

R44 SERVICE BULLETIN SB-112

DATE: 22 December 2022

TO: R44-series Owners, Operators, and Maintenance Personnel

SUBJECT: Tail Rotor Blade Inspection and Replacement

EFFECTIVITY: P/N C029-3 tail rotor blade S/Ns 14329 and prior (C029-3 REV Q and prior). Affected blades were factory-installed on the following aircraft:

R44 Helicopter S/Ns 2698 and prior,
R44 II Helicopter S/Ns 14564 and prior, except S/N 13525,
R44 Cadet Helicopter S/Ns 30087 and prior.

Affected blades were also shipped as spares prior to October 2022.

TIME OF COMPLIANCE:

Part A Inspection: Within next 10 flight hours or by 15 January 2023, whichever occurs first. Recurring inspections are required before the first flight of each day thereafter.

Part B Replacement: No later than 31 December 2024.
Helicopters operated and/or stored outdoors in corrosive environments such as salt water coastlines should replace affected blades as soon as practical.

BACKGROUND: RHC has received reports of tail rotor blade tips coming loose due to corrosion at the bond. Helicopters operating near saltwater are particularly susceptible to corrosion, especially if stored outdoors. A debonded tip can cause severe vibration and possible failure of the tail rotor gearbox housing. C029-3 revision R blades have tip caps with an alternate alloy to reduce the likelihood of corrosion.

COMPLIANCE PROCEDURE:

PART A: If helicopter is equipped with affected tail rotor blades, insert enclosed Special Tail Rotor Tip Preflight Inspection (page 3 of this bulletin) before the title page of the Pilot's Operating Handbook.

NOTE: Copies of Special Tail Rotor Tip Preflight Inspection sheet should also be made available to mechanics. Sheet may be removed from Pilot's Operating Handbook following replacement of affected tail rotor blades.

(OVER)

PART B: Replace each affected tail rotor blade per R44 Maintenance Manual (MM) § 30-20 and install tail rotor assembly per MM § 30-10. Enter new blade serial numbers in aircraft maintenance records.

NOTE: MT179-4 shaft is required to accomplish tail rotor static balance. Available from RHC Customer Service if not already on hand.

APPROXIMATE COST:

Part A:

Parts: None required (Special Tail Rotor Tip Preflight Inspection sheet included as part of Bulletin).

Labor: 0.2 labor-hour.

Part B:

Parts: No charge for helicopters or parts under warranty; each legible data plate removed from an affected blade and returned to RHC will be exchanged for a new blade.

For blades beyond warranty period, list price of \$3600 will be discounted to \$1240 provided:

- a. Blade is in airworthy condition. RHC must receive legible data plate and either photographic evidence of blade condition or actual blade.
- b. Blade has not exceeded its 12 year calendar life.
- c. Blade is not within 100 hours of its life limit.

Discount only applies to blades replaced by 31 December 2024. Cost does not include transportation. Normal Service Center discounts do not apply (see Dealer/Service Center Memo dated May 28, 1997).

Labor: 3.5 labor-hours.

SPECIAL TAIL ROTOR TIP PREFLIGHT INSPECTION

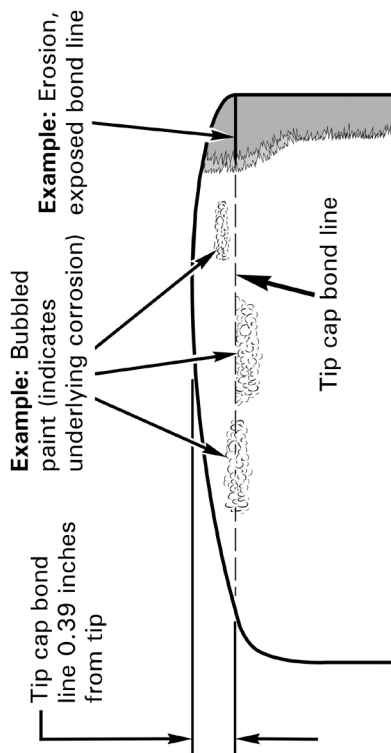
To be inserted before the title page of the Pilot's Operating Handbook for all helicopters with affected tail rotor blades per R44 SB-112.

Brief all pilots and maintenance personnel regarding these inspection requirements.

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Refer to Figure below.

To be performed before the first flight of each day. May be performed by pilot or mechanic. Conduct visual inspection of tail rotor tip area. If bubbled paint or other evidence of corrosion is observed at or adjacent to tip cap bond line or if any portion of tip cap bond line is exposed, do not fly helicopter. Comply with latest revision of R44 SL-82 prior to further flight.



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This page may be removed from the Pilot's Operating Handbook following replacement of affected tail rotor blades.