

[Federal Register: October 26, 2005 (Volume 70, Number 206)]
[Rules and Regulations]
[Page 61716-61720]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr26oc05-3]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2005-20473; Directorate Identifier 2004-NM-156-AD; Amendment 39-14351; AD 2005-22-07]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 757-200, -200PF, and -300 Series Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 757-200, -200PF, and -300 series airplanes. This AD requires inspecting for damage of the ground brackets, ground wires, and terminal lugs of the auxiliary power unit (APU) battery and the APU start transformer rectifier unit (TRU) as applicable; and corrective and related investigative actions. This AD results from reports indicating that during inspections on two airplanes, the ground brackets for the APU battery were found damaged. We are issuing this AD to detect and correct a damaged electrical bonding surface of the APU battery and APU start TRU ground connections, which could cause overheating of the ground connections and lead to possible consequent ignition of the adjacent insulating blankets.

DATES: This AD becomes effective November 30, 2005.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of November 30, 2005.

ADDRESSES: You may examine the AD docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., Nassif Building, room PL-401, Washington, DC.

Contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207, for service information identified in this AD.

FOR FURTHER INFORMATION CONTACT: Elias Natsiopoulos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 917-6478; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Examining the Docket

You may examine the airworthiness directive (AD) docket on the Internet at <http://dms.dot.gov> or in person at the Docket Management Facility office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Management Facility office (telephone (800) 647-5227) is located on the plaza level of the Nassif Building at the street address stated in the ADDRESSES section.

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to certain Boeing Model 757-200, -200PF, and -300 series airplanes. That NPRM was published in the Federal Register on March 3, 2005 (70 FR 10344). That NPRM proposed to require inspecting for damage of the ground brackets, ground wires, and terminal lugs of the auxiliary power unit (APU) battery and the APU start transformer rectifier unit (TRU) as applicable; and corrective and related investigative actions.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments received.

Support for the Proposed Rule

Two commenters have reviewed the subject NPRM and concur with the content and 18 month compliance timetable of the proposed AD.

Request for Deferral of Corrective Actions

One commenter requests that we allow a deferral of 30 to 60 days, not to exceed the compliance time of 18 months from the issue date of the AD, to accomplish any required repair or replacement of damaged parts discovered during the required inspection. The commenter is concerned that additional time may be needed after the inspection to accomplish the corrective actions and states that the NPRM does not specify when the applicable corrective actions and related investigative actions should be accomplished, only that they must be accomplished within 18 months after the effective date of the AD.

We agree with the intent of the commenter's request. We have determined that, in this case, safety will not be compromised if the applicable corrective actions and related investigative actions are not accomplished immediately after the inspection, provided such actions are accomplished within the 18 month compliance time specified in paragraph (f) of the AD. It is not necessary to change the AD to meet the intent of the commenter's request.

Request to Cite Affected AD

Two commenters request that paragraph (b) of the NPRM be revised to refer to AD 97-15-09, amendment 39-10083 (July 17, 1997, 62 FR 38204), as an affected rule, and request that the proposed AD be revised to clarify how it is affected by AD 97-15-09 and FAA Alternate Means of Compliance (AMOC) 98-130S-149R1, dated August 6, 1998. One commenter believes that the proposed AD should supersede AD 97-15-09, which is applicable to all Model 757 airplanes.

We agree that AD 97-15-09 is related to this AD because AD 97-15-09 applies to the same APU battery and TRU ground assemblies as this AD, and because AD 97-15-09 is applicable to all Model 757 airplanes. However, we do not agree that this AD should supersede AD 97-15-09, because the failure conditions addressed by AD 97-15-09 are not the same as the failure condition addressed by this AD. For Model 757 airplanes having line number (L/N) 1 through 777 inclusive, the AMOC and terminating action for AD 97-15-09 are specified in Boeing Service Bulletin 757-24A0080, dated April 23, 1998—as well as Revision 1, dated May 20, 1999, Revision 2, dated March 29, 2001, or Revision 3, dated November 4, 2004—which specifies, among other things, replacing the ground brackets. Model 757 airplanes having L/N 778 and subsequent were in production when AD 97-15-09 was issued. The AMOC and terminating action for AD 97-15-09 resulted from design changes made during production of Model 757 airplanes having L/N 778 and subsequent, and those design changes were approved in FAA AMOC 98-130S-149R1, dated August 6, 1998. However, the production process used to clean the electrical bonding surfaces of the grounding bracket and frame of Model 757 airplanes having L/N 778 and subsequent was incorrect and did not reflect the actions specified in Service Bulletin 757-24A0080, resulting in overheating of the ground assemblies. This AD applies only to Model 757 airplanes having L/N 778 and subsequent; Model 757 airplanes having L/N 1 through 777 inclusive require no further action according to this AD, provided those airplanes are repetitively inspected per AD 97-15-09, or the terminating actions specified in Service Bulletin 757-24A0080 have been correctly incorporated. Therefore, although AD 97-15-09 is related to this AD, it is not affected by this AD. We have not changed this AD in this regard.

