Bundesamt für Zivilluftfahrt (BAZL) Office fédéral de l'aviation civile (OFAC) Ufficio federale dell'aviazione civile (UFAC) Federal Office for Civil Aviation (FOCA)

Lufttüchtigkeitsanweisung Consigne de navigabilité Prescrizione di aeronavigabilità Airworthiness directive

HB 95-451

Inkraftsetzung Mise en vigueur Entrata in vigore

Effective Date

01.11.1995

Betroffene Muster - Types concernés - Applicabilità - Models affected

PILATUS AIRCRAFT LTD. - All Model PC-6 A,B and C aircraft (fitted with Turboprop engines), up to and including serial number 915.

Anlass/Massnahmen - Objet/Mesures - Oggetto/Provvedimenti - Subject/Action

COLLECTOR TANK VENTING SYSTEM

- a) Temporary Flight Manual revision
- b) Modification

Fristen - Délais - Scadenza - Compliance

a) Temporary Flight Manual revision :

Insert before further flight

b) Collector Tank Venting System

Modification within 90 days after the effective date

of this Airworthiness Directive.

Herkunft - Provenance - Provenienza - Origin

Bezugnahme - Référence - Riferimento - Reference

- Pilatus PC-6 A/B/C Aircraft Flight Manual Teporary Revision issued October 18,1995 ANNEX I (Page 3) of this Airworthiness Directive.
- Pilatus PC-6 Service Bulletin No.171, dated October 18,1995

Bemerkungen - Observations - Osservazioni - Remarks

Rechtsmittelbelehrung Voies de droit	siehe TM Nr. voir CT no.	F 02.020-80	Seite Page	1	von de	3
Rimedi giuridici	vedi CT no.	¥ 02.020-00	Pagina	-	di	-
Right to appeal	see CT no.		Page		of	

HB 95-451

Lufttüchtigkeitsanweisung Consigne de navigabilité Prescrizione di aeronavigabilità Airworthiness directive BAZL Schweiz OFAC Suisse UFAC Svizzera FOCA Switzerland

Reason for issue

Reports have been received that the operational limitations of the fuel system can be exceeded during certain parachute/sky-diving missions with the PC-6. Investigations have revealed that the combination of:

- minimum fuel level
- long and very steep descents
- immediate turn-around with the engine running
- followed by the same cycles

may not allow the collector tank to refill completely.

This condition, if not corrected, could result in fuel starvation and subsequent interruption of normal engine operation.

Since the unsafe condition described may exist or develop on other aircraft of the same type design this Airworthiness Directive requires the insertion of a Temporary Revision into the Aircraft Flight Manual and the modification of the Collector Tank Venting Sytem.

Corrective actions

A modification to the aircraft fuel system has been developed which consists of adding a separate vent line which is installed between the top of the collector tank and the existing overwing vent mast.

This modification (SB 171) improves the venting of the collector tank between the main wing tanks and the engine and eliminates the possibility of air inclusion in the fuel lines.

Compliance

- a) Before further flight revise Section 1 of the PC-6 Aircraft Flight Manual (AFM) with the Temporary Revision issued October 18. 1995 and operate aircraft accordingly. Revision of the Aircraft Flight Manual may be accomplished by inserting a copy of Annex 1 (page 3 of this AD) into the AFM.
- b) Within 90 days after the effective date of Airworthiness Directive modify the Collector Tank Venting System in accordance with Pilatus PC6 Service Bulletin No.171, dated October 18,1995.
- c) Incorporation of Service Bulletin 171 constitutes terminating action for the limitation requirements of paragraph a) of this AD. The AFM Temporary Revision may be removed after accomplishment of this modification.

₩ PC-6 A/B/C Series

AIRPLANE FLIGHT MANUAL

TEMPORARY REVISION TO PILATUS PC-6 A/B/C SERIES AIRPLANE FLIGHT MANUAL

SECTION 1

CERTIFICATE LIMITATIONS

FLIGHT LIMITATION

Avoid repeated prolonged steep descents.

GENERAL

A. Effectivity

All PC-6 Aircraft fitted with a Turboprop engine (PC-6 A, B and C models).

B. Reason

Parachute dropping and sky-diving missions, with the PC-6, have developed an operation habit where the fuel system can reach its limits. The combination of:

- · minimum fuel level
- · long and very steep descents
- · immediate turn-around with the engine running
- · followed by the same cycles,

may not allow the collector fuel tank to refill completely. Therefore, fuel starvation may result.

C. Description

A modification to the aircraft fuel system has been developed (SB No. 171) which improves the venting of the collector tank between the main wing tanks and the engine - under sustained, maximum achievable climb and descent attitudes - when operating at low fuel levels; thus eliminating the possibility of air inclusion in the fuel lines which could interrupt the normal operation of the engine.

D. Applicability

Until PC-6 Service Bulletin 171 is embodied.

Issued: Oct 18/95

Page 1 of 1