

PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

CAA-AD-024/2002R1

Nahrazuje CAA-AD-024/2002

Datum vydání: 09. května 2002

LETOUN - MOTOR - VYSOKOTLAKÉ OLEJOVÉ ČERPADLO (ATA 79) - VÝMĚNA

Týká se: letadel ATR 72-101, -102, -201, -202, -211 a -212, mimo letadel, na kterých byla provedena jedna z těchto ATR modifikací - 4371 nebo 3973 nebo 4437.

Datum účinnosti: 16. května 2002

Provést v termínech: Jak je popsáno v DGAC AD 2002-072-064(B) R1, od data účinnosti tohoto PZZ.

Postup provedení prací: Dle DGAC AD 2002-072-064(B) R1 (příloha tohoto PZZ).

Poznámky: Provedení tohoto PZZ musí být zapsáno do letadlové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL sekce technická - Ing. Stibůrek. Pokud to vyžaduje povaha tohoto PZZ, musí být zapracován do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě DGAC AD 2002-072-064(B) R1, který nahrazuje DGAC AD 2002-072-064(B).

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DGAC AD No.: 2002-072-064(B) R1
ATR

ATR 72 aircraft

Engines - High pressure oil pump - Pressure Regulating Valve (PRV) (ATA 79)

1. APPLICABILITY:

ATR 72-101, -102, -201, -202, -211, and -212 model aircraft except aircraft on which one of the ATR modifications 4371 or 3973 or 4437 has been embodied.

2. REASONS:

During years 1999 and 2000, three cases of propeller pitch lock, during final approach, have been experienced on ATR fleet. During two of these events the asymmetric power resulting from the propeller pitch lock was not recognised by the crew during landing and the aircraft veered off the runway after selection of reverse power while the "Low Pitch" condition was not effective for both engines.

A first measure has been to provide operators with enhanced operational procedures associated with reverse application. This has led ATR to revise the Airplane Flight Manual to add instructions that prohibit the crew from selecting the reverse position on the engines in the event of propeller asymmetric power. This AFM revision was mandated by AD No. 2000-437-052(B).

Extensive investigations were performed on the suspected components of the propeller pitch control system to isolate the root cause of the pitch lock issue. Performance anomalies were evidenced on two HP Oil pump.

Based on the test results, these HP Oil Pump anomalies, when independently considered, would not lead to a propeller

pitch lock. Nevertheless, the analysis of how the HP Oil Pump pressure regulating valves (PRV) fitted on the PW 124B/127 is interacting with the propeller control systems shows that this equipment could be a contributing factor to a propeller pitch lock condition especially when associated with oil contamination.

The actions rendered mandatory by this Airworthiness Directive (AD) are intended to modify PRV in order to avoid a propeller pitch lock situation and reduced controllability of the aircraft during landing.

Revision 1 of this AD aims at correcting the reference of one of the modifications which exempts from the applicability of this AD. Instead of modification 4473 it should have been red 4437.

3. ACTIONS:

The following measures are rendered mandatory from the effective date of this AD.

At the first opportunity and at the latest before June 30, 2004, replace all Pratt & Whitney Canada PW 124B and PW 127 HP Oil Pump PRV's by PRV modified in accordance with Pratt & Whitney Canada Service Bulletin 21570.

REF.: PRATT & WHITNEY CANADA Service Bulletin 21570.

This Revision 1 replaces AD 2002-072-064(B) issued on January 23, 2002

EFFECTIVE DATE:

Original AD: FEBRUARY 02, 2002

Revision 1: Upon receipt from March 20, 2002