Request to Clarify Applicability of Proposed AD to Certain Service Information

One commenter requests that we clarify how the actions in the NPRM apply to the actions specified by Alert Service Bulletin 757-24A0080, which provides the terminating action for AD 97-15-09. The commenter states that accomplishing Alert Service Bulletin 757-24A0080 may result in the same unsafe condition that occurred in airplanes having L/N 778 and subsequent, that were modified in accordance with Boeing Production Revision Record (PRR) 54530-186. The commenter asserts that the AD should address this possibility.

We agree with the commenter's concern, since the unsafe condition that is the subject of this AD was detected on airplanes produced in accordance with PRR 54530-186. Certain production type design changes were the same (for airplanes having L/N 778 and subsequent) as those specified in Alert Service Bulletin 757-24A0080—which provides the terminating action in AD 97-15-09 for airplanes L/N 1 through 777 inclusive. However, as already discussed, the unsafe condition addressed by this AD resulted from using an incorrect method to clean the bonding surfaces of the ground bracket and frame during the production of certain airplanes having L/N 778 and subsequent. The manufacturer advises that the bonding surface cleaning process specified in Alert Service Bulletin 757-24A0080 is the correct process. Therefore, no change is needed to the AD in this regard. Operators should note that the manufacturer has informed us that Model 757 airplanes having L/N 1029 and subsequent received the design change in production using the correct bonding surface cleaning process; therefore, only airplanes having L/N 778 through 1028 inclusive are affected by this AD.

Request to Include Electrical Check

One commenter requests that we revise the NPRM—as well as Figure 1 and the associated Work Instructions of Boeing Alert Service Bulletin 757-24A0099, dated March 25, 2004—to allow an initial detailed visual inspection (DVI) for discoloration and signs of overheating of the ground bracket and terminal, followed by a bonding resistance check between the ground bracket and terminal lug, rather than disconnecting the ground wire from the terminal bracket for the initial inspection. The commenter contends that, if the DVI discloses no evidence of discoloration or overheating, and the

measured resistance does not exceed 0.0001 ohm, the ground connection is acceptable for service and further inspection or action is unnecessary and shouldn't be required for the ground components. Further, the commenter asserts that adding the DVI step will make the NPRM consistent with AD 97-15-09 and Alert Service Bulletin 757-24A0080.

We do not agree with this request. The unsafe condition results from the incorrect process used to clean the bonding surfaces of the ground bracket and wire terminal, which failed to remove an anodized finish that reduces conductivity from those ground components. We have determined that it may be possible for those anodized ground components to display no evidence of discoloration or overheating during a DVI and to pass the bonding resistance check, but to deteriorate with time and service, resulting in the unsafe condition this AD intends to correct. Therefore, the inspections and actions specified in the applicable service bulletins must be accomplished to correct the unsafe condition addressed by this AD, which, as discussed earlier, is not the same as the unsafe condition addressed by AD 97-15-09 and Alert Service Bulletin 757-24A0080. We have not changed the AD in this regard.

Request to Replace Reference to Standard Overhaul Practices Manual

The same commenter requests that we revise the service bulletins by replacing the references to the cleaning method of faying bonding surfaces specified in the Standard Overhaul Practices Manual (SOPM), section 20-11-03, with the method specified by the Standard Wiring Practices Manual (SWPM), section 20-20-00. The commenter provided no justification for this request.

We do not agree with this request. We have examined the specified methods and have determined that SOPM section 20-11-03 provides the correct method for cleaning faying surface bond. We have not changed the AD in this regard.

Request to Identify Service Bulletins in Costs of Compliance

One commenter requests that we revise the Costs of Compliance section of the NPRM to specify which airplane groups are affected by Boeing Alert Service Bulletin 757-24A0099, and which airplane groups are affected groups by Boeing Alert Service Bulletin 757-24A0100, both dated March 25, 2004. The commenter gave no justification for this request.

We partially agree with this request. Though costs are determined in part from the estimated number of work hours specified in the applicable service bulletins for each group of airplanes, specifying which service bulletin provided the information for which group(s) of airplanes would have no effect on the total costs of the AD. However, to minimize any possible confusion, we have revised the Costs of Compliance in the AD as requested.

Request to Revise Cost Estimate

One commenter requests that we revise the Cost of Compliance section of the NPRM to agree with the work hours specified by the service bulletins. The commenter states that the cost of the work hours estimated by the manufacturer is considerably higher than the cost specified in the NPRM. The commenter also requests that we include the costs for materials and parts needed to repair any damaged ground components. The commenter states that materials and parts form a significant part of the costs of any airplane modification.

We do not agree with this request. The economic analysis of an AD is limited to the cost of actions that are actually required by the AD. The economic analysis does not consider the costs of conditional actions, such as the work hours that might be needed to repair a broken ground bracket detected during a required inspection ("repair, if necessary"), or the costs for parts and materials needed to accomplish such a repair. Such conditional repairs would be required—whether or not the AD directs such repairs—to correct an unsafe condition discovered in an airplane and to ensure that

the airplane is operated in an airworthy condition, as required by the Federal Aviation Regulations. No change is needed to the AD in this regard.

