

California Department of Forestry and Fire Protection

Aviation Program Advisory

NUMBER: 2

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**Helicopter Tail Rotor Inspection
Compliance is Mandatory**

Bell Helicopter Textron has issued a Operations Safety Notice on the Bell 212 tail rotor blade. The purpose of the notice was to inform operators of the failure of a tail rotor blade on a Bell 412 helicopter. This blade is also used on all Bell commercial model 205, 205B, 212 helicopters and on the Huey II, the civilian version of the CDF "Super Huey." CDF uses this tail rotor blade on the Super Huey. It is a very reliable blade with a 5000 hour finite life.

The preliminary investigation results revealed that 19 inches of the blade separated in flight, which caused further separation of the tail rotor assembly and loss of control of the aircraft.

The cause of the separation was due to cracking of the inboard skin of the blade, which subsequently progressed through the spar of the blade. The initial crack started in a **sharp** dent in the blade skin.

This Aviation Program Advisory is written to remind pilots of the importance of accomplishing a good visual inspection of the tail rotor blade during the preflight or post-flight inspection of the aircraft. The blades must be clean to perform an adequate visual inspection to determine their condition. This inspection can be accomplished by the pilot, who should be looking for dents and scratches in the blade skin surface.

Any dents found during inspections at the Aviation Management facility are usually circled with a paint marker and dated. This indicates the dent has been inspected and is within the limits of the Component Repair and Overhaul Manual. If any unmarked cracks or sharp dents are discovered, put the helicopter out of service and consult with the CDF helicopter maintenance program manager.

Any questions should be directed to the Helicopter Maintenance Program Manager at the CDF Aviation Management Unit.

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