

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2007-28988; Directorate Identifier 2007-NM-047-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-400 and -400D Series Airplanes

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

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for certain Boeing Model 747-400 and -400D series airplanes. This proposed AD would require installing new relays to allow the flightcrew to turn off electrical power to the in-flight entertainment (IFE) system and other non-essential passenger cabin systems through the left and right utility bus switches, and other specified actions. This proposed AD results from an IFE systems review. We are proposing this AD to ensure that the flightcrew is able to turn off electrical power to the IFE system and other non-essential passenger cabin systems through utility bus switches in the flight compartment, in the event of smoke or fumes. The flightcrew's inability to turn off electrical power to the IFE system and other non-essential passenger cabin systems could result in the inability to control smoke or fumes in the airplane flight deck or passenger cabin during a non-normal or emergency situation.

DATES: We must receive comments on this proposed AD by October 1, 2007.

ADDRESSES: Use one of the following addresses to submit comments on this proposed AD.

- *DOT Docket Web site:* Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.

- *Government-wide rulemaking Web site:* Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- *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.

- *Fax:* (202) 493-2251.

- *Hand Delivery:* Room W12-140 on the ground floor of the West Building, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5

p.m., Monday through Friday, except Federal holidays.

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

FOR FURTHER INFORMATION CONTACT:

Shohreh Safarian, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6418; fax (425) 917-6590.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to submit any relevant written data, views, or arguments regarding this proposed AD. Send your comments to an address listed in the **ADDRESSES** section. Include the docket number "FAA-2007-28988; Directorate Identifier 2007-NM-047-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD. Using the search function of that Web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the comment on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78), or you may visit <http://dms.dot.gov>.

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. Comments will be available in the AD docket shortly after the Docket Management System receives them.

Discussion

The Federal Aviation Administration (FAA) completed a review of in-flight entertainment (IFE) systems installed on transport category airplanes. The review focused on the interface between the IFE system and airplane electrical system, with the objective of determining if any unsafe conditions exist with regard to the interface.

The type of IFE systems considered for review were those that contain video monitors (cathode ray tubes or liquid crystal displays, either hanging above the aisle or mounted on individual seat backs or seat trays), or complex circuitry (i.e., power supplies, electronic distribution boxes, extensive wire routing, relatively high power consumption, multiple layers of circuit protection, etc.). In addition, in-seat power supply systems that provide power to more than 20 percent of the total passenger seats were also considered for the review. The types of IFE systems not considered for review include systems that provide only audio signals to each passenger seat, ordinary in-flight telephone systems (e.g., one telephone handset per group of seats or bulkhead-mounted telephones), systems that have only a video monitor on the forward bulkhead(s) (or a projection system) to provide passengers with basic airplane and flight information, and in-seat power supply systems that provide power to less than 20 percent of the total passenger seats.

Items considered during the review include the following:

- Can the electrical bus(es) supplying power to the IFE system be de-energized when necessary without removing power from systems that may be required for continued safe flight and landing?

- Can IFE system power be removed when required without pulling IFE system circuit breakers (i.e., is there a switch (dedicated to the IFE system or a combination of loads) located in the flight deck or cabin that can be used to remove IFE power?

- If the IFE system requires changes to flightcrew procedures, has the airplane flight manual (AFM) been properly amended?

- If the IFE system requires changes to cabin crew procedures, have they been properly amended?

- Does the IFE system require periodic or special maintenance?

In all, we reviewed approximately 180 IFE systems. The review results indicate that potential unsafe conditions exist on some IFE systems installed on various transport category airplanes. These conditions can be summarized as:

- Electrical bus(es) supplying power to the IFE system cannot be de-energized when necessary without removing power from systems that may be required for continued safe flight and landing.

- Power cannot be removed from the IFE system when required without pulling IFE system circuit breakers (i.e., there is no switch dedicated to the IFE system or combination of systems for the purpose of removing power).

- Installation of the IFE system has affected crew (flightcrew and/or cabin crew) procedures, but the procedures have not been properly revised.

Boeing has received numerous reports of smoke or flames in the passenger cabin of Model 747-400 series airplanes. Investigation of several of these reports revealed that the source of the smoke and flames was the wiring for the passenger cabin IFE system, cabin lighting, or passenger seats. Currently, the flightcrew is not able to turn off power to the IFE system and other non-essential passenger cabin systems through utility bus switches in the flight compartment, in the event of smoke or fumes. The flightcrew's inability to turn off electrical power to the IFE system and other non-essential passenger cabin systems, if not corrected, could result in the inability to control smoke or fumes in the airplane flight deck or passenger cabin during a non-normal or emergency situation.

