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

SERVICE DIRECTIVE BULLETIN

SERVICE DIRECTIVE BULLETIN NO 0045

Date: November 2, 1977

Subject: Inadvertent Engine Stoppage on Power Reductions at High Density Altitudes

Models: F-28C and 280C Helicopters

Effectivity: Immediately and as Otherwise Noted

The FAA issued an AD dated 30 September 1977, prohibiting practice autorotation in response to reported occurrences of inadvertent engine stoppages on power reductions to flight idle As discussed in Service Information Letter No 0069, these occurrences have been the result of minor malfunctions Typical malfunctions and/or maladjustments (such as too rich mixture, leaking injector mixture and idle plates, and sticky or clogged fuel air vent nozzle check valves) are particularly adverse relative to power reductions at high density altitudes

The FAA has revised their AD, lifting their restrictions, provided that all owners and operators perform a one-time inspection to assure that their engine is adjusted properly and free of malfunctions, follow modified Flight Manual procedures, and install Enstrom Kit No 28-121015 to improve engine reliability within the next 100 flight hours or 3 months, whichever is less

Specifically all owners and operators should

a. Prior to next flight, perform maintenance check per Service Information Letter No 0069 to provide a smooth running idle characteristic Adjust the idle mixture at the aircraft base altitude in accordance with step 4 Particular attention should be placed on step 4, sub-paragraphs (g) and (h) If more than a 50 rpm rise occurs at idle rpm when the boost is switched off, the injector idle mixture plates must be lapped smooth Prior to each flight, idle mixture setting and idle plate leakage should be checked by the procedures of this paragraph.

b. For flights above 6, 000 feet density altitude, the mixture should be leaned to provide fuel flows no greater than 130 lbs/hr at 36.5" manifold pressure. Power reductions should be performed by closing the throttle to the stop if rpm's less than 2000 are to be attained (e g , cracked throttles are prohibited) FAA required placard is enclosed

c. Install Enstrom Kit No 28-121015 to improve the reliability of the system and increase its tolerance to malfunctions within the next 100 flight hours or three months, whichever is less

d. In the event that malfunctions are suspected to have occurred during flight, follow the operating procedures described in Section 3 of Service Information Letter No. 0069.

All owners and operators should contact Enstrom Customer Service to obtain Kit No. 28-121015 in sufficient time to facilitate installation at the next convenient 100-hour inspection.