
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 39.1 (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.

Pilatus PC-12 Series Aeroplanes

AD/PC-12/41

Generator Control Unit

6/2004

Applicability: All PC-12 and PC-12/45 airplanes, Manufacturer Serial Numbers (MSN) 101 through 507 with the second battery factory option and which do not have Generator Control Unit (GCU) part number (P/N) 988.21.15.103 installed.

Requirement: 1. Remove GCU P/N 988.21.15.102 and install GCU P/N 988.21.15.103 in accordance with the Accomplishment Instructions of Pilatus PC-12 Service Bulletin (SB) No. 24-022 dated 13 June 2003.

Note 1: The following Service Bulletins should be accomplished before or at the same time as PC-12 SB No. 24-022, as applicable:

PC-12 SB 24-010 Revision 1 dated 06 October 2003.

- When an Electrosystems generator P/N 978.87.24.121 is installed.

PC-12 SB 24-019 Revision 1 dated 06 June 2003.

*- When an Electrodelta voltage regulator P/N 988.21.15.101 is installed.
(This SB changes the P/N of the GCU to 988.21.15.103.)*

2. GCUs with P/N 988.21.15.102 may not be installed as a replacement part on any aeroplane with the second battery factory option installed.

Note 2: FOCA (Switzerland) AD HB-2004-101 refers.

Compliance: For Requirement 1 - At the next 100 hour or annual inspection, but no later than 90 days after the effective date of this Directive.

For Requirement 2 - As of the effective date of this Directive.

This Airworthiness Directive becomes effective on 10 June 2004.

Background: The Swiss Federal Office for Civil Aviation (FOCA) has received reports of incidents on PC-12 series aeroplanes with the second battery installation where the 2nd battery was discharged due to loss of the 2nd generator output, without any failure being indicated.

Pilatus PC-12 Series Aeroplanes

AD/PC-12/41 (continued)

Investigation revealed that the GCU lets the 2nd battery energise the number 2 generator relay until the power from the battery is insufficient to hold the relay closed. This condition, if not corrected, could result in failure of the second generator not being detected whilst the 2nd battery is discharging.

This Directive requires the replacement of the GCU to correct the anomaly.



James Coyne
Delegate of the Civil Aviation Safety Authority

27 April 2004