# SERVICE INFORMATION LETTER

#### SERVICE INFORMATION LETTER NO. 0168

Page 1 of 2

DATE: January 20, 2009

1. SUBJECT: Grease Recommendations for Rotor System Bearings

2. MODEL: F28A, 280, F28C, 280C, F28F, 280F, and 280FX Helicopters

3. EFFECTIVITY: All

#### 4. BACKGROUND:

Enstrom has received reports of premature failure of the tail rotor feathering bearings when Mobil 28 was used as the grease lubricant. During the investigation, several references have indicated that Mobil 28 is not effective at lubricating oscillating bearings. Aeroshell 14 historically has been proven to be effective and is recommended for such applications. Changing the grease to Aeroshell 14 corrected the problem in every installation where it was tried. This Service Information Letter (SIL) provides updated grease guidelines for the tail rotor feathering bearing as well as all oscillating bearings used in the main and tail rotor assemblies.

This SIL takes precedence over the grease lubricants previously contained in SIL No. 0137, specifically, grease lubricants pertaining to the main and tail rotor assemblies.

Technical aspects of this SIL are FAA Approved.

## 5. COMPLIANCE:

Enstrom recommends immediate compliance with the grease lubrication guidelines as defined in paragraph 5.1.

Warranty credit will not be considered for bearings lubricated with any grease contrary to the recommendations provided in this SIL.

## 5.1 GREASE LUBRICANT GUIDELINES FOR MAIN AND TAIL ROTOR SYSTEMS:

- 1. Discontinue Mobil 28 as a lubricant for any main or tail rotor bearing (oscillating-type) as noted in Table 1.
- 2. Incorporate Aeroshell 14 (MIL-G-25537) as the primary grease for lubricating the tail rotor feather bearings and other oscillating-type bearings as noted in Table 1.
- 3. Do not use Aeroshell 14 for the main rotor feather bearings.

## **NOTE**

Enstrom does not recommend using Aeroshell 14 for the main rotor feathering bearings as this grease will attack the lamiflex bearings.

4. Aeroshell 22 is acceptable as a secondary grease for all main and tail rotor bearings.

**TABLE 1. Grease Lubrication Recommendations** 

Bearing	Acceptable	Not Recommended
Main rotor flapping hinge	Aeroshell 14 ( <b>preferred</b> )	Mobil 28
bearings	Aeroshell 22	
	Enco Beacon No. 325	
Main rotor lead-lag bearings	Aeroshell 14 ( <b>preferred</b> )	Mobil 28
	Aeroshell 22	
	Enco Beacon No. 325	
Main rotor feather bearings	Aeroshell 22	Aeroshell 14
	Enco Beacon No. 325	Mobil 28
Main rotor walking beam pivot	Aeroshell 14	Mobil 28
bearings	Aeroshell 22	
	Enco Beacon No. 325	
Tail rotor teetering bearings	Aeroshell 14 ( <b>preferred</b> )	Mobil 28
	Aeroshell 22	
	Enco Beacon No. 325	
Tail rotor feather bearings	Aeroshell 14 ( <b>preferred</b> )	Mobil 28
	Aeroshell 22	
	Enco Beacon No. 325	

## **NOTE**

Aeroshell 22 and Mobil 28 are approved for use in the tail rotor pitch change bearing.