Relevant Service Information

We have reviewed Boeing Service Bulletin 747-24-2246, dated October 6, 2005. The service bulletin describes procedures for installing new relays to allow the flightcrew to turn off electrical power to the IFE system and other non-essential passenger cabin systems through the left and right utility bus switches, and doing other specified actions. The other specified actions include installing new wiring, rerouting existing wiring, removing certain wiring, and testing the cabin lighting, passenger IFE systems, and certain circuit breakers. Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA's Determination and Requirements of the Proposed AD

We have evaluated all pertinent information and identified an unsafe condition that is likely to exist or develop on other airplanes of this same type design. For this reason, we are proposing this AD, which would require accomplishing the actions specified in the service information described previously.

Costs of Compliance

There are about 490 airplanes of the affected design in the worldwide fleet. This proposed AD would affect about 62 airplanes of U.S. registry. The proposed actions would take about 123 work hours per airplane, at an average labor rate of \$80 per work hour. Required parts would cost between \$9,412 and \$11,936 per airplane. Based on these figures, the estimated cost of the proposed AD for U.S. operators is up to \$1,350,112, or up to \$21,776 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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed 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 proposed 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, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

BOEING: Docket No. FAA-2007-28988; Directorate Identifier 2007-NM-047-AD.

Comments Due Date

(a) The FAA must receive comments on this AD action by October 1, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Boeing Model 747-400 and -400D series airplanes, certificated in any category; as identified in Boeing Service Bulletin 747-24-2246, dated October 6, 2005.

Unsafe Condition

(d) This AD results from an in-flight entertainment (IFE) systems review. We are issuing this AD to ensure that the flightcrew is able to turn off electrical power to the IFE system and other non-essential passenger cabin systems through utility bus switches in the flight compartment, in the event of smoke or fumes. The flightcrew's inability to turn off electrical power to the IFE system and other non-essential passenger cabin systems could result in the inability to control smoke or fumes in the airplane flight deck or passenger cabin during a non-normal or emergency situation.

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.

Install New Relays

(f) Within 60 months after the effective date of this AD, install new relays to allow the flightcrew to turn off electrical power to the IFE system and other non-essential passenger cabin systems through the left and right utility bus switches and do all other specified actions as applicable, by accomplishing all the applicable actions specified in the Accomplishment Instructions of Boeing Service Bulletin 747-24-2246, dated October 6, 2005. The other specified actions must be done before further flight after installing the new relays.

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.

Issued in Renton, Washington, on July 30, 2007.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E7-16115 Filed 8-15-07; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2007-28925; Directorate Identifier 2007-NM-123-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus A330-200 and -300 Series Airplanes and Model A340-200 and -300 Series Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated 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:

During ground inspection of an A340-311 aircraft, it has been discovered that 5 fasteners were missing between Frame (FR) 18 and FR19 on longitudinal joint at stringer 28RH (right hand).

Further investigations have revealed that the missing fasteners have not been installed in production due to incorrect production instructions.

If not corrected, this situation could affect the structural integrity of the aircraft in the area of stringer 28 between FR18 and FR19 at longitudinal joint.

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by September 17, 2007.

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

- **DOT Docket Web Site:** Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- **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:** Room W12-140 on the ground floor of the West Building, 1200 New Jersey Avenue, SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- **Federal eRulemaking Portal:** <http://www.regulations.gov>. Follow the instructions for submitting comments.

Examining the AD 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 AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations 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: Tim Backman, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2797; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the **ADDRESSES** section. Include "Docket No. FAA-2007-28925; Directorate Identifier 2007-NM-123-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each

substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2007-0125, dated May 4, 2007 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

During ground inspection of an A340-311 aircraft, it has been discovered that 5 fasteners were missing between Frame (FR) 18 and FR19 on longitudinal joint at stringer 28RH (right hand).

Further investigations have revealed that the missing fasteners have not been installed in production due to incorrect production instructions.

If not corrected, this situation could affect the structural integrity of the aircraft in the area of stringer 28 between FR18 and FR19 at longitudinal joint.

In order to re-establish the structural strength of the aircraft, this Airworthiness Directive (AD) renders mandatory the inspection of the longitudinal joint at stringer 28 RH between FR18 and FR19 [for missing fasteners].

For airplanes on which any fastener is missing, the corrective actions include doing a detailed visual inspection for cracking of the adjacent fastener area from the outside, without removing the fasteners; and if no crack is found, doing a rotating probe inspection for cracks of the adjacent fastener holes after removing the fasteners, and replacing any missing fastener. The corrective actions also include contacting Airbus for repair instructions and repair if fasteners are not at nominal diameter or if any crack is found. You may obtain further information by examining the MCAI in the AD docket.

Relevant Service Information

Airbus has issued Service Bulletins A330-53-3170 and A340-53-4175, both dated March 27, 2007. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe