MODEL AFFECTED: **210**

SUBJECT: **MAIN ROTOR BLADE P/N 210-015-001-101, INSPECTION OF.**

HELICOPTERS AFFECTED: **Model 210 helicopters serial number 21001, 21002, 21003 and 21004.**

COMPLIANCE: Within the next 25 hours after receipt of this bulletin and every 100 hours of operation thereafter.

DESCRIPTION:

A model 212 Main Rotor Blade P/N 212-015-501-115 with approximately 1000 hours total time was recently returned to BHTI for evaluation. The blade was found cracked through the blade retention bolt hole at Blade Station 28.0 and another crack through the lower doublers at Blade Station 36.0. The main rotor blade contained a fatigue fractured grip plate, fatigue fractured doublers and a fatigue cracked spar on the bottom of the blade as a result of inadequate bond between the doublers and grip plate. This bulletin introduces a one-time inspection of the Main Rotor Blade as well as a recurring inspection every 100 hours of operation to for continued safety of operation. Refer to Figures 1 for the inspection area and Figure 2 showing the cracks. As the 210-015-001-101 Main Rotor Blade on the Model 210 is virtually the same as the reference 212 Main Rotor Blade, this bulletin also applies to the 210 Main Rotor Blade. A

APPROVAL:

The engineering design aspects of this bulletin are FAA/DER 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:

There is no warranty provided for 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.

Part Number	Nomenclature	Quantity	Reference
MILC87936TY1	Cleaning Compound	1 liter	C-318
WD-40	Preservative Oil	12 OZ	C-125

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

Bell Model 210 Illustrated Parts Breakdown
Bell Model 210 Maintenance Manual
Bell Model 210 Component Repair and Overhaul Manual

PUBLICATIONS AFFECTED:

None affected

ACCOMPLISHMENT INSTRUCTIONS:

1. Wash upper and lower Main Rotor Blade surfaces with a solution of cleaning compound (C-318) and water. Rinse thoroughly and wipe dry.

-NOTE-

Accomplishment of this inspection does not require removal of the blades from the Main Rotor Hub.

2. Inspect the Main Rotor Blade upper and lower grip plates and doublers between blade station 24.5 and 40.0 and the whole width of the chord. Inspect for signs of edge voids, corrosion and cracks. Hair line cracks in the paint finish should be suspect for possible cracks / voids.

3. Carry out a detailed visual inspection of the top and bottom of the blade using a 3-power magnifying glass. Any cracks in the finish must be investigated further by removing paint and in affected the area (sand in a spanwise direction) to determine if the grip plate / doublers are cracked.

CAUTION

Pay particular attention not to remove any parent material from the skin / doublers during sanding operation.

4. Refinish the sanded area as per BHT-210-CR&O.

5. Following the inspection, apply a light coat of preservative oil (C-125) to all surfaces of blade.

6. Annotate records to indicate compliance with this bulletin.

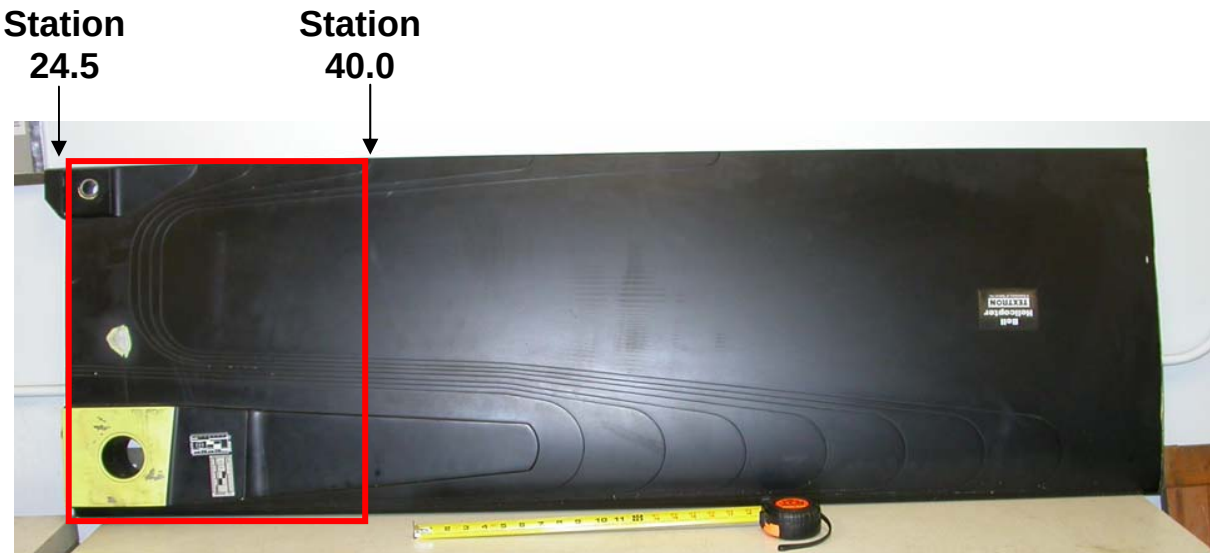

Figure 1
Inspection Area

Figure 2
Crack Indications