

Bundesamt für Zivilluftfahrt (BAZL) Office fédéral de l'aviation civile (OFAC) Ufficio federale dell'aviazione civile (UFAC) Federal Office for Civil Aviation (FOCA) Maulbeerstrasse 9 CH-3003 Berne Switzerland	Lufttüchtigkeitsanweisung (LTA) Consigne de Navigabilité (CN) Prescrizione di Aeronavigabilità (PA) Airworthiness Directive (AD)	FOCA AD HB 2000-443
Inkraftsetzung Mise en vigueur Entrata in vigore Effective Date	PILATUS - PC-12 FOCA TC/TCDS No.: F 56-30 ATA 27	

TITLE: **PILATUS AIRCRAFT LTD. – PC-12
FLAP SYSTEM - Modification**

APPLICABILITY: PILATUS AIRCRAFT LTD.
Model PC-12 and PC-12/45 airplanes.
▪ Manufacturers Serial Numbers (MSN) 101 through MSN 320.

EFFECTIVE DATE: November 09, 2000.

REASON:

The PC-12 flaps system consists of one flap panel per wing which is driven by two flap actuators. The flap actuators are interconnected to each other by flexible drive shafts and driven by a centrally mounted Power Drive Unit. There is a remote potential failure mode of a single flap actuator which cannot be detected by the present flap control system. If the gear system of a single actuator becomes excessively worn there will be no longer any output motion, though the input motion by the flex shaft is still intact. Undetected, the remaining three actuators could continue to drive and a distortion/twist of the flap panel, which is connected to the excessively worn actuator, could occur. A subsequent failure of the flap panel or its linkage and reduced airplane controllability is then possible.

In order to correct the condition described, this Airworthiness Directive (AD) requires modification of the flap system consisting of :

- Replacement of the existing Flap Control and Warning Unit (FCWU) with a new designed FCWU.
- Installation of a Remote Control Circuit Breaker (RCCB) system, which makes it possible for the pilot to interrupt and reset (only for certain failure modes) the Power Drive Unit (PDU) circuit in flight and on the ground.
- Removal of the flap position indicator resolvers from the outboard flap mechanism and installation of flap position indicator resolvers at the center and inboard flap actuator positions.
- Modification of the applicable electrical wires and installation of new wires as necessary.


COMPLIANCE: (Required as indicated, unless already accomplished)

To prevent structurally unacceptable single flap panel twist, which could result in reduced controllability of the airplane, accomplish the following:

(a) Within the next 600 hours time-in-service after the effective date of this Airworthiness Directive or not later than June 30, 2001, whichever occurs first.

- (1) Modify the flap system as specified in and in accordance with the Accomplishment Instructions of PILATUS PC-12 Service Bulletin No. 27-008 Revision 2, dated September 13, 2000 or later revisions approved by the Swiss Federal Office for Civil Aviation (FOCA).
- (2) Perform inspection to check backlash play of each flap actuator and repeat the inspections thereafter at intervals stipulated in Aircraft Maintenance Manual (AMM) chapter 05-10-20, dated July 21, 2000 and in accordance with the inspection requirements of AMM Chapter 27-50-03, dated April 30, 2000 and/or later revisions of the AMM. Remove all actuators which do not fulfill the criteria and replace with serviceable parts before further flight.

Rechtsmittelbelehrung Voies de droit Rimedi giuridici Right to appeal	siehe TM Nr. voir CT no. vedi CT no. see CT no. 02.020-80	Seite Page Pagina Page von de di of 1 2
--	--	--

FOCA AD HB 2000-443	Lufttüchtigkeitsanweisung (LTA) Consigne de Navigabilité (CN) Prescrizione di Aeronavigabilità (PA) Airworthiness Directive (AD)		BAZL Schweiz OFAC Suisse UFAC Svizzera FOCA Switzerland
-------------------------------	---	--	--

Note:

After modification of the flap system in accordance with para (a) (1) of this AD, relief of the flap actuator inspection intervals mandated by FOCA AD HB 98-460 is provided in the revised AMM chapter 5.

(b) After modification

- (1) Amend the PC-12 Pilot's Operating Handbook (POH) with POH /AFM Temporary Revision No.15 MODIFIED FLAP SYSTEM - dated April 03, 2000, and operate aircraft accordingly.

REF. PUBLICATIONS:

- PILATUS PC-12 Service Bulletin No. 27-008 Revision 2, dated September 13, 2000 or later revisions approved by the Swiss Federal Office for Civil Aviation (FOCA).
- PILATUS PC-12 Pilot's Operating Handbook (POH) with POH /AFM Temporary Revision No.15 - MODIFIED FLAP SYSTEM - dated April 03, 2000

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

PILATUS AIRCRAFT LTD
CUSTOMER LIAISON MANAGER
CH-6371 STANS , Switzerland

TEL No.: +41 41 619 6319
FAX No.: +41 41 610 3351

FOR FURTHER INFORMATION CONTACT:

FEDERAL OFFICE FOR CIVIL AVIATION (FOCA)
Type Certification Section (FM), Maulbeerstrasse 9
CH-3003 Berne, Switzerland

FAX No.: +41 31 325 8051 (or)
FAX No.: +41 31 322 5918

Rechtsmittelbelehrung Voies de droit Rimedi giuridici Right to appeal	siehe TM Nr. voir CT no. vedi CT no. see CT no.	02.020-80	Seite Page Pagina Page	2	von de di of	2
--	--	-----------	---------------------------------	---	-----------------------	---