


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2007- 0241R4</p> <p>Date: 31 August 2010</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>	
<p>Type Approval Holder's Name :</p> <p>Pilatus Aircraft Ltd.</p>	<p>Type/Model designation(s) :</p> <p>PC-6 aeroplanes</p>
<p>TCDS Number :</p>	<p>Switzerland No. F 56-10</p>
<p>Foreign AD :</p>	<p>Not applicable</p>
<p>Revision:</p>	<p>This Airworthiness Directive (AD) revises EASA AD 2007-0241R3 dated 06 May 2009 which superseded Federal Office of Civil Aviation (FOCA) Switzerland AD TM-L Nr. 80.627-6 / Index 72-2 dated 06 December 1972 and HB-2006-400 dated 21 September 2006 and EASA AD 2007-0114 dated 02 May 2007.</p>
ATA 57	Wing – Wing Strut Fitting – Inspection / Replacement
<p>Manufacturer(s):</p>	<p>Pilatus Aircraft Ltd. and Fairchild Republic Company (formerly known as Fairchild Industries, Fairchild Heli Porter and Fairchild-Hiller Corporation).</p>
<p>Applicability:</p>	<p>PC-6 aircraft, all Models, Manufacturer Serial Number (MSN) 101 through MSN 999 inclusive and PC-6 aircraft, all Models, manufactured by Fairchild in the United States of America, MSN 2001 through MSN 2092 inclusive.</p>
<p>Reason:</p>	<p>Findings of corrosion, wear and cracks in the upper wing strut fittings on some PC-6 aircraft have been reported in the past. It is possible that the spherical bearing of the wing strut fittings installed in the underwing can be loose in the fitting or cannot rotate because of corrosion. In this condition, the joint cannot function as designed and fatigue cracks may then develop. Undetected cracks, wear and/or corrosion in this area could cause failure of the upper attachment fitting, leading to failure of the wing structure and subsequent loss of control of the aircraft.</p> <p>To address this problem, FOCA published AD TM-L Nr. 80.627-6 / Index 72-2 and HB-2006-400 and EASA published AD 2007-0114 to require specific inspections and to obtain a fleet status. Since the issuance of AD 2007-0114, the reported data proved that it was necessary to establish and require repetitive inspections.</p> <p>EASA published Emergency AD 2007-0241-E to extend the applicability and to require repetitive eddy current and visual inspections of the upper wing strut fitting for evidence of cracks, wear and/or corrosion and examination of the</p>

	<p>spherical bearing and replacement of cracked fittings. Collected data received in response to Emergency AD 2007-0241-E resulted in the issuance of EASA AD 2007-0241R1 that permitted extending the intervals for the repetitive eddy current and visual inspections from 100 Flight Hours (FH) to 300 FH and from 150 Flight Cycles (FC) to 450 FC, respectively. In addition, oversized bolts were introduced by Pilatus PC-6 Service Bulletin (SB) 57-005 R1 and the fitting replacement procedure was adjusted accordingly.</p> <p>Based on fatigue test results, EASA AD 2007-0241R2 was issued to extend the repetitive inspection interval to 1 100 FH or 12 calendar months, whichever occurs first, and to delete the related flight cycle intervals and the requirement for the "Mild Corrosion Severity Zone". In addition, some editorial changes have been made for reasons of standardization and readability.</p> <p>Revision 3 of this AD referred to the latest revision of the PC-6 Aircraft Maintenance Manual (AMM) Chapter 5 limitations which have included the same repetitive inspection intervals and procedures already mandated in the revision 2 of AD 2007-0241. Besides the inspections, in the latest revision of the PC-6 AMM, the replacement procedures for the fittings were included.</p> <p>Additionally, EASA AD 2007-0241R3 introduced the possibility to replace the wing strut fitting with a new designed wing strut fitting. With this optional part replacement, in the repetitive inspection procedure the 1 100 FH interval is deleted so that only calendar defined intervals of inspections remained applicable.</p> <p>The aim of this new revision is to only mandate the initial inspection requirement and consequently to limit its applicability to aeroplanes which are not already in compliance with EASA AD 2007-0241R3. All aeroplanes which are in compliance with EASA AD 2007-0241R3 have to follow the repetitive inspection requirements as described in Pilatus PC-6 AMM Chapter 04-00-00, Document Number 01975, Revision 12 and the Airworthiness Limitations (ALS) Document Number 02334 Revision 1 mandated by EASA AD 2010-0176. Therefore the repetitive inspection requirements corresponding paragraphs have been deleted in this new EASA AD revision. The paragraph numbers of EASA AD 2007-0241R numbering has been maintained for referencing needs.</p>
Effective Date:	<p>Original issue: 07 September 2007.</p> <p>Revision 4: 14 September 2010.</p>
Required action(s) and Compliance Time(s):	<p>Required as indicated, unless previously accomplished:</p> <p>Note 1: Paragraphs (§) 1 and 2 of this AD are not applicable to airplanes that have already been inspected in accordance with EASA AD 2007-0241R3 (Pilatus SB 57-004) and/or for which a new wing strut fitting has been installed, unless the aircraft has already exceeded 1 100 FH or the calendar time defined in § 1. C. (3) (c) of Pilatus PC-6 SB 57-005, counted from the last inspection after 16 May 2007 [the effective date of EASA AD 2007-0114] or counted from the replacement date of the wing strut fitting, as applicable.</p> <ol style="list-style-type: none"> 1. Before next flight after the 07 September 2007 [the effective date of the original issue of this AD], perform a visual inspection of the upper wing strut fittings and an examination of the spherical bearing as instructed in paragraph § 3. A. (1) of Pilatus PC-6 SB 57-005. <p>Note 2: For the requirements of § 1 of this AD and to avoid any aircraft grounding at an inadequate location, a one-time ferry flight is permitted in accordance with § 1. C. (3) (a) NOTE 2 of Pilatus PC-6 SB 57-005 to reach a maintenance facility where the inspection(s) can be accomplished.</p> <ol style="list-style-type: none"> 2. Within the next 25 FH or 25 FC or one (1) calendar month, whichever occurs first after 07 September 2007 [the effective date of the original issue of this AD], perform a visual and eddy current inspection of the upper wing strut fittings and an examination of the spherical bearing as instructed in § 3. A. (2) (a) to (i) of Pilatus PC-6 SB 57-005.

	<p>3. Deleted.</p> <p>4. Deleted.</p> <p>5. If any crack is found during the inspection as required by this AD, before further flight, replace the wing strut fitting as instructed in chapter 57-00-02 of PC-6 AMM.</p>
Ref. Publication:	<p>Pilatus Aircraft Ltd. PC-6 SB No. 57-005 dated 30 August 2007, Revision 1 dated 19 November 2007 and Revision 2 dated 19 May 2008.</p> <p>Pilatus PC-6 AMM Chapter 04-00-00, Document Number 01975, Revision 12 dated 14 May 2010.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The initial issue of this AD was published as an Emergency AD on 05 September 2007. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA; E-mail ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: PILATUS AIRCRAFT LTD., Customer Liaison Manager, CH-6371 STANS, Switzerland Tel.: +41 (0)41 619 65 80 Fax: +41 (0)41 619 65 76 E-mail: fodermatt@pilatus-aircraft.com.