



A Textron Company

Distribution A: Approved for Public Release IAW DOD Memo 13-S-0836

ALERT SERVICE BULLETIN

UH-1H-13-09
14 January 2013

MODEL AFFECTED: UH-1H

SUBJECT: MAIN ROTOR BLADE, P/N 204-011-250-113, GRIP PAD AND GRIP PLATES, INSPECTION OF

HELICOPTERS AFFECTED: ALL UH-1H HELICOPTERS

COMPLIANCE: Part 1:

Within 10 flight hours after receipt of this ASB but no later than **1 March 2013**

Part 2:

At each Daily and Phased Inspection following compliance with Part 1.

DESCRIPTION:

Bell Helicopter recently evaluated a UH-1H main rotor blade with multiple fatigue cracks around the blade retention bolt hole. The cracks initiated as a result of a void between the lower grip plate and grip pad. In addition a substantial void was also found at the outboard doubler tip on the lower blade surface.

Part 1 of this Alert Service Bulletin requires a one-time inspection of the upper and lower grip plates and lower grip pad for cracks and edge voids. Part 2 is to emphasize the importance of detailed grip pad, grip plate, and doubler inspection during the current UH-1H inspection tasks at both the Daily and Phased (150 hour) Inspections.

Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected aircraft.

APPROVAL:

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

CONTACT INFO:

For any questions regarding this bulletin, please contact:

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

MANPOWER:

Approximately 4.0 man-hours are required to complete this bulletin. This estimate is based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

There is no warranty credit applicable for parts or labor associated with this bulletin.

MATERIAL:

Required Material:

None required.

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>Qty</u>	<u>Reference *</u>
299-947-100TY2CL2G50	Adhesive	AR	C-317
EC2216 B/A TAN N/S	Adhesive	AR	C-322
-----	Abrasive Paper	AR	C-406

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

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

TM 55-1520-210-23-1 AVUM & AVIM Maintenance Instructions
TM 55-1520-210-PMD Preventative Maintenance Daily Inspection Checklist
TM 55-1520-210-PM Phased Maintenance Checklist
BHT-ALL-SPM Standard Practices Manual

PUBLICATIONS AFFECTED:

None affected.

ACCOMPLISHMENT INSTRUCTIONS:**Part 1:**

1. Prepare helicopter for maintenance.
2. Refer to Figure 1. Clean blade upper and lower grip plates and the lower grip pad per TM 55-1520-210-23-1, Chapter 5.
 - a. Visually inspect grip pad and plates for cracks.
 - b. Visually inspect grip pad and grip plate bond lines for voids, loose or damaged adhesive squeeze-out. Hair line cracks in the paint finish and loose adhesive squeeze-out could be indication of voids.
 - c. If any of the discrepancies above are found, remove blade and inspect damaged/suspect areas.

CAUTION

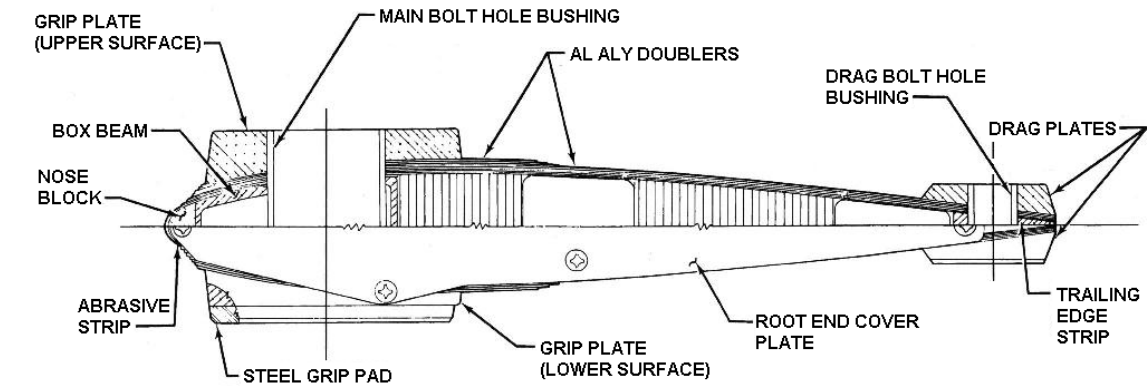
DURING TRIMMING AND SANDING OPERATIONS, DO NOT NICK, SCRATCH, OR GOUGE METAL SURFACES OR EDGES. DO NOT FEATHER EDGES.

