HUGHES SERVICE INFORMATION NOTICE

NOTICE NO N-40
DATE March 15, 1968

SUBJECT: TAIL ROTOR REPAIR - EROSION, BLADE LEADING EDGE

MODELS AFFECTED: All 269A(TH-55A) Helicopter Serial Nos. 0315 and subsequent equipped with P/N 269A6004 tail rotor assemblies.

TIME OF COMPLIANCE: When inspection of tail rotor reveals erosion of blade leading edge inboard of abrasion strip.

PREFACE:

The information given in this Service Information Notice lists a procedure for field repair of erosion damage to the leading edge of tail rotor blades. Repair of tail rotor blades, where feasible, will increase abrasion life of blades and permit continued use of existing matched sets of blades, thus offering a considerable cost savings to owners and operators.

Reference

269A/A-1/TH-55A Handbook of Maintenance Instruction, Reissued 15 December 1967

FORM NO. 9578A HTC AD REV 11-67

Tools and Equipment

Nomenclature	Type	Specification or Source
Template	P/N269A6124-7002 or equiv.	HTC-AD
Gage, Feeler	0.010 Calibrated	Commercial
Scale	0-1000 Grams	Commercial

MATERIALS

Nomenclature	Type	Specification or Source
Sandpaper	Fine	Commercial
Tape, abrasive		No. 471, 3M Company
Solvent	MEK	Commercial
Resin, Epoxy		Narmco 3135
Catalyst		Narmco 7111 Polyamide
Cup, Unwaxed	Disposable	Commercial
Spatula		Commercial

PROCEDURE

a. Remove tail rotor assembly, per HMI.

b. Disassemble tail rotor assembly, per HMI; Disassembly-Tail Rotor Assembly, steps a. through m.

c. Carefully peel off existing abrasive tape from both tail rotor blades.

CAUTION

Do not damage or remove stainless steel leading edge abrasion strip.

d. Using solvent, clean old adhesive and all foreign matter from blades and spar; air dry.

e. Mix resin and catalyst in equal parts by weight.

NOTE

Pot life of resin is 3 to 4 hours; curing time is 24 hours at room temperature or 2 hours at 140° to 200°F.

f. Repair eroded areas of blade by filling in with resin and smoothing to contour after resin hardens; use template to determine contour, and fine sandpaper for smoothing.

NOTE

When smoothing to contour, check that 0.010 feeler gage does not pass between template and contour.

CAUTION

Repair is not feasible, if erosion has progressed through all fiberglass layers to spar on one or both blades. Replace both tail rotor blades with set of matched tail rotor blades.

g. Weigh each tail rotor blade to ensure that maximum weight limit of 500 grams per blade has not been exceeded; lightly sand resin areas, if required, using 0.010 feeler gage to check for proper contour.

NOTE

If maximum allowable weight of 500 grams per each tail rotor blade is exceeded after sanding and contouring, replace blades with new set of matched tail rotor blades.

h. Assemble Tail Rotor Assembly per HMI, Assembly-Tail Rotor Assembly, steps g through s.

i. Install tail rotor assembly, per HMI.

j. Balance tail rotor assembly, per HMI.

k. Apply new abrasive tape on tail rotor blades, per HMI.

l. Check tail rotor repair, and abrasive tape application, for discrepancies.

m. Perform operational check of tail rotor assembly.

Weight and Balance Data

Weight and balance not affected.