

# TECHNICAL BULLETIN

NO. 214ST-97-155

**Bell Helicopter** **TEXTRON**

DATE 8-27-97

A Subsidiary of Textron Inc.

DATE

REV.

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**MODEL AFFECTED:** 214ST

**SUBJECT:** MODIFICATION OF P/N 214-015-300 MAIN ROTOR BLADES TO P/N 214-015-300-129 BY APPLICATION OF A HIGH VISIBILITY PAINT SCHEME.

**HELICOPTERS AFFECTED:** All Model 214ST helicopters.

**COMPLIANCE:** At customer option.

**DESCRIPTION:**

Customers have inquired about repainting the upper surface of P/N 214-015-300 main rotor blades with a high visibility color scheme. The scheme most commonly used is an alternating pattern of orange and white stripes.

This bulletin provides information for applying a high visibility color scheme to existing blades. New spare P/N 214-015-300 main rotor blades provided by BHT will not be painted in the high visibility color scheme.

**APPROVAL:**

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

**MANPOWER:**

Approximately 5.0 man-hours will be required to accomplish this bulletin per each main rotor blade.

Man-hours are based on "hands-on-time" and may vary due to manpower and facilities available to the operator.

**MATERIALS:**

**REQUIRED MATERIAL:**

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

7851 58913

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

| <u>PART NUMBER</u>    | <u>NOMENCLATURE</u> | <u>QUANTITY</u> |
|-----------------------|---------------------|-----------------|
| MIL-C-85285, COL12197 | COATING             | 1               |
| 299-947-322 2 GAL     | PRIMER              | 1               |

**CONSUMABLE MATERIAL:**

The following material is required for the accomplishment of this bulletin, however this material is considered consumable (bench stock) material and may not require ordering depending on the operators consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

| <u>PART NUMBER</u> | <u>NOMENCLATURE</u> | <u>REFERENCE NO.</u> |
|--------------------|---------------------|----------------------|
| 180 GRIT CLOTH     | ABRASIVE CLOTH      | C-423                |
| TTT548 1GA         | TOLUENE             | C-306                |

**- NOTE -**

The "C" REFERENCE NO. above is a cross reference found in the Standard Practice Manual.

**SPECIAL TOOLS:**

None required.

**WEIGHT AND BALANCE:**

Not affected.

**ELECTRICAL LOAD DATA:**

Not affected.

**REFERENCES:**

BHT-214ST-MM, Chapter 62  
BHT-214ST-IPB, Chapter 62

**PUBLICATIONS AFFECTED:**

None.

**ACCOMPLISHMENT INSTRUCTIONS:**





**- CAUTION -**

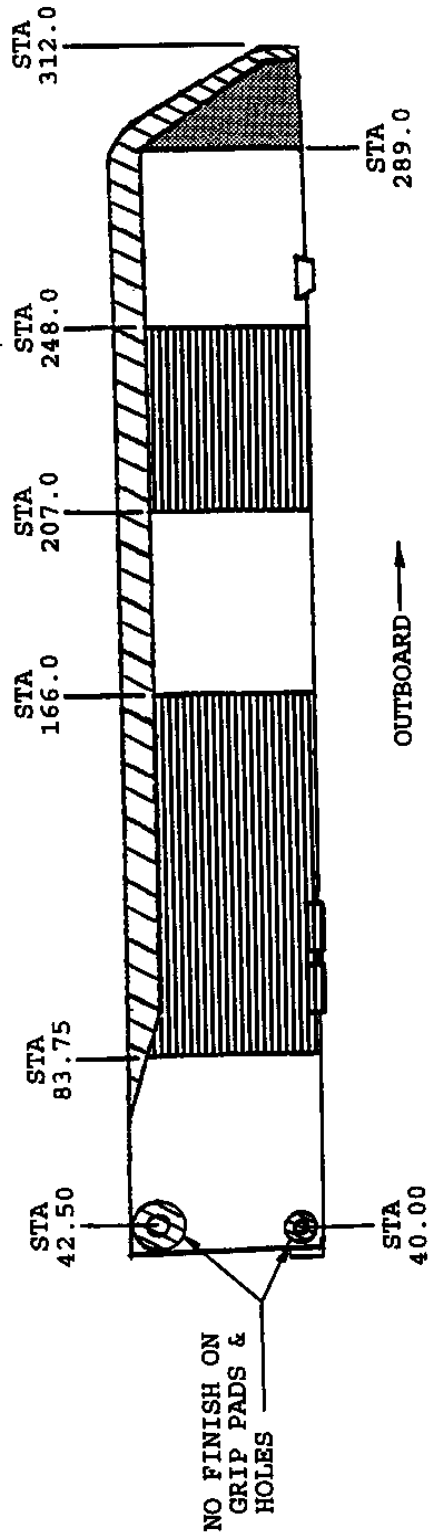
The high visibility color scheme may be applied only to the top surface of the blade and must conform to the dimensions noted in Figure 1.

