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No. CF-91-26R1

AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to Canadian Aviation Regulation (CAR) 593. Pursuant to CAR 605.84 and the further details of CAR Standard 625, Appendix H, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with CAR 605.84 and the above- referenced Standard.

This AD has been issued by the Continuing Airworthiness Division (AARDG), Aircraft Certification Branch, Transport Canada, Ottawa, telephone (613) 952-4357.

CF-91-26R1 PRATT & WHITNEY CANADA

Applies to Pratt & Whitney Canada (P&WC) PW118A, PW123, PW123AF, PW124B, PW125B, PW126 and PW126A engine models. These engines are installed on, but not necessarily limited to, the EMB-120, DHC-8 Series 300, CL-215T, ATR-72, Fokker 50 and BAe ATP aircraft.

Compliance is required as indicated, unless already accomplished.

There have been several incidents of internal oil fires in the intercompressor case (ICC) in certain models of P&WC PW100 series engines. In five incidents, the fire penetrated the ICC and required flight crew action to extinguish the fire. It has been determined that spontaneous ignition of engine oil can cause an ICC fire. Oil may originate from two sources:

1. Oil which accumulates in the ICC cavity; or
2. Reverse flow (air/oil mist) into the ICC as a result of a No. 5 bearing failure.

In order to reduce the potential of oil accumulating in the ICC cavity, accomplish the following:

Part A

Applies to all PW123, PW123AF and PW124B engines not incorporating P&WC Service Bulletin (SB) 20914, or its later revisions.

1. After the effective date of this directive, perform the inspections stated in Part A of the Accomplishment Instructions of P&WC SB 21023R1 (Revision 1) dated 8 November 1991, or its later revisions, or superseding service bulletins that are "DOT Approved", at the times specified in Part A of the Compliance section of the same service bulletin.
2. Compliance with paragraph A.1 of this directive is also required whenever one or more of the following is observed:
 - (a) Indications of oil leaks or stains on the ICC front or rear flanges.
 - (b) A sudden shift in oil consumption trend, and the applicable engine maintenance manual troubleshooting fails to rectify the problem.
 - (c) An oil odour and/or smoke in the aircraft cabin, originating from the bleed air system.
3. Before 31 March 1992, incorporate P&WC SB 20914R3 dated 15 October 1991, or its later revisions, or superseding service bulletins that are "DOT Approved". Compliance with paragraph A.3 of this directive constitutes terminating action for the requirements stated in paragraphs A.1 and A.2 of this directive.

For PW124B engines, compliance with P&WC SB 21111 dated 16 December 1991, or its later revisions, or superseding service bulletins that are "DOT Approved", is an equivalent means of compliance with paragraph A.3 of this directive.

Part B

Applies to all PW123, PW123AF and PW124B engines.

1. After the effective date of this directive, drain the No. 5 bearing vent passage in accordance with Part B of the Accomplishment Instructions of P&WC SB 21023R1 dated 8 November 1991, or its later revisions, or superseding service bulletins that are "DOT Approved", at the times specified in Part B of the Compliance section of the same service bulletin.
2. Not later than the next engine shop visit, incorporate P&WC SB 21053 dated 10 June 1991, or its later revisions, or superseding service bulletins that are "DOT Approved". Compliance with paragraph B.2 of this directive constitutes terminating action for the requirements stated in paragraph B.1 of this directive.

Part C

Applies to all PW118A, PW125B and PW126 and PW126A engines not incorporating P&WC SB 20914, or its later revisions.

1. After the effective date of this directive, perform the inspections stated in Part A of the Accomplishment Instructions of P&WC SB 21034R1 dated 8 November 1991, or its later revisions, or superseding service bulletins that are "DOT Approved", at the times specified in Part A of the Compliance section of the same service bulletin.
2. Compliance with paragraph C.1 of this directive is also required whenever one or more of the following is observed:
 - (a) Indications of oil leaks or stains on the ICC front or rear flanges.
 - (b) A sudden shift in the oil consumption trend, and the applicable engine maintenance manual troubleshooting fails to rectify the problem.
 - (c) An oil odour and/or smoke in the aircraft cabin, originating from the bleed air system.
3. Before 31 March 1992, incorporate P&WC SB 20914R3 dated 15 October 1991, or its later revisions, or superseding service bulletins that are "DOT Approved". Compliance with paragraph C.3 of this directive constitutes terminating action for the requirements stated in paragraphs C.1 and C.2 of this directive.

For PW125B engines, compliance with P&WC SB 21088 dated 15 October 1991, or its later revisions, or superseding service bulletins that are "DOT Approved", is an equivalent means of compliance with paragraph C.3 of this directive.

For PW126 and PW126A engines, compliance with P&WC SB 21097 dated 8 November 1991, or its later revisions, or superseding service bulletins that are "DOT Approved", is an equivalent means of compliance with paragraph C.3 of this directive.

Part D

Applies to all PW125B, PW126 and PW126A engines.

1. After the effective date of this directive, drain the No. 5 bearing vent passage in accordance with Part B of the Accomplishment Instructions of P&WC SB 21034R1 dated 8 November 1991, or its later revisions, or superseding service bulletins that are "DOT Approved", at the times specified in Part B of the Compliance section of the same service bulletin.
2. Not later than the next engine shop visit, incorporate P&WC SB 21053 dated 10 June 1991, or its later revisions, or superseding service bulletins that are "DOT Approved". Compliance with paragraph D.2 of this directive constitutes terminating action for the requirements stated in paragraph D.1 of this directive.

Alternative means of compliance with the requirements of this directive may be used only if approved by the Director, Airworthiness Branch, Transport Canada, Ottawa. Any application should be made to the appropriate regional office.