

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 23, 25, 27, 29, 91, 121, 125 and 135

[Docket No. FAA-2005-20245; Amendment No. 23-58, 25-124, 27-43, 29-50, 91-300, 121-338, 125-54, 129-45, and 135-113]

RIN 2120-AH88

Revisions to Cockpit Voice Recorder and Digital Flight Data Recorder Regulations

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; correction.

SUMMARY: The Federal Aviation Administration (FAA) is amending a final rule published in the **Federal Register** on March 7, 2008. That final rule amended cockpit voice recorder and digital flight data recorder regulations affecting certain air carriers, operators, and aircraft. In that final rule, the FAA failed to include conforming amendments to certain operating rules to ensure that certain new requirements apply to only newly manufactured aircraft.

DATES: *Effective Date:* These amendments become effective July 9, 2009.

FOR FURTHER INFORMATION CONTACT: For technical questions contact: Timothy W. Shaver, Avionics Systems Branch, Aircraft Certification Service, AIR-130, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 385-4686; facsimile (202) 385-4651; e-mail tim.shaver@faa.gov. For legal questions contact: Karen L. Petronis, Regulations Division, Office of the Chief Counsel, Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-3073; facsimile (202) 267-3073; e-mail karen.petronis@faa.gov.

SUPPLEMENTARY INFORMATION: The Federal Aviation Administration (FAA) published a final rule entitled "Revisions to Cockpit Voice Recorder and Digital Flight Data Recorder Regulations" in the **Federal Register** on March 7, 2008 (73 FR 12542). That final rule amended cockpit voice recorder (CVR) and digital flight data recorder (DFDR) regulations affecting certain air carriers, operators, and aircraft manufacturers by:

- Increasing the duration of certain CVR recordings,
- Increasing the data recording rate for certain DFDR parameters,

- Requiring physical separation of the DFDR and CVR, improving the reliability of the power supplies to both the CVR and DFDR, and

- Requiring that certain datalink communications received on an aircraft be recorded if datalink communication equipment is installed.

Following publication of the final rule, an individual contacted us noting that §§ 91.609(e)(1) and 135.151(a)(1) require a CVR to be installed in accordance with § 23.1457(d) or § 25.1457(d). He noted that when we added new requirements to §§ 23.1457(d) and 25.1457(d) in the final rule without changing §§ 91.609(e)(1) and 135.151(a)(1), we mandated an immediate retrofit of existing aircraft to comply with the new certification requirements. He stated that this result appeared to conflict with our stated intent in the preamble to the final rule indicating that these new provisions would apply only to newly manufactured aircraft.

We agree that our failure to amend certain operating rules not otherwise addressed in the final rule had this unintended effect. We took the opportunity to review all of the operating rules in Title 14 Code of Federal Regulations (14 CFR) to determine whether other sections were similarly affected. Our review found similar issues in §§ 121.344, 121.344a, 121.359, 125.226 and 135.152.

We received another comment suggesting that we forgot to include the recorder location and mounting requirement for CVRs in airplanes operated under part 125. This is a requirement for newly manufactured airplanes. We agree that this was an oversight, and are amending § 125.227(h)(1) to correct this error.

This document makes the appropriate amendatory changes to clearly reflect the impact that the final rule's new requirements have on §§ 91.609, 121.344, 121.344a, 121.359, 125.226, 125.227, 135.151 and 135.152. This amendment will not impose any additional restrictions on operators affected by these regulations.

This document also corrects the change made to § 129.1(b), which included certain sections that had been redesignated.

Correcting Amendment

This correcting amendment will clarify the references to §§ 23.1457, 23.1459, 25.1457, 25.1459, 27.1457, 27.1459, 29.1457 and 29.1459 in §§ 91.609, 121.344, 121.344a, 121.359, 125.226, 129.1, 135.151 and 135.152.

This amendment also modifies references to §§ 23.1457, 25.1457,

27.1457, and 29.1457, by separating the two requirements in paragraph (d)(1) of each section into two subparagraphs. The first requirement will be designated (d)(1)(i); the second will be designated (d)(1)(ii). The second requirement, which was added in the final rule, applies only to airplanes manufactured after April 7, 2010. References to these sections contained in the operating rules are also being amended to conform to this modification.

