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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2006-26043; Directorate Identifier 2005-NM-010-AD; Amendment 39-15193; AD 2007-19-03]**

**RIN 2120-AA64**

#### **Airworthiness Directives; McDonnell Douglas Model 717-200 Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule.

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**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all McDonnell Douglas Model 717-200 airplanes. This AD requires inspecting the power conversion distribution unit (PCDU) to determine its part number, and modifying certain PCDUs. This AD results from reports of failed PCDUs, the loss of an electrical bus, and the presence of a strong electrical burning odor in the flight deck and forward cabin. We are issuing this AD to prevent the loss of an electrical bus due to PCDU failure, resulting in the loss of all flight displays for an unacceptable time period, and consequent emergency landing.

**DATES:** This AD becomes effective October 17, 2007.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of October 17, 2007.

**ADDRESSES:** You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC.

Contact Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024), for service information identified in this AD.

**FOR FURTHER INFORMATION CONTACT:** Thomas Phan, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5342; fax (562) 627-5210.

## SUPPLEMENTARY INFORMATION:

### Examining the Docket

You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Operations office (telephone (800) 647-5527) is located on the ground floor of the West Building at the DOT street address stated in the ADDRESSES section.

### Discussion

The FAA issued a supplemental notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to all McDonnell Douglas Model 717-200 airplanes. That supplemental NPRM was published in the Federal Register on June 6, 2007 (72 FR 31206). That supplemental NPRM proposed to require inspecting the power conversion distribution unit (PCDU) to determine its part number, and modifying certain PCDUs. That supplemental NPRM also proposed to re-identify the part number reference for the proposed corrective action.

### Comments

We provided the public the opportunity to participate in the development of this AD. No comments have been received on the supplemental NPRM or on the determination of the cost to the public.

### Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed in the supplemental NPRM.

### Costs of Compliance

There are about 137 airplanes of the affected design in the worldwide fleet, of which about 108 airplanes are U.S. registered. The following tables provide the estimated costs for U.S. operators to comply with this AD. The total fleet cost could be as high as \$434,592.

**Estimated Costs for Primary Actions**

<b>Primary actions</b>	<b>Work hours</b>	<b>Labor rate per hour</b>	<b>Parts cost</b>	<b>Cost per airplane</b>
Part number identification	1	\$80	\$0	\$80
Modification (Boeing Alert Service Bulletin 717-24A0028)	12	\$80	\$0	\$960

### Estimated Costs for Concurrent Actions

Hamilton Sundstrand Service Bulletin	Work hours	Labor rate per hour	Parts cost	Cost per airplane
40EGS22P-24-3	6	\$80	\$154, per airplane	\$634
40EGS22P-24-4	3	\$80	\$0	\$240
40EGS22P-24-6	3	\$80	\$0	\$240
40EGS22P-24-7	1 per PCDU, maximum 3 PCDUs per airplane	\$80	\$10 per PCDU, maximum 3 PCDUs per airplane	\$270 (maximum)
40EGS22P-24-8	10	\$80	\$0	\$800
40EGS22P-24-9	10	\$80	\$0	\$800

#### 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 have 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 that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under 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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the ADDRESSES section for a location to examine the regulatory evaluation.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39–AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

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

#### **§ 39.13 [Amended]**

2. The Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):



**2007-19-03 McDonnell Douglas:** Amendment 39-15193. Docket No. FAA-2006-26043; Directorate Identifier 2005-NM-010-AD.

**Effective Date**

- (a) This AD becomes effective October 17, 2007.

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to all McDonnell Douglas Model 717-200 airplanes, certificated in any category.

**Unsafe Condition**

- (d) This AD results from reports of failed power conversion distribution units (PCDUs), the loss of an electrical bus, and the presence of a strong electrical burning odor in the flight deck and forward cabin. We are issuing this AD to prevent the loss of an electrical bus due to PCDU failure, resulting in the loss of all flight displays for an unacceptable time period, and consequent emergency landing.

**Compliance**

- (e) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**Identification of PCDU Part Number**

- (f) Within 20 months after the effective date of this AD, inspect the PCDU to determine its part number. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number can be conclusively determined from that review.