3. Carefully trim or scrape away any loose or damaged squeeze-out at bond lines as required. Trimmed areas must be sanded smooth using 280 grit, or finer, abrasive paper.
4. Visually inspect all suspect areas as follows:
 - a. Cracks in the grip pad or grip plates are not acceptable. If cracks are found in the pad or plates, forward to a blade repair facility for repair evaluation.
 - b. Single edge voids in the grip pad or grip plate bond lines on any one side which are no more than 0.060 inch in depth and 2.0 inch in length are acceptable but must be sealed.
 - c. Edge voids in excess of the above limits are not field repairable. Forward to a blade repair facility for repair evaluation.
 - d. In areas where the adhesive squeeze-out was removed, inspect for corrosion as well as edge voids. Remove light surface corrosion per TM 55-1520-210-23-1, Chapter 5.
 - e. Seal acceptable edge voids and repair areas of removed squeeze-out with adhesive C-317 or C-322, blended to a smooth fillet with surrounding contour. Allow to cure.
 - f. Locally touch-up inspection/repared areas per TM 55-1520-210-23-1, Chapter 5.

PART 2:

5. Refer to TM 55-1520-210-PMD, Preventative Maintenance Daily Inspection Checklist, Inspection Area 7; and, TM 55-1520-210-PM, Phased Maintenance Checklist, Inspection Area 9. During the Daily and Phased Inspections, particular attention should be given to:
 - a. The grip pad, upper and lower grip plates, and all upper and lower doublers for cracks, corrosion, edge voids, and condition of adhesive squeeze-out.
 - b. Note that hair line cracks in the paint may indicate presence of a void and should be investigated. Loose adhesive squeeze-out could be evidence of voids

or underlying corrosion and should be removed, the underlying area inspected for voids/corrosion, and repaired as required.



SECTION A - A
SECTION THRU MAIN AND DRAG BOLT HOLES
AND VIEW OF ROOT END OF BLADE

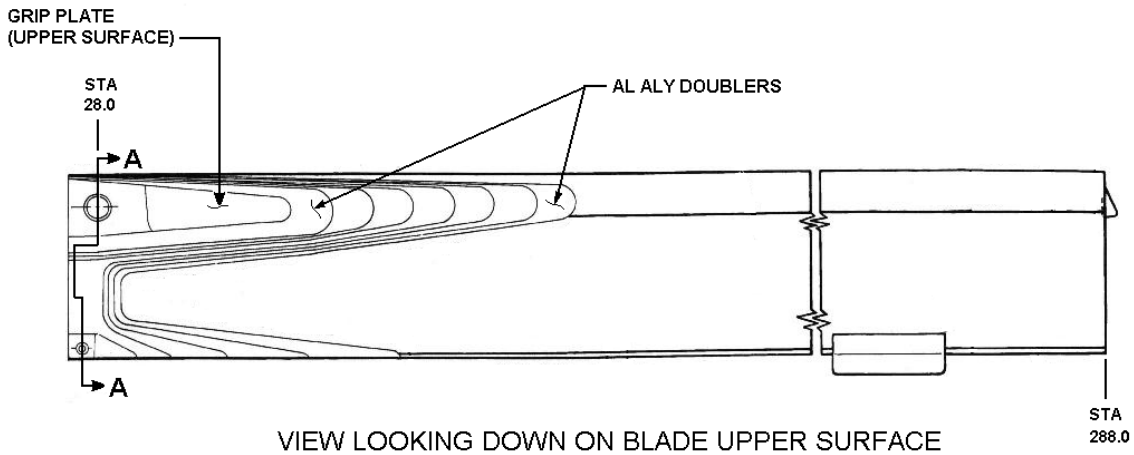


FIGURE 1