[Federal Register: December 17, 2007 (Volume 72, Number 241)]
[Rules and Regulations]
[Page 71210-71212]
From the Federal Register Online via GPO Access [wais.access.gpo.gov]
[DOCID:fr17de07-5]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-0336; Directorate Identifier 2007-NM-201-AD; Amendment 39-15308; AD 2007-26-06]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-200B, 747-300, and 747-400 Series Airplanes

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

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 747-200B, 747-300, and 747-400 series airplanes. This AD requires an inspection to determine the manufacturer and manufacture date of the oxygen masks in the passenger service units of the outboard and center main deck, the flight attendant service units, flightcrew rest, upper and lower module of the door 5 overhead crew rest, lavatory modules, and miscellaneous ceiling panels, as applicable, and related investigative/corrective actions if necessary. This AD results from a report that several passenger masks with broken in-line flow indicators were found following a mask deployment. We are issuing this AD to prevent the in-line flow indicators of the passenger oxygen masks from fracturing and separating, which could inhibit oxygen flow to the masks and consequently result in exposure of the passengers and cabin attendants to hypoxia following a depressurization event.

DATES: This AD becomes effective January 2, 2008.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of January 2, 2008.

We must receive comments on this AD by February 15, 2008.

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

• Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

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

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Susan Letcher, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6474; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Discussion

We have received a report indicating that several passenger masks with broken in-line flow indicators were found following a mask deployment on a Boeing Model 777-200 series airplane. Operators subsequently found several more broken in-line flow indicators after examining the oxygen mask assemblies on other Model 777 series airplanes and on Model 747-400 series airplanes. Investigation revealed that certain flow indicators are weaker and can fracture because of internal residual stresses caused by the flow indicator joint design and manufacturing processes. Fractures cause the in-line flow indicator to separate and consequently prevent oxygen flow to the mask during an emergency. This condition, if not corrected, could result in exposure of the passengers and cabin attendants to hypoxia following a depressurization event.

The oxygen masks on certain Model 777 airplanes and Model 747-400 series airplanes have the same flow indicators as those installed on certain Model 747-200B and -300 series airplanes. Therefore, the Model 747-200B and -300 series airplanes are also subject to the identified unsafe condition. We are addressing the unsafe condition on the Model 777 airplanes in another rulemaking action.

Relevant Service Information

We have reviewed Boeing Service Bulletin 747-35-2119, dated November 30, 2006. The service bulletin describes procedures for doing a general visual inspection to determine the manufacturer and manufacture date of the oxygen masks in each of the oxygen boxes in the passenger service units of the outboard and center main deck, the flight attendant service units, flightcrew rest, upper and lower module of the door 5 overhead crew rest, lavatory modules, and miscellaneous ceiling panels, as applicable. The service bulletin also describes procedures for doing related investigative and corrective actions. The related investigative action includes doing a general visual inspection of each flow indicator to determine the color of the flow direction mark and the word "flow" on the flow indicator, if the identification (ID) label shows that the manufacturer is B/E Aerospace and the manufacture date is from January 1, 2002, through March 1, 2006. The corrective action includes replacing the oxygen mask assembly with a new oxygen mask assembly having an improved flow indicator, if the flow direction mark and the word "flow" on the flow indicator of the existing oxygen mask are not green and the letter "W" is shown on the right side of the ID label.

Boeing Service Bulletin 747-35-2119 refers to B/E Aerospace Service Bulletin 174080-35-01, dated February 6, 2006; and Revision 1, dated May 1, 2006; as additional sources of service information for replacing an oxygen mask assembly with a new oxygen mask assembly having an improved flow indicator. B/E Aerospace Service Bulletin 174080-35-01 describes procedures for modifying the oxygen mask assembly by replacing the flow indicator, part number (P/N) 118023-02, with an improved flow indicator, P/N 118023-12. B/E Aerospace Service Bulletin 174080-35-01 also specifies that, as an alternative to modifying the oxygen mask, operators may replace the oxygen mask with a new oxygen mask having the improved flow indicator.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA's Determination and Requirements of This AD

The unsafe condition described previously is likely to exist or develop on other airplanes of the same type design that may be registered in the U.S. at some time in the future. Therefore, we are issuing this AD to prevent the in-line flow indicators of the passenger oxygen masks from fracturing and separating, which could inhibit oxygen flow to the masks and consequently result in exposure of the passengers and cabin attendants to hypoxia following a depressurization event. This AD requires accomplishing the actions specified in the service information described previously.

