



ENSTROM HELICOPTER CORPORATION

2209 22ND STREET, P.O. BOX 490, MENOMINEE, MICHIGAN 49858-0490 USA

SERVICE DIRECTIVE BULLETIN

SERVICE NOTE NO. 0027

Date: December 9, 1975
Subject: Over-Running Clutch Assembly - P/N 28-13401
Model: F-28A and 280 Helicopters
Compliance: As Noted Below

There has been a reported incident of a sprag over-running clutch assembly locking up during a training maneuver. We have had similar reports of two occurrences in foreign countries. The latter clutch assemblies were examined and inspection indicated that severe overloads had been applied to the units. It was concluded that in normal operations the only possible way to overload the clutch assembly would be by very rapid or instantaneous rotor engagement. This type of clutch problem has been associated with helicopters used in flight training operations.

It is necessary that the following maintenance and inspection procedures be put into immediate practice on all F-28A and 280 models:

Monitor clutch oil level as described in Enstrom Maintenance Manual on page MM 3-4 and 3-6. Inspect clutch and pulley area for signs of leakage which would indicate possible oil loss from the assembly. If complete oil loss is suspected or if clutch assembly has been subjected to abnormal engagement (normal rotor engagement is defined in Enstrom Flight Manual, page FM 3-2), the upper pulley should be rotated by hand in reverse direction to check for roughness or noise. If any abnormality is detected, the unit should be replaced. It should also be noted that slight end play of assembly to .050 of an inch is normal. On helicopters with abnormal clutch engagements, the tail rotor drive shaft couplings and pins should also be closely inspected for possible damage.

This over-running clutch inspection should be performed immediately on helicopters with abnormal clutch engagements, or on ships with clutch assemblies that are suspected of operating without proper lubricant level. This same procedure should also be performed at normal 100-hour inspections.