

Federal Department of the Environment, Transport, Energy and Communications DETEC

Federal Office of Civil Aviation FOCA

Safety Division - Aircraft

Swiss Confederation

Lufttüchtigkeitsanweisung (LTA) Consigne de Navigabilité (CN) Prescrizione di Aeronavigabilità (PA) Airworthiness Directive (AD)		FOCA AD HB-2006-376
Inkraftsetzung Mise en viguer Entrata in vigore Effective Date	02 August 2006	Pilatus – PC-7 MkII FOCA TC/TCDS No: F56-25 ATA 57 – WINGS

Issue date: 25 July 2006

Subject: CENTER WING NOSE SKIN – Inspection

Superseded / Revised ADs: Not applicable

### 1. APPLICABILITY:

## PILATUS AIRCRAFT LTD.

All Model PC-7 MkII airplanes Manufacturer Serial Number (MSN) 010, MSN 101 thru MSN 160 inclusive and MSN 601 thru MSN 604 inclusive and MSN 608 thru MSN 616 inclusive.

## 2. REASON:

This Airworthiness Directive (AD) is prompted due to the discovery of crack damage in some radii at the rear edge of the Nose Skin, Part Number (P/N) 557.31.09.120. The radii are adjacent to the left and right corners at the forward edge of the floor panel P/N 557.31.09.027. Crack damage can also occur in the forward support structure of the floor panel adjacent to the skin panel.

It is thought that the damage is caused by fatigue following local yielding in the little radius due to application of high Nz loads. Crack propagation in certain areas may lead to failure of the main wing torsion box.

In order to correct and control the situation, this AD requires an eddy-current, non-destructive inspection (NDI) of the Nose Skin and adjacent structure above the left and right Main Landing Gear (MLG) bay and a visual inspection of the forward support structure of the floor panel. This AD also requires to report to PILATUS if cracks are found during the inspections and to apply for crack-length monitoring instructions.

#### COMPLIANCE / ACTION:

Required as indicated below, unless already accomplished:

Within the next 150 flying hours or six (6) calendar months, whichever occurs first, after the effective date of this AD:

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#### 3.1. INSPECTION

- 3.1.1. Perform an inspection of the forward area of the floor panel and the related structure at the locations illustrated by paragraph 3. B. (1) of PILATUS PC-7 MkII Service Bulle tin No. 57-004. Crack damage is not permitted.
- 3.1.2. If during the inspection required by paragraph 3.1.1. of this AD any crack damage is found, prior to further flight, contact PILATUS for instructions.
- 3.1.3. Perform an NDI inspection of the nose skin in accordance with instructions provided by paragraph 3. B. (2) of PILATUS PC-7 MkII Service Bulletin 57-004.
- 3.1.4. If during the inspection required by paragraph 3.1.3. of this AD any crack damage is found and complies with acceptable limits, monitor the length of the crack and provide to PILATUS the information required by PILATUS PC-7 MkII Service Bulletin No. 57-004. Requirements for subsequent inspections in case of no cracks or cracks within the limits are defined in the AMM 05-22-10.
- 3.1.5. If during the inspection required by paragraph 3.1.3. of this AD any crack damage is found which exceeds the acceptable limits, prior to further flight, contact PILATUS for instructions.

# 4. REF. PUBLICATIONS:

The actions required by this AD shall be done in accordance with the manufacturer's documentation listed in this paragraph, and/or later revisions approved by the Swiss Federal Office of Civil Aviation (FOCA):

## **Manufacturer's Documentation**

- PILATUS PC-7 MkII Service Bulletin No. 57-004, dated 29 January 2004.
- PILATUS PC-7 MkII Aircraft Maintenance Manual (AMM) chapter 05-22-10, dated 30 September 2004.

The applicable manufacturer's documentation may be obtained directly from:

 PILATUS AIRCRAFT LTD.
 TEL No.: +41 41 619 6226

 CUSTOMER LIASON MANAGER
 FAX No.: +41 41 619 6170

CH-6371 STANS, Switzerland Email: snolan@pilatus-aircraft.com

## 5. FOR FURTHER INFORMATION CONTACT:

FEDERAL OFFICE OF CIVIL AVIATION (FOCA)

Design and Production (STEH) FAX No.: +41 31 325 9324 (or) CH-3003 Bern, Switzerland FAX No.: +41 31 322 5918