Clarification Between the AD and Service Bulletin

Although Boeing Service Bulletin 747-35-2119 specifies to replace the oxygen mask assembly with a new oxygen mask assembly having an improved flow indicator, the intent of the service bulletin is to replace it with either a new or modified oxygen mask assembly having an improved flow indicator. Therefore, this proposed AD would require replacing the oxygen mask assembly with a new or modified oxygen mask assembly having an improved flow indicator.

Costs of Compliance

None of the airplanes affected by this action are on the U.S. Register. All airplanes affected by this AD are currently operated by non-U.S. operators under foreign registry; therefore, they are not directly affected by this AD action. However, we consider this AD necessary to ensure that the unsafe condition is addressed if any affected airplane is imported and placed on the U.S. Register in the future.

If an affected airplane is imported and placed on the U.S. Register in the future, the required actions would take about 141 work hours per airplane, assuming an average of 600 oxygen masks per airplane distributed in about 150 oxygen boxes, at an average labor rate of $80 per work hour. Required parts would cost about $6 per oxygen mask, or $3,600 per airplane. Based on these figures, the estimated cost of the AD would be up to $14,880 per airplane.

FAA's Determination of the Effective Date

No airplane affected by this AD is currently on the U.S. Register. Therefore, providing notice and opportunity for public comment is unnecessary before this AD is issued, and this AD may be made effective in less than 30 days after it is published in the Federal Register.

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments before it becomes effective. However,

we invite you to send any written data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2007-0336; Directorate Identifier 2007-NM-201-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments. http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

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 the regulation:

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.

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):

2007-26-06 Boeing: Amendment 39-15308. Docket No. FAA-2007-0336; Directorate Identifier 2007-NM-201-AD.

Effective Date

(a) This AD becomes effective January 2, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Boeing Model 747-200B, 747-300, and 747-400 series airplanes, certificated in any category; as identified in Boeing Service Bulletin 747-35-2119, dated November 30, 2006.

Unsafe Condition

(d) This AD results from a report that several passenger masks with broken in-line flow indicators were found following a mask deployment. We are issuing this AD to prevent the in-line flow indicators of the passenger oxygen masks from fracturing and separating, which could inhibit oxygen flow to the masks and consequently result in exposure of the passengers and cabin attendants to hypoxia following a depressurization event.

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 and Related Investigative/Corrective Actions if Necessary

(f) Within 60 months after the effective date of this AD, do a general visual inspection to determine the manufacturer and manufacture date of the oxygen masks in each of the oxygen boxes in the passenger service units of the outboard and center main deck, the flight attendant service units, flightcrew rest, upper and lower module of the door 5 overhead crew rest, lavatory modules, and miscellaneous ceiling panels, as applicable, and do all the applicable related investigative and corrective actions, by accomplishing all of the applicable actions specified in the Accomplishment Instructions of Boeing Service Bulletin 747-35-2119, dated November 30, 2006; except where the service bulletin specifies replacing the oxygen mask assembly with a new oxygen mask assembly, replace it with a new or modified oxygen mask assembly having an improved flow indicator. The related investigative and corrective actions must be done before further flight.

Note 1: The service bulletin refers to B/E Aerospace Service Bulletin 174080-35-01, dated February 6, 2006; and Revision 1, dated May 1, 2006; as additional sources of service information for

modifying the oxygen mask assembly by replacing the flow indicator with an improved flow indicator.

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) 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

(h) You must use Boeing Service Bulletin 747-35-2119, dated November 30, 2006, 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 this document 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 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 December 10, 2007.
Ali Bahrami,
Manager, Transport Airplane Directorate, Aircraft Certification Service.
[FR Doc. E7-24334 Filed 12-14-07; 8:45 am]