Similarly, this amendment modifies references to §§ 23.1459, 25.1459, 27.1459, and 29.1459 by separating the two requirements in paragraph (a)(3) of these sections into two subparagraphs. The first requirement will be designated paragraph (a)(3)(i); the second will be designated (a)(3)(ii). The second requirement, which was added in the final rule, applies only to airplanes manufactured after April 7, 2010. References to these sections contained in the operating rules are also being amended to conform to this modification.

This amendment will revise § 125.227(h)(1) to reference § 25.1457(e).

Finally, this amendment corrects the list of sections included in § 129.1(b).

List of Subjects

14 CFR Parts 23, 25, 27, 29, 91 and 125

Aircraft, Aviation safety.

14 CFR Part 121

Air carriers, Aircraft, Aviation safety, Charter flights, Safety, Transportation.

14 CFR Part 129

Air carriers, Aircraft, Aviation safety.

14 CFR Part 135

Air taxis, Aircraft, Aviation safety.

Correction

■ In consideration of the foregoing, the Federal Aviation Administration amends parts 23, 25, 27, 29, 91, 121, 125, 129, and 135 of Title 14, Code of Regulations, as follows:

PART 23—AIRWORTHINESS STANDARDS: NORMAL, UTILITY, ACROBATIC, AND COMMUTER CATEGORY AIRPLANES

- 1. The authority citation for part 23 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44704.

- 2. Amend § 23.1457 by revising paragraph (d)(1) to read as follows:

§ 23.1457 Cockpit voice recorders.

* * * * *

(d) * * *

(1)(i) It receives its electrical power from the bus that provides the maximum reliability for operation of the cockpit voice recorder without jeopardizing service to essential or emergency loads.

(ii) It remains powered for as long as possible without jeopardizing emergency operation of the airplane.

* * * * *

■ 3. Amend § 23.1459 by revising paragraph (a)(3) to read as follows:

§ 23.1459 Flight data recorders.

(a) * * *

(3)(i) It receives its electrical power from the bus that provides the maximum reliability for operation of the flight data recorder without jeopardizing service to essential or emergency loads.

(ii) It remains powered for as long as possible without jeopardizing emergency operation of the airplane.

* * * * *

PART 25—AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY AIRPLANES

■ 4. The authority citation for part 25 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701, 44702, and 44704.

■ 5. Amend § 25.1457 by revising paragraph (d)(1) to read as follows:

§ 25.1457 Cockpit voice recorders.

* * * * *

(d) * * *

(1)(i) It receives its electrical power from the bus that provides the maximum reliability for operation of the cockpit voice recorder without jeopardizing service to essential or emergency loads.

(ii) It remains powered for as long as possible without jeopardizing emergency operation of the airplane.

* * * * *

■ 6. Amend § 25.1459 by revising paragraph (a)(3) to read as follows:

§ 25.1459 Flight data recorders.

(a) * * *

(3)(i) It receives its electrical power from the bus that provides the maximum reliability for operation of the flight data recorder without jeopardizing service to essential or emergency loads.

(ii) It remains powered for as long as possible without jeopardizing emergency operation of the airplane.

* * * * *

PART 27—AIRWORTHINESS STANDARDS: NORMAL CATEGORY ROTORCRAFT

■ 7. The authority citation for part 27 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44704.

■ 8. Amend § 27.1457 by revising paragraph (d)(1) to read as follows:

§ 27.1457 Cockpit voice recorders.

* * * * *

(d) * * *

(1)(i) It receives its electrical power from the bus that provides the maximum reliability for operation of the cockpit voice recorder without jeopardizing service to essential or emergency loads.

(ii) It remains powered for as long as possible without jeopardizing emergency operation of the airplane.

* * * * *

■ 9. Amend § 27.1459 by revising paragraph (a)(3) to read as follows:

§ 27.1459 Flight data recorders.

(a) * * *

(3)(i) It receives its electrical power from the bus that provides the maximum reliability for operation of the flight data recorder without jeopardizing service to essential or emergency loads.

