. The main rotor blade must be removed from service if any skin cracks are detected. Contact Bell Product Support if any skin cracks are found during the inspection.
- e. If no skin cracks are found, touch-up and refinish the affected area. (TM 55-1520-210-23).
- f. Carry out main rotor blade preventive maintenance. (TM 55-1520-210-23).
- 3. Make an entry in the helicopter logbook and historical service records indicating findings and compliance with Part II of this Alert Service Bulletin.



Figure 1 – 204-011-250 Series Main Rotor Blade