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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2004–19795; Directorate Identifier 2004–NM–196–AD; Amendment 39–14181; AD 2005–14–04]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 777–200 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 777–200 and –300 series airplanes. This AD requires replacing the existing halogen lamps in the cargo compartment light assemblies with new incandescent lamps, and installing warning and identification placards. This AD is prompted by a report of an aft cargo fire during flight. We are issuing this AD to prevent a fire in the cargo compartment.

DATES: This AD becomes effective August 15, 2005.

The incorporation by reference of certain publications listed in the AD is approved by the Director of the Federal Register as of August 15, 2005.

ADDRESSES: For service information identified in this AD, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124–2207.

Docket: The AD docket contains the proposed AD, comments, and any final disposition. You can examine the 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 U.S. Department of Transportation, 400 Seventh Street, SW., room PL–401, Washington, DC. This docket number is FAA–2004–19795; the directorate identifier for this docket is 2004–NM–196–AD.

FOR FURTHER INFORMATION CONTACT: Clint Jones, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM–150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 917–6471; fax (425) 917–6590.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with an AD for certain Boeing Model 777–200 and –300 series airplanes. That action, published in the **Federal Register** on December 3, 2004 (69 FR 70202), proposed to require replacing the existing halogen lamps in the cargo compartment light assemblies with new incandescent lamps, and installing warning and identification placards.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments that have been submitted on the proposed AD.

Support for the Proposal

Several commenters support the proposal. One commenter, an airplane operator, estimates that the proposed actions for its fleet would take approximately 6.25 man hours per airplane at a cost of $569. We agree that this cost estimate is in line with the estimate provided in the proposal.

Request To Allow Replacement According to a Specified Standard

One commenter, an airplane operator, agrees with the intent of the proposal, but requests that the proposal be revised to allow operators to use incandescent replacement lamps that meet a certain design specification, rather than those that have a particular part number.

We agree with the commenter; many incandescent lamps are manufactured to industry standards, and would adequately address the unsafe condition. The American National Standards Institute (ANSI) gives specifications for the lamps that include rated voltage, rated life, current or wattage, mean spherical candela, bulb diameter, and base design. All of these specifications are considered critical for lamps that are used in the affected airplanes. We have revised paragraph (f) of the final rule to allow operators the option to use lamps that meet the ANSI standard.

Request To Clarify Part Number

The same commenter requests that we revise the proposal to add known, manufacturer-internal part numbers for the light bulbs listed in the proposal. This suggested change is intended to promote awareness and compliance with the AD.

We agree with the commenter. The airplane manufacturer's service bulletin and the part assembly manufacturer's service bulletin each have a separate part number that refers to the same part, which could cause confusion. We have revised paragraph (g) of the final rule to include both part numbers.

Request To Address Light Bulbs Changed Before Compliance Date of AD

The same commenter requests that we change the proposal to address the modification of the light assembly that would be required should a halogen lamp fail and need replacement prior to the end of the compliance period of the AD. We infer that the commenter is pointing out that any halogen lamp could be replaced with another halogen lamp before operators must replace them all with new incandescent lamps in the entire cargo area.

We agree with the commenter. It is likely that the situation the commenter describes will happen. The change to paragraph (g) described in the above paragraph titled ''Request to Clarify Part Number,'' and the addition of the words ''As of 18 months after the effective date of this AD,'' to that same paragraph, will ensure that no halogen lamps are installed in the cargo ceiling light assemblies after the compliance period of the AD.

Request To Include Additional Lighting Assembly

One commenter, another airplane operator, requests that we include in the proposal a requirement to change the lamp in the airplane's bulk cargo door sill. The commenter points out that this lamp also could be an ignition source. The commenter also is concerned that two different lamp installations and

inventory stocks for the same compartment of the airplane could cause confusion and potential opportunity to mix the bulbs.

