



Interagency Aviation Accident Prevention Bulletin



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Subject: Helicopter Tail Rotor Inspection

Area of Concern: Flight Safety

Distribution: All Aviation Activities

Discussion: Specific Tail Rotor Blades on Airbus helicopters require inspection every 10 hours.

Last July, we had a vendor that had a tail rotor failure on an AS 350 B3. It did not result in an accident. This failure was discovered on a post flight after the pilot felt an abnormal vibration in the tail rotor (anti-torque) pedals. This incident was reported via [SAFECOM 16-0615](#).

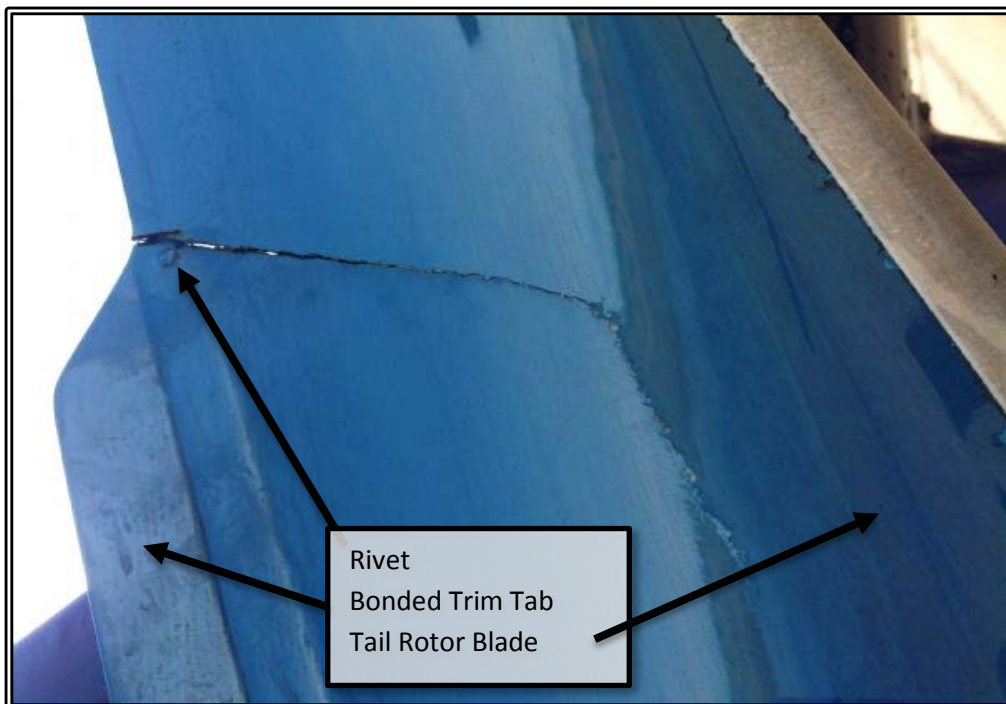


Figure 1 Blue Tail rotor blade close-up showing crack emanating from the rivet and bonded trim tab.

The aircraft was equipped with an older type “blue” tail rotor with the trailing edge trim tab constructed with rivets. This particular type of blade has been prone to developing an unsafe condition which led to the FAA issuing an Airworthiness Directive (AD), [AD 2001-26-55](#). The AD requires the blade to be visually inspected prior to the first flight of each day or at intervals not to exceed 10 hours of time in service, whichever occurs first. If the blade passes the initial inspection, it remains serviceable and can continue to be used given the stricter inspection requirements. The Pilot-in-Command (PIC) or maintainer can complete the visual inspection and make the required logbook entry to comply with the AD.

The crack in the blade skin on this tail rotor blade (photo on first page) is unusually large according to the manufacturer. The vendor had complied with all inspections including those required by AD 2001-26-55.

Vendors and our Safety Compliance Inspectors are all quite familiar with this type of rotor blade, the AD, and the inspection criteria, however many field personnel may not be fully familiar with this issue.

The manufacturer has created a new blade to replace this model. The new blade doesn't use a riveted and bonded tab, which eliminates the additional inspection criteria. However, some of these "blue" blades remain in service and may be used as long as operators comply with the additional inspection criteria and deemed serviceable.

AD 2001-26-55 applies to only Airbus Helicopters and these models: AS-350B, AS-350B1, AS-350B2, AS-350B3, AS-350BA, AS-350C, AS-350D, AS-350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N.

The issue serves as an important reminder of the importance of pre-flight inspections. The Pilot-in-Command is always the final authority in determining the airworthiness of the aircraft. Use the pre-flight checklist from the pilot operating handbook (POH) as intended. Avoid distractions, interruptions, and breaks in established routines to ensure you have completed a thorough pre-flight.

/s/ Keith Raley

Keith Raley

Aviation Safety, Training,
Program Evaluations & Quality Management

/s/ Eric Shambora

Eric Shambora

Acting Branch Chief, Aviation
Safety Management Systems