**- NOTE -**

Blades painted in the high visibility paint scheme must be installed in pairs in the same hub assembly to reduce instances of rotor imbalance during operations.

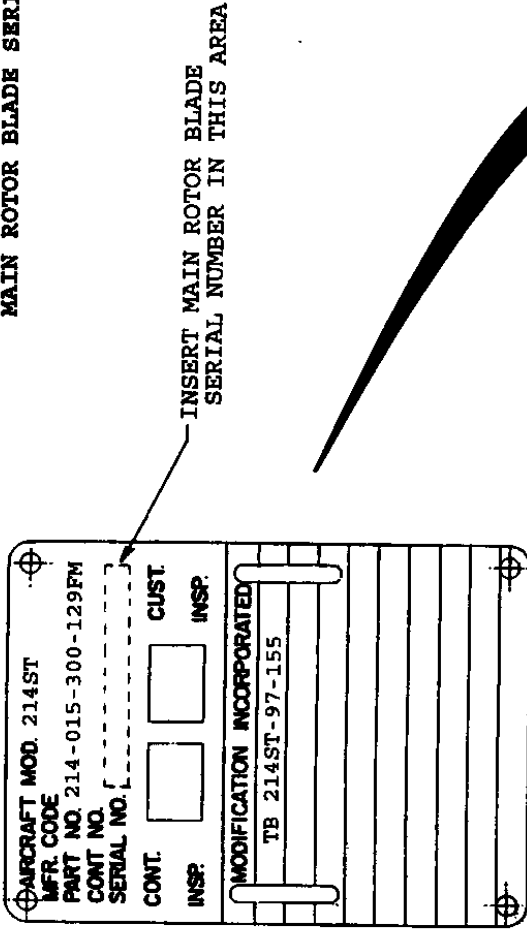
1. Mask off areas to be painted as noted in Figure 1.
2. Lightly sand areas to be painted with 180 grit or finer abrasive paper or cloth to remove gloss.
3. Wipe clean with toluene dampened cloth; air dry.
4. Apply one coat of polyurethane compatible primer, 0.0004 to 0.0010 inch (0.4 to 1.0 mil) thick, to each masked area. Allow to dry.
5. Apply one coat of polyurethane paint, orange color #12197, 0.0012 to 0.0015 inch (1.2 to 1.5 mil) thick to each masked area. Allow to dry.
6. Remove mask and feather the leading edges of each orange painted area by lightly sanding with 180 grit or finer abrasive paper or cloth.
7. Vibroetch required data on main rotor blade identification plate (P/N MS27753-2) as noted in Figure 2 and annotate main rotor blade historical record card accordingly.
8. Check dynamic balance of the main rotor hub and blade assembly and adjust as necessary.

-  NO FINISH AREA (TYPICAL)
-  WHITE (COLOR NO. 27925)
-  YELLOW (COLOR NO. 13538)
-  ORANGE (COLOR NO. 12197)



**FIGURE 1**  
 MAIN ROTOR BLADE HIGH VISIBILITY PAINT SCHEME  
 (VIEW LOOKING DOWN ON TOP SURFACE)

- NOTE:** 1. LIGHTLY VIBROETCH DATA SHOWN AT LEFT ON P/N MS27253-2 IDENTIFICATION PLATE ON EACH MAIN ROTOR BLADE MODIFIED BY THIS TECHNICAL BULLETIN.
2. FM FOLLOWING THE PART NUMBER INDICATES "FIELD MODIFIED". DO NOT CHANGE THE MAIN ROTOR BLADE SERIAL NUMBER.



MS27253-2  
 IDENTIFICATION PLATE

FIGURE 2