We partially agree with the commenter's request. We agree that there could be opportunity to mix lamps if the operator does not follow the placarded directions on the re-worked light assemblies. However, a number of factors will minimize this possibility. First, the lights are placarded, and maintenance personnel should look at the removed part (or lamp) and compare it to the replacement lamp. Second, the illustrated parts catalogue has been updated to show the new lamps and the corresponding installation locations. Third, the lamp intensities and hues are different. Finally, we disagree that the sill light is an ignition source because there is a required cargo net that acts as a barrier and protects the door and sill area; therefore, properly loaded cargo should not come into contact with the cargo door sill light because it is located between the cargo net and the bulk cargo door. We have not changed the final rule in this regard. However, we have revised paragraph (g) of the final rule to clarify that the door sill light is not affected by the requirements of that paragraph.

Suggestion To Use Light-Emitting Diode

Another commenter agrees with the proposal but suggests that high-intensity light-emitting diode (LED) lighting be used rather than incandescent lighting. The commenter points out that LED lighting can create a brighter light than that of incandescent lamps, but operate cooler and more efficiently than halogen or incandescent lamps.

We partially agree with the commenter. We agree with the commenter's assessment of LED technology; LED lighting has been found to be cooler than halogen and brighter than incandescent lamps. We disagree with any requirement to replace halogen lamps with LED lighting. Although the new installation with incandescent lamps does not provide as much light, the installation has been demonstrated and inspected onboard the airplane and has been found to be compliant with Federal Aviation Regulations. We will, however, consider specific proposed alternative methods of compliance for the requirements of this AD as specified in paragraph (h) of this AD. We have not changed the final rule in this regard.

Request To Shorten Compliance Time

Another commenter requests that we reduce the compliance time to less than the proposed 18 months. The commenter suggests the most expeditious replacement schedule possible—as quickly as lamp suppliers can provide the lamps, and the airplane operators can make the replacements. The commenter suggests that the supplier can produce the necessary number of lamps in a shorter time-frame than 18 months. The commenter maintains that operators can replace the lamps without waiting for scheduled maintenance, and that the work can be done during several overnight maintenance actions.

We partially agree with the commenter. We agree with adhering to the most expeditious replacement schedule that is reasonable. We strive to review all risk collectively across the U.S. fleet, and then to reduce that overall risk to acceptable levels. We disagree with a compliance time of less than 18 months for this issue, because an 18-month compliance time currently accomplishes a reduction to the risk of another cargo fire at an accelerated, expeditious schedule. We have not changed the final rule in this regard.

Request To Lengthen Compliance Time

Another commenter, the airplane manufacturer, requests that we change the compliance time from 18 months to 36 months. The commenter notes that 36 months is more appropriate and is conservative from a risk-management standpoint. The commenter further states that a 36-month compliance time would allow airplanes to accomplish the action on the 133 affected U.S.-registered airplanes during regular scheduled maintenance visits instead of requiring a potential unscheduled, and therefore costly, maintenance task. The commenter points out that, in accordance with Section 25.857 (''Cargo compartment classification'') of the Federal Aviation Regulations (14 CFR 25.857(c)), the Model 777–200 and 777–300 cargo compartments have smoke detection systems and an approved built-in fire suppression system. The commenter states that these systems would limit damage only to the cargo that initially catches fire. The commenter also states that operators have been notified to maintain clearance between cargo baggage and the ceiling liner in the bulk compartment until the service bulletin is completed. The commenter believes that, with a fleet history of over 7 million flight hours and only one known cargo fire, the risk of an uncontrolled cargo fire is extremely improbable.

We do not agree with the commenter. When we established the compliance time of 18 months, we considered the urgency associated with the unsafe condition, the availability of required parts, and the practical aspects of replacing the lamps within a period or time that corresponds to the normal maintenance schedules of most affected operators. In addition, operators may request approval for an alternative method of compliance according to paragraph (h) of this AD. The request should include an assessment of the effect of the requested change on the unsafe condition addressed by this AD. We have not changed the final rule in this regard.

Request To Remove Manufacturer's Acknowledgement

The same commenter requests that we remove the sentence ''the manufacturer has acknowledged this adjustment'' from the section in the proposal titled ''Differences Between the Proposed AD and the Service Bulletin'' in the preamble of the proposal. The commenter points out that this statement implies that the manufacturer has agreed to the shortened compliance time, when it has not agreed with this request.