Request to Supply Torque Information

One commenter requests that we revise the NPRM, or the applicable service bulletin, to explicitly specify the torque required to tighten the screw/nut used to secure the ground wire terminal lug to the ground bracket. The commenter contends that SWPM section 20-30-00, which is specified as the source information for determining the applicable torque, lists a range of torque values for various stud sizes and states that the proper torque value is critical to the proper function of these components.

We agree that the correct torque is critical for proper accomplishment of this AD. Improper torque will affect the electrical conductivity of the ground terminals and could result in another unsafe condition. However, we do not agree that it is necessary for the AD to specify an exact torque value. Torque limits for specific stud sizes are specified in the SWPM, which is controlled and maintained by the manufacturer. We have not changed the AD in this regard.

Clarification of Alternative Method of Compliance (AMOC) Paragraph

We have revised this action to clarify the appropriate procedure for notifying the principal inspector before using any approved AMOC on any airplane to which the AMOC applies.

Conclusion

We have carefully reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Costs of Compliance

There are about 251 airplanes of the affected design in the worldwide fleet. This AD will affect about 159 airplanes of U.S. registry.

For about 89 Group 1 airplanes as identified in Alert Service Bulletin 757-24A0099 and Alert Service Bulletin 757-24A0100, as applicable: The inspection and cleaning of the ground connections will take about 2 work hours per airplane, at an average labor rate of \$65 per work hour. Based on these figures, the estimated cost of the AD for U.S. operators is \$11,570, or \$130 per airplane.

For about 64 Group 2 airplanes as identified in Alert Service Bulletin 757-24A0099: The inspection and cleaning of the ground connection will take about 1 work hour per airplane, at an average labor rate of \$65 per work hour. Based on these figures, the estimated cost of the AD for U.S. operators is \$4,160, or \$65 per airplane.

For about 6 Group 3 airplanes as identified in Alert Service Bulletin 757-24A0099: The inspection and cleaning of the ground connections will take about 2 work hours per airplane, at an average labor rate of \$65 per work hour. Based on these figures, the estimated cost of the AD for U.S. operators is \$780, or \$130 per airplane.

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):

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at www.faa.gov/aircraft/safety/alerts/

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2005-22-07 Boeing: Amendment 39-14351. Docket No. FAA-2005-20473; Directorate Identifier 2004-NM-156-AD.

Effective Date

- (a) This AD becomes effective November 30, 2005.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Boeing Model 757-200, -200PF, and -300 series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 757-24A0099 and Boeing Alert Service Bulletin 757-24A0100, both dated March 25, 2004.

Unsafe Condition

(d) This AD was prompted by reports indicating that during inspections on two airplanes, the ground brackets for the auxiliary power unit (APU) battery were found damaged. We are issuing this AD to detect and correct a damaged electrical bonding surface of the APU battery and APU start transformer rectifier unit (TRU) ground connections, which could cause overheating of the ground connections and lead to possible consequent ignition of the adjacent insulating blankets.

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.

Inspection of Ground Connections

(f) Within 18 months after the effective date of this AD, perform a general visual inspection for damage of the ground brackets, ground wires, and terminal lugs of the APU battery and APU start TRU, and do any corrective and related investigative actions; by doing all the actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 757-24A0099 (for Model 757-200 and -200PF series airplanes) or Boeing Alert Service Bulletin 757-24A0100 (for Model 757-300 series airplanes), both dated March 25, 2004, as applicable.

Note 1: For the purposes of this AD, a general visual inspection is "A visual examination of an interior or exterior area, installation or assembly to detect obvious damage, failure or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to ensure visual access to all surfaces in the inspection area. This level of inspection is made under normal available lighting conditions such as daylight, hangar lighting, flashlight or drop-light and may require removal or opening of access panels or doors. Stands, ladders or platforms may be required to gain proximity to the area being checked."

Alternative Methods of Compliance (AMOCs)

(g)(1) The Manager, Seattle 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) Before using any AMOC approved in accordance with 14 CFR 39.19 on any airplane to which the AMOC applies, notify the appropriate principal inspector in the FAA Flight Standards Certificate Holding District Office.

Material Incorporated by Reference

(h) You must use Boeing Alert Service Bulletin 757-24A0099, dated March 25, 2004; or Boeing Alert Service Bulletin 757-24A0100, dated March 25, 2004; as applicable; to perform the actions that are required by this AD, unless the AD specifies otherwise. 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, P.O. Box 3707, Seattle, Washington 98124-2207, for a copy of this service information. You may review copies at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL-401, Nassif Building, Washington, DC; on the Internet at <http://dms.dot.gov>; or at the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on October 18, 2005.

Kevin M. Mullin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-21311 Filed 10-25-05; 8:45 am]

BILLING CODE 4910-13-P