THE ENSTROM HELICOPTER CORPORATION
TWIN COUNTY AIRPORT, P.O. BOX 490, MENOMINEE, MICHIGAN 49858

SERVICE INFORMATION LETTER

Date: March 19, 1976

Subject: Damper Modification

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

Effectivity: Serial No. 003 thru 321; also 325, 326, 327, 331, 332, 334, 337, 338, 339, 340
Serial No. 1001 thru 1030

A low rate damper assembly has been approved for installation on all Enstrom helicopter models as noted. This modification will improve the rotor flight characteristics at maximum gross weights, in turbulence and in severe maneuvers by significantly reducing the frequency of the damper relief valve "blow off." Thus the maintenance required to bleed the dampers to maintain a smooth helicopter ride will be significantly reduced.

This modification can easily be made in the field by maintenance personnel with the factory low rate damper kit. This modification can be accomplished as follows:

a. Remove the damper assembly (P/N 28-14264-1) from the rotor head. The assembly should then be thoroughly cleaned and flushed off.

Note: This is especially important to reduce the possibility of dirt or contaminants from entering the damper upon disassembly.

b. Remove the safety wire from the four reservoir retaining bolts and plug. Place the damper assembly on its side, with the reservoir and retaining bolts facing up, in a clean shop pan or on a clean shop cloth (see Figure 1).

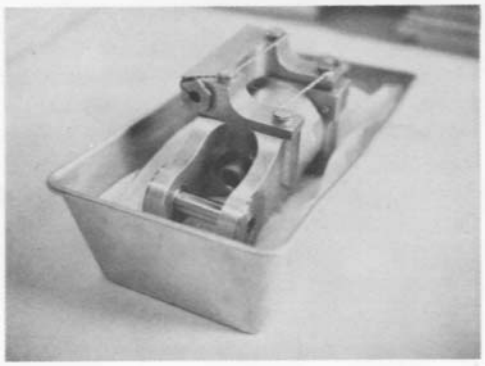

Figure 1

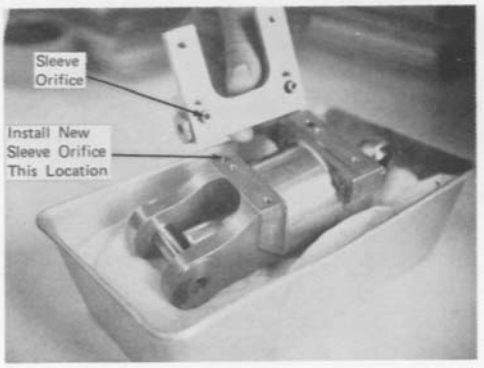

Figure 2

c. Remove plug from reservoir end, remove the four reservoir retaining bolts, and lift reservoir from the damper housing. The position as described in paragraph (b) should be maintained so as not to allow air to enter the piston cavity. Oil loss from the reservoir will be replaced on assembly. It should be noted that discoloration of the silicone oil is common and should be disregarded. See Figure 2.

d. After removal of the reservoir housing, the (2) orifice sleeves will be exposed. They should be carefully removed by hand along with the 0-ring. The new orifice sleeve and 0-ring should be flushed with silicone oil and carefully installed in the housing assembly. The orifice sleeve should be topped off with silicone oil.

e. The reservoir housing should then be flushed and cleaned thoroughly. Reinstall the reservoir, being careful to mate it properly with the sleeve orifices. Install the four retaining bolts and torque to 20 - 25 inch pounds. The retaining bolts should then be safetied with . 032 dia. steel wire as before.

f. A small quantity (½ cup) of fresh clean silicone oil should be readied in a pouring cup or container. Oil should not be agitated or pumped for damper filling. The damper assembly should then be lifted and turned with the rod end down and the reservoir filled completely with silicone oil so that the filler plug is wetted out when installed.

g. The damper assembly should now be purged of air entrapment per instructions in Enstrom Service Letter 0033 dated July 25, 1973.

This described modification should be repeated for each damper assembly. After modifications have been completed, a log book entry should be made stating the dampers have been modified to low rate 28-14264 -3 configuration. The part number 28-14264-3 should be metal stamped on the side of the reservoir housing for proper identification.

The damper modification kit can be acquired from Enstrom Customer Service. The damper kit part number is 28-14264-3K which consists of 6 each sleeve orifices P/N 28-14273-13, 6 each 0-rings P/N 2-10, and a pint of silicone oil (L-45-20). The cost of this damper modification kit is $35. 49.