We acknowledge the commenter's request but the ''Differences Between the Proposed AD and the Service Bulletin'' section for the NPRM is not reproduced in the final rule. Therefore, there is no change to be made to the final rule. However clarification is necessary. The statement quoted above is not intended to imply agreement on behalf of the manufacturer. The statement is intended to clarify that we contacted the manufacturer and alerted the appropriate individuals that the compliance time in the proposal would differ from that in the service bulletin. The manufacturer responded with a formal letter acknowledging, and not necessarily agreeing with, the 18-month compliance time.

Request To Include Additional Placard

Another commenter requests that the proposal require that operators install a temporary placard stating that no cargo may be loaded against the existing halogen light assemblies. The commenter states that this placard would stay in place until the halogen lamps are replaced, and would be a quick and easy way to alert operators of the halogen lamp hazard.

We disagree with the request to include this additional placard. Operators have already been warned of this hazard through a Boeing Fleet Team Digest article, which was published in the first quarter of 2004. In addition, there are placards associated with the smoke detection system ports in the ceiling cargo bay that caution not to block the ports. Therefore, we have

determined that the intent of this comment is already satisfied. We have not changed the final rule in this regard.

Explanation of Additional Change to Proposal

We have added a reference to Honeywell International Service Bulletin 15–0712–33–0001, dated October 15, 2004, as an additional source of service information for replacing the lamps. This reference was inadvertently omitted from the proposal and is now included as Note 1 of the final rule.

Conclusion

We have carefully reviewed the available data, including the comments that have been submitted, 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 474 airplanes of the affected design in the worldwide fleet. The following table provides the estimated costs for U.S. operators to comply with this AD.

ESTIMATED COSTS

Airplane model	Work hours	Average hourly labor rate	Parts	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
777–200 (Group 1)	5	$65	No cost to operators	$325	133	$43,225
777–300 (Group 2)	7	65	No cost to operators	*455	None currently	*0

*The figures in this table would apply if an affected Model 777–300 series airplane is imported and placed on the U.S. Register in the future.

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. 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 FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2005–14–04 Boeing: Amendment 39–14181. Docket No. FAA–2004–19795; Directorate Identifier 2004–NM–196–AD.

Effective Date

(a) This AD becomes effective August 15, 2005.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Boeing Model 777–200 and –300 series airplanes, certificated in any category; as identified in Boeing Special Attention Service Bulletin 777–33–0025, dated September 1, 2004.

Unsafe Condition

(d) This AD was prompted by a report of an aft cargo fire during flight. We are issuing this AD to prevent a fire in the cargo compartment.

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.

Lamp Replacement

(f) Within 18 months after the effective date of this AD, replace all halogen lamps in the cargo compartment ceiling light assemblies with new incandescent lamps that have the part number (P/N) in paragraph (f)(1) of this AD or that meet the standard in paragraph (f)(2) of this AD; and install warning and identification placards. Except as provided by paragraph (f)(2) of this AD, do all actions in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777–33–0025, dated September 1, 2004.

(1) General Electric (P/N) GE2233 lamp, as referenced in Boeing Special Attention Service Bulletin 777–33–0025, dated September 1, 2004.

(2) Any 28-volt incandescent lamp built to American National Standards Institute (ANSI) 2233 specifications, and whose manufacturer has requested and been assigned the ANSI 2233 designation by the American National Standards Institute.

Note 1: Boeing Special Attention Service Bulletin 777–33–0025, dated September 1, 2004, refers to Honeywell International Service Bulletin 15–0712–33–0001, dated October 15, 2004, as an additional source of service information for replacing the lamps.

Parts Installation

(g) As of 18 months after the effective date of this AD, no person may install a halogen bulb, P/N 9203 (Boeing), or P/N 55–2181–7 (Honeywell), in any airplane cargo ceiling light assembly (excluding the lamp in the airplane's bulk cargo door sill).

Alternative Methods of Compliance (AMOCs)

(h) 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.