(ii) It remains powered for as long as possible without jeopardizing emergency operation of the airplane.

* * * * *

PART 29—AIRWORTHINESS STANDARDS: TRANSPORT CATEGORY ROTORCRAFT

■ 10. The authority citation for part 29 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44704.

■ 11. Amend § 29.1457 by revising paragraph (d)(1) to read as follows:

§ 29.1457 Cockpit voice recorders.

* * * * *

(d) * * *

(1)(i) It receives its electrical power from the bus that provides the maximum reliability for operation of the cockpit voice recorder without jeopardizing service to essential or emergency loads.

(ii) It remains powered for as long as possible without jeopardizing emergency operation of the airplane.

* * * * *

■ 12. Amend § 29.1459 by revising paragraph (a)(3) to read as follows:

§ 29.1459 Flight data recorders.

(a) * * *

(3)(i) It receives its electrical power from the bus that provides the maximum reliability for operation of the flight data recorder without jeopardizing service to essential or emergency loads.

(ii) It remains powered for as long as possible without jeopardizing emergency operation of the airplane.

* * * * *

PART 91—GENERAL OPERATING AND FLIGHT RULES

■ 13. The authority citation for part 91 continues to read as follows:

Authority: 49 U.S.C. 106(g), 1155, 40103, 40113, 40120, 44101, 44111, 44701, 44709, 44711, 44712, 44715, 44716, 44717, 44722, 46306, 46315, 46316, 46504, 46506–46507, 47122, 47508, 47528–47531, articles 12 and 29 of the Convention on International Civil Aviation (61 stat. 1180).

■ 14. Amend § 91.609 by revising paragraph (e)(1) to read as follows:

§ 91.609 Flight data recorders and cockpit voice recorders.

* * * * *

(e) * * *

(1) Is installed in compliance with § 23.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g); § 25.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g); § 27.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g); or § 29.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g) of this chapter, as applicable; and

* * * * *

PART 121—OPERATING REQUIREMENTS: DOMESTIC, FLAG, AND SUPPLEMENTAL OPERATIONS

■ 15. The authority citation for part 121 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 40119, 41706, 44101, 44701–44702, 44705, 44709–44711, 44713, 44716–44717, 44722, 46105.

■ 16. Amend § 121.344 by revising paragraph (j) introductory text to read as follows:

§ 121.344 Digital flight data recorders for transport category airplanes.

* * * * *

(j) Each flight data recorder system required by this section must be installed in accordance with the requirements of § 25.1459(a) (except paragraphs (a)(3)(ii) and (a)(7)), (b), (d) and (e) of this chapter. A correlation must be established between the values recorded by the flight data recorder and the corresponding values being measured. The correlation must contain a sufficient number of correlation points to accurately establish the conversion

from the recorded values to engineering units or discrete state over the full operating range of the parameter. Except for airplanes having separate altitude and airspeed sensors that are an integral part of the flight data recorder system, a single correlation may be established for any group of airplanes—

* * * * *

■ 17. Amend § 121.344a by revising paragraph (d) introductory text to read as follows:

§ 121.344a Digital flight data recorders for 10–19 seat airplanes.

* * * * *

(d) Each flight data recorder system required by this section must be installed in accordance with the requirements of § 23.1459(a) (except paragraphs (a)(3)(ii) and (6)), (b), (d) and (e) of this chapter. A correlation must be established between the values recorded by the flight data recorder and the corresponding values being measured. The correlation must contain a sufficient number of correlation points to accurately establish the conversion from the recorded values to engineering units or discrete state over the full operating range of the parameter. A single correlation may be established for any group of airplanes—

* * * * *

■ 18. Amend § 121.359 by revising paragraphs (d)(1) and (e)(1) to read as follows:

§ 121.359 Cockpit voice recorders.

