
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Radio Communication and Navigation Equipment

AD/RAD/86 Caledonian Airborne Systems CPT-600/900 11/2006 Emergency Locator Transmitters

Applicability: Caledonian Airborne Systems CPT-600 and CPT-900 Automatic Deployable Emergency Locator Transmitter (ADELT) and Automatic Deployable/Automatic Fixed Emergency Locator Transmitter (AD/AFELT).

Note 1: CPT-600 and CPT-900, ADELT and AD/AFELT systems are known to be installed on, but not limited to, the following aircraft:

<i>Manufacturer</i>	<i>Aircraft Model</i>
Bell Helicopter Textron	212 and 214 series
EADS	ATR-42
Eurocopter	AS 332, AS 365 N and BO 105
Sikorsky	S-61 and S-76

Note 2: CPT-600 and CPT-900, ADELT and AD/AFELT systems are also known to be installed on the following military aircraft:

<i>Manufacturer</i>	<i>Aircraft Model</i>
Eurocopter	AS 352, AS 565 and AS 321
Sikorsky	S-70A

Requirement: Modify the affected CPT-600/-900 ADELT and AD/AFELT Systems by replacing the main case part number (P/N) BC85-051 and piston P/N BC85-052 with improved units made of stainless steel 6S80D in accordance with Caledonian Airborne Systems Service Bulletin No.CPT-600/900/SB-01 Issue 1 dated February 2006 or later EASA approved revision.

Note 3: EASA AD 2006-0241 refers.

Compliance: Within six months after the effective date of this Directive.

This Airworthiness Directive becomes effective on 26 October 2006.

Radio Communication and Navigation Equipment

AD/RAD/86 (continued)

Background: The manufacturer has received a report that during a maintenance activity a beacon failed to deploy, highlighting wear in the main case P/N BC85-051 and profiling of the piston P/N BC85-052 which is prone to cupping seizures. Original main cases P/N BC85-051 up to S/N 311 were manufactured from stainless steel AISI 303. In May 1990 the material specification changed to stainless steel 6S80D that has three times the hardness.

The wear highlighted was on an original main case P/N BC85-051 and took the form of “cupping” around the locking sphere holes that prevented the separation of the sleeve retainer from the main case. Original Pistons P/N BC85-052 up to S/N 299 were manufactured prior to 1990 and their sphere contact profile is more prone to cupping seizures.

After investigation by Caledonian Airborne Systems they advise that original main cases and pistons, which are now in excess of 15 years age, be removed from service.



James Coyne
Delegate of the Civil Aviation Safety Authority

13 September 2006