



**ENSTROM HELICOPTER CORPORATION**

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## **SERVICE DIRECTIVE BULLETIN**

SERVICE DIRECTIVE BULLETIN NO. 0039

Date: May 12, 1977

Subject: Inspection of Tail Rotor Drive Shaft after Tail Rotor Strike

Model: F-28A, 280, F-28C, 280C

Effectivity: All Serial Numbers

Compliance: See Text

The following supplements the information provided in Service Directive Bulletin No. 0037, Rev. A, dated January 17, 1977, Part 3, paragraph c.

A tail rotor strike, evidenced by deformation of strike tabs on the blade tips if not more obvious, may cause serious damage to the tail rotor drive shaft which cannot be detected by visual examination. The drive shaft may have experienced an overload failure even though it may continue to drive the tail rotor.

After a tail rotor strike and before the helicopter is put back into service, it is required that both the forward and aft ends of the tubular drive shaft be inspected at the taper pin holes. To do this, the couplings at the forward and aft ends of the shaft must be removed and the tubular shaft inspected at the taper pin hole for elongation of the hole and complete or partial failure of the tube. The aluminum plug inside the tube may be holding the parts together even if a failure has occurred. The aluminum plug can transmit torque to the tail rotor briefly.

Since the point of failure is under the extended shaft of the coupling, any problem with the drive shaft resulting from a strike cannot be seen.