

## LUFTVÄRDIGHETSDIREKTIV (LVD)

A. Helikopter Enstrom LVD Nr 2816

Sektion 2. Utlandstillverkad flygmateriel

TITEL:

Kontroll av spänningsregulator och överspänningsrelä

**GÄLLER:** 

Modell F-28A, 280, F-28C med S/N lägre än S/N 745, och modell 280C

med S/N lägre än S/N 1502 med installerade komponenter angivna

under (a) i bifogad kopia av FAA AD 97-20-04

ATGÄRD:

Utför åtgärder angivna i FAA AD 97-20-04

TID FÖR ÅTGÄRD:

Inom 5 flygtimmar räknat från 97-11-09

**UNDERLAG:** 

FAA AD 97-20-04

Enstrom Helicopter Corporation SDB No 0086 daterad 31 mars 1996

eller senare utgåva

**REFERENS:** 

FAA AD 97-20-04

**BESLUTSDATUM:** 

1997-10-24

LFS 1997:47

Atgärder enligt LVD utgör nödvändig förutsättning för ifrågavarande flygmateriels luftvärdighet. Referens BCL M 1.11.

Anteckning om åtgärd, som vidtagits i enlighet med LVD, skall införas i teknisk journal för berörd flygmateriel med hänvisning till ifrågavarande LVD-nummer. Angivet underlag refererar till senast gällande revision/utgåva. LVD utges i luftfartsverkets författningssamlingar LFS.

## **AIRWORTHINESS DIRECTIVE**



REGULATORY SUPPORT DIVISION P.O. BOX 26460 OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department of Transportation Federal Aviation Administration

The following Alworithness Directive issued by the Federal Aviation Administration in accordance with the provisions of Federal Aviation Regulations, Part 38, applies to an alread model of which our records indicate you may be the regulated owner. Almorithness Directives affect eviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworitiness Directive applies, except in accordance with the requirements of the Airworitiness Directive (reference for a supplier of the Airworitiness Directive).

97-20-04 ENSTROM HELICOPTER CORPORATION: Amendment 39-10142. Docket No. 96-SW-31-AD.

Applicability: Model F-28A; 280; F-28C helicopters, with a serial number (S/N) less than S/N 745; and Model 280C helicopters, with a S/N less than S/N 1502, certificated in any category.

NOTE 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (e) to request approval from the FAA. This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any helicopter from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent an electrical overload and a failure of the voltage regulator and over-voltage relay, that could result in an inflight fire, and subsequent forced landing of the helicopter:

- (a) Within the next five hours time-in-service (TIS) after the effective date of this AD, determine if a Prestolite-manufactured voltage regulator, part number (P/N) VSF7203, or Prestolite-manufactured over-voltage relay, P/N X16799, P/N X17621, or P/N FOC-4002A, is installed.
  - (1) If any of these parts are installed, perform the following:
- (i) Determine if the alternator output is within the proper output voltage range (14.2 + .2 to -.4 volts). If the alternator output voltage is not within the proper voltage range, adjust or replace the voltage regulator.
- (ii) Conduct an operational test of the over-voltage relay, and replace any over-voltage relay that fails the operational test with an airworthy over-voltage relay. Accomplish both the operational test and the over-voltage relay replacement in accordance with paragraph 6.3.3 of Enstrom Helicopter Corporation SDB No. 0086, dated March 31, 1996.
- (2) If no over-voltage relay is installed, before further flight, install an airworthy relay, P/N FOC-4002A, in accordance with paragraph 6.3.4. of Enstrom Helicopter Corporation Service Directive Bulletin (SDB) No. 0086, dated March 31, 1996, or complete the terminating action described in paragraph (c).
- (b) After compliance with paragraph (a) of this AD, thereafter, before each flight, check the amp meter for readings within the normal operating range while the helicopter engine is operating at 2,200 revolutions-per-minute (RPM). This check may be performed by the owner/operator (pilot) holding at least a private pilot certificate, and must be entered into the aircraft records showing compliance with this paragraph in accordance with sections 43.9 and 91.417(a)(2)(v) of the Federal Aviation Regulations (14 CFR 43.9 and 91.417(a)(2)(v)).
- (c) After compliance with paragraph (a) of this AD, thereafter, at each annual inspection or 100 hour time-in-service (TIS) inspection, whichever occurs first, perform the following:
- (1) Determine if the alternator output is within the proper output voltage range, and if the alternator output voltage is not within the proper voltage range, adjust or replace the voltage regulator.
- (2) Conduct an operational test of the over-voltage relay, and replace any over-voltage relay that fails the operational test with an airworthy over-voltage relay in accordance with paragraph 6.3.3 of Enstrom Helicopter Corporation SDB No. 0086, dated March 31, 1996.
- (d) Replacement of the existing voltage control system with a transistorized voltage controller, P/N ECD-069-11, and modifying the wiring in accordance with paragraph 6.4 of Enstrom Helicopter Corporation SDB No. 0086, dated March 31, 1996, is considered a terminating action for the requirements of this AD.
- (e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Chicago Aircraft Certification Office, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Chicago Aircraft Certification Office.
- NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Chicago Aircraft Certification Office.

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- (f) The check, test, and replacement, if necessary, shall be done in accordance with Enstrom Helicopter Corporation Service Directive Bulletin No. 0086, dated March 31, 1996. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Enstrom Helicopter Corporation, Twin County Airport, P.O. Box 490, Menominee, Michigan 49858. Copies may be inspected at the FAA, Office of the Assistant Chief Counsel, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.
  - (g) This amendment becomes effective on October 7, 1997.

## FOR FURTHER INFORMATION CONTACT:

Ms. Brenda S. Ocker, Aerospace Engineer, FAA, Systems and Flight Test Branch, Chicago Aircraft Certification Office, 2300 East Devon Ave., Des Plaines, Illinois 60018, telephone (847) 294-7126, fax (847) 294-7834.