Material Incorporated by Reference

(i) You must use Boeing Special Attention Service Bulletin 777–33–0025, dated September 1, 2004, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approves the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. For copies of the service information, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124–2207. For information on the availability of this material at the National Archives and Records Administration (NARA), call (202) 741–6030, or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.* You may view the AD docket at the Docket Management Facility, U.S. Department of Transportation, 400 Seventh Street SW., room PL–401, Nassif Building, Washington, DC.

Issued in Renton, Washington, on June 24, 2005.

Michael J. Kaszycki,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05–13140 Filed 7–8–05; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2005–20733; Directorate Identifier 2005–NM–004–AD; Amendment 39–14179; AD 2005–14–02]

RIN 2120–AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB–135 and Model EMB–145, –145ER, –145MR, –145LR, –145XR, –145MP, and –145EP Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB–135 and Model EMB–145, –145ER, –145MR, –145LR, –145XR, –145MP, and –145EP airplanes. This AD requires inspecting to determine the part number of the left and right engine fire handles; and replacing the engine fire handles with engine fire handles having different part numbers if necessary. This AD is prompted by cases of the internal circuit of the engine fire handle failing. We are issuing this AD to prevent failure of the internal circuit of the engine fire handle that could disable the fuel shut-off valves and the discharge of the fire extinguishing agent, which, in the event of a fire, could result in the inability to extinguish a fire.

DATES: This AD becomes effective August 15, 2005.

The incorporation by reference of certain publications listed in the AD is approved by the Director of the Federal Register as of August 15, 2005.

ADDRESSES: For service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), P.O. Box 343—CEP 12.225, Sao Jose dos Campos—SP, Brazil.

Docket: The AD docket contains the proposed AD, comments, and any final disposition. You can examine the 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 U.S. Department of Transportation, 400 Seventh Street, SW., room PL–401, Washington, DC. This docket number is FAA–2005–20733; the directorate identifier for this docket is 2005–NM–004–AD.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–1175; fax (425) 227–1149.

SUPPLEMENTARY INFORMATION: The FAA proposed to amend 14 CFR part 39 with an AD for all Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB–135 and EMB–145, –145ER, –145MR, –145LR, –145XR, –145MP, and –145EP airplanes. That action, published in the **Federal Register** on March 31, 2005 (70 FR 16447), proposed to require inspecting to determine the part number of the left and right engine fire handles; and replacing the engine fire handles with engine fire handles having different part numbers if necessary.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the single comment that has been submitted on the proposed AD.

Request To Allow Installation of Alternative Parts

The commenter asks that the language specified in the proposed AD be changed to allow installation of alternative parts. The commenter states that the proposed AD is objectionable because it specifies part numbers that are to be installed, to the exclusion of other possibly acceptable parts. The commenter notes that 14 CFR 21.303(a), Parts Manufacturing Approval (PMA), provides a legal mechanism for the installation of alternative parts; a rule that mandates only certain parts for installation contravenes existing law and may not be legally enforceable. The commenter adds that although no known PMA alternatives have been identified for the parts that are found defective per this proposed AD, it is still possible that parts now existing, or manufactured in the future, could be legally used in place of those specified in the proposed AD. The commenter states that allowing PMA alternatives can be accomplished by changing paragraph (f) of the proposed AD to add the phrase ''or PMA alternatives'' to the end of the sentence which identifies the part numbers for installation.

We do not agree. ADs are issued to provide a means of compliance for operators to ensure that the identified unsafe condition is properly addressed, and the service information referenced in this AD identifies the replacement parts necessary to obtain that compliance. It is impossible for us to foresee all the potential means to correct the unsafe condition, including the availability of replacement parts from sources other than the original manufacturer. This is especially true for yet-to-be designed replacement parts. It is our policy to allow the use of alternative parts, which may exist or may not yet be manufactured, in place of the replacement parts specified in the requirements of this AD only after a review of the design data for those parts to verify that the unsafe condition will not be reintroduced. This review is conducted once we receive a request for an alternative method of compliance. Any operator who would like to use an alternate type of engine fire handle may submit a request for approval of an alternative method of compliance, as specified in paragraph (i) of this AD. The request must include data substantiating that an acceptable level of safety would be maintained by use of the alternate type of engine fire handle. No change to the AD is needed in this regard.