- (1) If the part number is below 762904E, do the actions specified in paragraphs (g) and (h) of this AD.

- (2) If the part number is 762904E or higher, no further work is required by this AD.

**Modification**

- (g) Within 20 months after the effective date of this AD, modify the PCDU in accordance with Boeing Alert Service Bulletin 717-24A0028, Revision 1, dated December 20, 2005. A modification done before the effective date of this AD in accordance with Boeing Alert Service Bulletin 717-

24A0028, dated November 24, 2004, is acceptable for compliance with the requirements of this paragraph.

Note 1: Boeing Alert Service Bulletin 717-24A0028 refers to Hamilton Sundstrand Service Bulletin 40EGS22P-24-10, Revision 1, dated May 11, 2005, as an additional source of service information for the modification.

**Concurrent Requirements**

(h) Before or concurrently with the modification required by paragraph (g) of this AD, do the applicable actions specified in Table 1 of this AD.

**Table 1 – Concurrent Requirements**

<b>Do the following –</b>	<b>In accordance with Hamilton Sundstrand Service Bulletin –</b>
Rework the transformer rectifier unit assembly (TRU) Rework the W3 wiring harness assembly to install direct lead wires to the TRU Add a ground wire to the TRU transformer Add an insulated spacer to the PCDU top cover	40EGS22P-24-3, dated June 30, 2000.
Install new PCDU 186 firmware	40EGS22P-24-4, Revision 1, dated January 2, 2002.
Install new PCDU 186 firmware	40EGS22P-24-6, dated July 25, 2002.
Modify the top cover of the PCDU	40EGS22P-24-7, dated September 3, 2003.
Modify printed wiring board (PWB) assemblies A4 and A5 Check and apply torque seal to fasteners on the TRU assembly and to PCDU internal fasteners, as applicable	40EGS22P-24-8, dated September 4, 2003.
Modify PWB assembly A4	40EGS22P-24-9, dated November 19, 2003.

**Credit for Accomplishment of Earlier Service Bulletin**

(i) Installation of new PCDU 186 firmware before the effective date of this AD in accordance with Hamilton Sundstrand Service Bulletin 40EGS22P-24-4, dated April 26, 2001, is acceptable for compliance with the corresponding requirements of paragraph (h) of this AD.

**Alternative Methods of Compliance (AMOCs)**

(j)(1) The Manager, Los Angeles Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested in accordance with the procedures found in 14 CFR 39.19.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which

the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

**Material Incorporated by Reference**

(k) You must use the service documents identified in Table 2 of this AD to perform the actions that are required by this AD, unless the AD specifies otherwise.

**Table 2 – Material Incorporated by Reference**

<b>Service Bulletin</b>	<b>Revision Level</b>	<b>Date</b>
Boeing Alert Service Bulletin 717-24A0028	1	December 20, 2005
Hamilton Sundstrand Service Bulletin 40EGS22P-24-3	Original	June 30, 2000
Hamilton Sundstrand Service Bulletin 40EGS22P-24-4	1	January 2, 2002
Hamilton Sundstrand Service Bulletin 40EGS22P-24-6	Original	July 25, 2002
Hamilton Sundstrand Service Bulletin 40EGS22P-24-7	Original	September 3, 2003
Hamilton Sundstrand Service Bulletin 40EGS22P-24-8	Original	September 4, 2003
Hamilton Sundstrand Service Bulletin 40EGS22P-24-9	Original	November 19, 2003

Hamilton Sundstrand Service Bulletin 40EGS22P-24-4, Revision 1, dated January 2, 2002, has the following effective pages:

<b>Page Nos.</b>	<b>Revision level shown on page</b>	<b>Date shown on page</b>
1, 3, 4, 5, 6, 7, 8	1	January 2, 2002.
2	Original.	April 26, 2001.

The Director of the Federal Register approved the incorporation by reference of these documents in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Boeing Commercial Airplanes, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024), for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on September 4, 2007.  
 Stephen P. Boyd,  
 Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.  
 [FR Doc. E7-17844 Filed 9-11-07; 8:45 am]