

2010-05-02 Pilatus Aircraft Ltd.: Amendment 39-16211; Docket No. FAA-2009-1158; Directorate Identifier 2009-CE-063-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective April 1, 2010.

Affected ADs

(b) This AD supersedes AD 2009-08-10, Amendment 39-15883.

Applicability

(c) This AD applies to Model PC-12/47E airplanes, all manufacturer serial numbers (MSN), certificated in any category.

Subject

(d) Air Transport Association of America (ATA) Code 34: Navigation.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

Field reports have indicated that the possibility exists that both Primary Flight Displays (PFDs) could indicate a roll attitude offset of up to 10 degrees in the same direction if an accelerated turn onto the active runway is performed immediately followed by take-off. In addition, annunciated heading splits have been reported. This condition has been reported to correct itself after several minutes.

Additionally, if the aeroplane is operating in geographical latitudes with low horizontal magnetic field strength, incorrect heading may be displayed if the ADAHRS switches from GPS track to magnetometer heading while the aeroplane is on the ground.

This situation, if not corrected, could result in an undesired bank angle, heading splits and/or incorrect heading, which would constitute an unsafe condition.

As a short-term interim measure, AD 2009-0028-E has been released in February 2009 to limit at 30[deg] the bank angle during climb. Afterwards, as a result of the ongoing investigation, the problem has been temporarily addressed with some limitations in the take-off procedure. These limitations have been mandated by AD 2009- 0080-E which superseded AD 2009-0028-E.

In order to terminate the operational limitations, an updated ADAHRS version with improved software was developed.

For the reasons described above, this AD supersedes AD 2009- 0080-E and mandates as a terminating action either an update of the ADAHRS software or the replacement of the ADAHRS unit.

From MSN 1181 and subsequent an improved ADAHRS unit was implemented during production.

Actions and Compliance

(f) Unless already done, do the following actions:

(1) For MSN 545 and MSN 1001 through MSN 1180, before further flight after April 20, 2009 (the effective date of AD 2009-08-10), incorporate Pilatus Aircraft Ltd. Temporary Revision No. 11 to PC-12/47E Pilot's Operating Handbook (POH), Report No. 02277, dated March 18, 2009, into the Pilatus PC-12/47E POH. The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations 14 CFR 43.7 may do this action. Make an entry in the aircraft records showing compliance with this portion of the AD following 14 CFR 43.9.

(2) For MSN 545 and MSN 1001 through MSN 1180, within 180 days after April 1, 2010 (the effective date of this AD):

(i) Update the air data, attitude, and heading reference system (ADAHRS) software following the accomplishment instructions of Honeywell International Inc. Service Bulletin KSG 7200-34-09, Revision 0, dated September 24, 2009; or

(ii) Replace ADAHRS unit KSG 7200 Honeywell Part Number (P/N) 065-00188-5102, Software Version MOD 02/02 (Pilatus P/N 985.99.12.192) with a new ADAHRS unit with Honeywell P/N 065-00188- 5103 (Pilatus P/N 985.99.12.205) following the accomplishment instructions of Pilatus Aircraft Ltd. Pilatus PC-12 Service Bulletin No. 34-022, dated October 5, 2009.

(3) For MSN 545 and 1001 through 1180, before further flight after the actions required by paragraph (f)(2) of this AD, remove Pilatus Aircraft Ltd. Temporary Revision No. 11 to PC-12/47E Pilot's Operating Handbook, Report No. 02277, dated March 18, 2009.

(4) Do not install an ADAHRS unit with Honeywell P/N 065-00188- 5102 (Pilatus P/N 985.99.12.192) on any affected Model PC-12/47E airplane, as follows:

(i) For MSN 545 and 1001 through 1180 airplanes, as of 180 days after April 1, 2010 (the effective date of this AD); and

(ii) For all other MSNs, as of April 1, 2010 (the effective date of this AD).

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate,

901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2009-0249, dated November 20, 2009, Pilatus Aircraft Ltd. Temporary Revision No. 11 to PC-12/47E Pilot's Operating Handbook, Report No. 02277, dated March 18, 2009; Honeywell International Inc. Service Bulletin KSG 7200-34-09, Revision 0, dated September 24, 2009; and Pilatus Aircraft Ltd. Pilatus PC-12 Service Bulletin No: 34-022, dated October 5, 2009, for related information.

Material Incorporated by Reference

(i) You must use Pilatus Aircraft Ltd. Temporary Revision No. 11 to PC-12/47E Pilot's Operating Handbook, Report No. 02277, dated March 18, 2009; Honeywell International Inc. Service Bulletin KSG 7200-34-09, Revision 0, dated September 24, 2009; and Pilatus Aircraft Ltd. Pilatus PC-12 Service Bulletin No: 34-022, dated October 5, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of Honeywell International Inc. Service Bulletin KSG 7200-34-09, Revision 0, dated September 24, 2009; and Pilatus Aircraft Ltd. Pilatus PC-12 Service Bulletin No: 34-022, dated October 5, 2009, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On April 20, 2009 (74 FR 17384, April 15, 2009), the Director of the Federal Register previously approved the incorporation by reference of Pilatus Aircraft Ltd. Temporary Revision No. 11 to PC-12/47E Pilot's Operating Handbook, Report No. 02277, dated March 18, 2009.

(3) For service information identified in this AD:

(i) Pilatus service information: contact Pilatus Aircraft Ltd., Customer Service Manager, CH-6371 STANS, Switzerland; telephone: +41 (0)41 619 62 08; fax: +41 (0)41 619 73 11; Internet: <http://www.pilatus-aircraft.com>, or e-mail: SupportPC12@pilatus-aircraft.com. You may get Pilatus Aircraft Ltd. Temporary Revision No. 11 to PC-12/47E Pilot's Operating Handbook, Report No. 02277, dated March 18, 2009, from the Web site of the Swiss Federal Office of Civil Aviation (FOCA): <http://www.bazl.admin.ch/fachleute/lufttechnik/entwicklung/00677/index.html?lang=en>.

(ii) Honeywell service information: contact Honeywell International Inc., 23500 West 105th Street, Olathe, Kansas 66061- 8425, U.S.A., CAGE: 22373; telephone: (800) 601-3099 (toll free U.S.A./Canada); telephone: (602) 365-3099 (international direct); telephone: 00-800-601-30999 (EMEA Toll Free); telephone: 420-234- 625-500 (EMEA Direct); Internet: <http://www.bendixking.com>; e-mail: Karen.Attebery@honeywell.com; telephone: (913) 712-2301; fax: (913) 712-2301.

(4) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(5) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.