OAS-25A
(12/12)

Interagency Aviation
SAFETY ALERT

Subject: AS350 Family Tail Rotor Bellcrank

Area of Concern: Flight Safety

Distribution: All Aviation Activities

Discussion: Two recent SAFECOM reports identified an issue with the Airbus 350 Series helicopter Tail Rotor Gearbox Input Bellcrank (sometimes call an input lever). This bellcrank is on all Airbus 350 Series helicopter gearboxes that have a conventional tail rotor.

SAFECOM 15-316 was submitted on June 22, 2015. The submitter identified the bellcrank bushing had slipped out of its position. The bellcrank was replaced and in less than 10 hours had failed again.

SAFECOM 15-605 was submitted on August 14, 2015. A pilot was conducting a preflight inspection of his aircraft and noticed that the bushing had slipped. The bellcrank was replaced and after 3 hours of flight time, slipped again. The pilot of this aircraft had read SAFECOM 15-316 which made him aware of this issue and focused greater attention to the bushing on the bellcrank.

Tail Rotor Gearbox

Bellcrank

Bushing

Adhesive

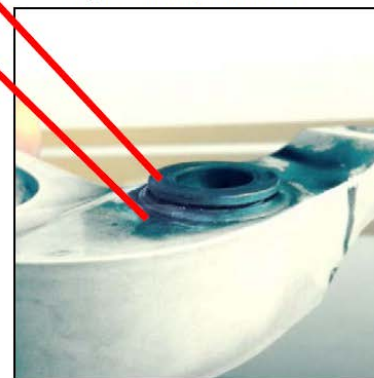Figure 1 Example gearbox and bellcrank

Figure 2 Example bellcrank

Figure 3 Actual bushing failure showing gap

SAFECOM 15-820 was submitted on September 18, 2015. A mechanic was conducting a preflight inspection of her aircraft and identified the displaced bushing. Because of the previous SAFECOM messages, she was aware of this issue and paid specific attention on each of her preflight inspections.

OAS maintenance inspectors have reviewed these cases and are encouraging an increased focus in this area during pre-flight and post-flight inspections.

Operator Actions. Operators are encouraged to file a Service Difficulty Report (SDR) with the Federal Aviation Administration (FAA). This is the best way for operators to ensure that the manufacturer is aware of the number of part failures.

Maintenance Malfunction Information Report. The FAA and the Helicopter Association International (HAI) have joined forces to provide the aviation industry with the Maintenance Malfunction Information Report (MMIR) system. The joint MMIR program is an efficient way of producing both the SDR and optional warranty claim forms. View the MMIR system at https://www.rotor.com/Resources/MMIREventReporting.aspx

The following Federal Aviation Regulations apply for reports for the respective FAR Part:

- § 135.415 Service difficulty reports

- § 145.63 Reports of defects or unairworthy conditions

For general aviation, see Advisory Circular 20-109A "Service Difficulty Program" for guidance.

This is an excellent example of how SAFECOM reports can alert us to important information and be shared so that others can take proactive action.

/s/ Keith Raley   /s/ Gary Sterling
Keith Raley   Gary Sterling
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