* * * * *

(d) * * *

(1) Is installed in compliance with § 23.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g); or § 25.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g) of this chapter, as applicable; and

* * * * *

(e) * * *

(1) Is installed in compliance with § 23.1457 (except paragraphs (d)(1)(ii), (4) and (5)) or § 25.1457 (except paragraphs (d)(1)(ii), (4) and (5)) of this chapter, as applicable; and

* * * * *

PART 125—CERTIFICATION AND OPERATIONS: AIRPLANES HAVING A SEATING CAPACITY OF 20 OR MORE PASSENGERS OR A MAXIMUM PAYLOAD CAPACITY OF 6,000 POUNDS OR MORE; AND RULES GOVERNING PERSONS ON BOARD SUCH AIRCRAFT

■ 19. The authority citation for part 125 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701–44702, 44705, 44710–44711, 44713, 44716–44717, 44722.

■ 20. Amend § 125.226 by revising paragraph (j) introductory text to read as follows:

§ 125.226 Digital flight data recorders.

* * * * *

(j) Each flight data recorder system required by this section must be installed in accordance with the requirements of § 25.1459(a) (except paragraphs (a)(3)(ii) and (7)), (b), (d) and (e) of this chapter. A correlation must be established between the values recorded by the flight data recorder and the corresponding values being measured. The correlation must contain a sufficient number of correlation points to accurately establish the conversion from the recorded values to engineering units or discrete state over the full operating range of the parameter. Except for airplanes having separate altitude and airspeed sensors that are an integral part of the flight data recorder system, a single correlation may be established for any group of airplanes—

* * * * *

■ 21. Amend 125.227 by revising paragraph (h)(1) to read as follows:

§ 125.227 Cockpit voice recorders.

* * * * *

(h) * * *

(1) Meets the requirements of § 25.1457(a)(3) through (a)(6), (d)(1), (d)(4), (d)(5), (d)(6), and (e) of this chapter;

* * * * *

PART 129—OPERATIONS: FOREIGN AIR CARRIERS AND FOREIGN OPERATORS OF U.S.-REGISTERED AIRCRAFT ENGAGED IN COMMON CARRIAGE

■ 22. The authority citation for part 129 continues to read as follows:

Authority: 49 U.S.C. 1372, 40113, 40119, 44101, 44701–44702, 44705, 44709–44711, 44713, 44716–44717, 44722, 44901–44904, 44906, 44912, 46105, Pub. L. 107–71, sec. 104.

■ 23. Amend § 129.1 by revising paragraph (b) to read as follows:

§ 129.1 Applicability.

* * * * *

(b) *Operations of U.S.-registered aircraft solely outside the United States.* In addition to the operations specified under paragraph (a) of this section, §§ 129.14, 129.20 and 129.24 and subpart B also apply to U.S.-registered aircraft operated solely outside the

United States in common carriage by a foreign person or foreign air carrier.

* * * * *

PART 135—OPERATING REQUIREMENTS: COMMUTER AND ON DEMAND OPERATIONS AND RULES GOVERNING PERSONS ON BOARD SUCH AIRCRAFT

■ 24. The authority citation for part 135 continues to read as follows:

Authority: 49 U.S.C. 106(g), 41706, 44113, 44701–44702, 44705, 44709, 44711–44713, 44715–44717, 44722.

■ 25. Amend § 135.151 by revising paragraphs (a)(1) and (b)(1) to read as follows:

§ 135.151 Cockpit voice recorders.

* * * * *

(a) * * *

(1) Is installed in compliance with § 23.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g); § 25.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g), § 27.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g); or § 29.1457(a)(1) and (2), (b), (c), (d)(1)(i), (2) and (3), (e), (f), and (g) of this chapter, as applicable; and

* * * * *

(b) * * *

(1) Is installed in compliance with § 23.1457 (except paragraphs (d)(1)(ii), (4) and (5)), § 25.1457 (except paragraphs (d)(1)(ii), (4) and (5)), § 27.1457 (except paragraphs (d)(1)(ii), (4) and (5)) or § 29.1457 (except paragraphs (d)(1)(ii), (4) and (5)) of this chapter, as applicable; and

* * * * *

■ 26. Amend § 135.152 by revising paragraphs (f)(1) introductory text and (f)(2) introductory text to read as follows:

§ 135.152 Flight data recorders.

* * * * *

(f)(1) For airplanes manufactured on or before August 18, 2000, and all other aircraft, each flight recorder required by this section must be installed in accordance with the requirements of § 23.1459 (except paragraphs (a)(3)(ii) and (6)), § 25.1459 (except paragraphs (a)(3)(ii) and (7)), § 27.1459 (except paragraphs (a)(3)(ii) and (6)), or § 29.1459 (except paragraphs (a)(3)(ii) and (6)), as appropriate, of this chapter. The correlation required by paragraph (c) of §§ 23.1459, 25.1459, 27.1459, or 29.1459 of this chapter, as appropriate, need be established only on one aircraft of a group of aircraft:

* * * * *

(2) For airplanes manufactured after August 18, 2000, each flight data recorder system required by this section must be installed in accordance with the requirements of § 23.1459(a) (except paragraphs (a)(3)(ii) and (6)), (b), (d) and (e), or § 25.1459(a) (except paragraphs (a)(3)(ii) and (7)), (b), (d) and (e) of this chapter. A correlation must be established between the values recorded by the flight data recorder and the corresponding values being measured. The correlation must contain a sufficient number of correlation points to accurately establish the conversion from the recorded values to engineering units or discrete state over the full operating range of the parameter. Except for airplanes having separate altitude and airspeed sensors that are an integral part of the flight data recorder system, a single correlation may be established for any group of airplanes—

* * * * *

Issued in Washington, DC, on July 2, 2009.
Pamela Hamilton-Powell,
Director, Office of Rulemaking.
 [FR Doc. E9-16056 Filed 7-8-09; 8:45 am]
 BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0046; Directorate Identifier 2008-NE-05-AD; Amendment 39-15962; AD 2009-14-12]

RIN 2120-AA64

Airworthiness Directives; Pratt & Whitney Canada Corp. (P&WC) Models PW305A and PW305B Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

P&WC has determined that the Post-Service Bulletin (SB) PW300-72-24287 High Pressure Compressor (HPC) drum rotor assemblies P/N 30B2478 and 30B2542 on PW 305A and 305B engines with single stage coated labyrinth seals, are susceptible to developing significant cracks in the region of the labyrinth seal.

We are issuing this AD to detect cracks in the HPC drum rotor assembly, which could lead to an uncontained failure of the drum rotor assembly and damage to the airplane.

DATES: This AD becomes effective August 13, 2009.

ADDRESSES: The Docket Operations office is located at Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue, SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

FOR FURTHER INFORMATION CONTACT: Ian Dargin, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: ian.dargin@faa.gov; telephone (781) 238-7178; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the **Federal Register** on February 20, 2009 (74 FR 7836). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

P&WC has determined that the Post-Service Bulletin (SB) PW300-72-24287 High Pressure Compressor (HPC) drum rotor assemblies P/N 30B2478 and 30B2542 on PW 305A and 305B engines with single stage coated labyrinth seals, are susceptible to developing significant cracks in the region of the labyrinth seal.

P&WC issued SB PW300-72-24462 for initial inspection of affected HPC drum rotor assemblies for cracks. In addition, the PW305 Maintenance Manual (MM) 05-20-00 was revised (Revision No. 26) accordingly, to add requirement for repeat inspection interval. A new P/N 31B6325-01, HPC drum rotor assembly, which is not susceptible to subject cracking, is made available through SB PW300-72-24376, as terminating action for the required repeat inspection.

Recent data (Ref: SIL: PW300-093) indicate that a number of high-time Pre-SB-PW300-72-24376 HPC drum rotor assemblies (P/N 30B2478 and 30B2542), with potential for a hazardous disk failure in consequence of non-compliance with the inspection requirements, are still in-service. This AD is issued to mandate the inspection of the affected P/N 30B2478 and 30B2542 HPC drum rotor assemblies in accordance with PW305-MM-05-20-00 requirements.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

Based on the service information, we estimate that this AD will affect about 540 products of U.S. registry. We also estimate that it will take about 10 work-hours per product to comply with this AD. The average labor rate is \$80 per work-hour. Required parts will cost about \$5,000 per product. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$3,132,000. Our cost estimate is exclusive of possible warranty coverage.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.