

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

[Docket No. 99-NM-248-AD]

RIN 2120-AA64

**Airworthiness Directives; Boeing Model 747-400 Series Airplanes**

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain Boeing Model 747-400 series airplanes. This proposal would require removal of existing inertial reference units (IRU) and installation of modified IRU's. This proposal is prompted by a report of the failure of the left and center IRU's on a single flight. The actions specified by the proposed AD are intended to prevent loss of multiple IRU's in flight, which could result in the loss of navigation data during flight. This could compromise the ability of the flight crew to maintain the safe flight and landing of the airplane.

**DATES:** Comments must be received by November 22, 1999.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-248-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Jay G. Yi, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1013; fax (425) 227-1181.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

Interested persons are invited to participate in the making of the proposed rule by submitting such

written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 99-NM-248-AD." The postcard will be date stamped and returned to the commenter.

**Availability of NPRMs**

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-248-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

**Discussion**

The FAA has received a report indicating that the left and center inertial reference units (IRU) failed during a single flight on a Boeing Model 747-400 series airplane. A short circuit in the brake system control unit (BSCU) connected to the left IRU caused the left IRU to fail. The pilot then selected the center IRU to monitor the BSCU. The same short circuit also caused the center IRU to fail. Such failure of multiple IRU's in flight, if not corrected, could result in the loss of navigation data during flight. This could compromise the ability of the flight crew to maintain the safe flight and landing of the airplane.

**Explanation of Relevant Service Information**

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-34A2638, Revision 1, dated April 8, 1999, which describes procedures for removal of the left, right, and center IRU's, and replacement with modified IRU's. The modified IRU's are

redesigned to prevent failure caused by an electrical short circuit in equipment connected to the IRU. Accomplishment of the actions specified in the alert service bulletin is intended to adequately address the identified unsafe condition.

**Explanation of Requirements of Proposed Rule**

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require accomplishment of the actions specified in the alert service bulletin described previously, except as discussed below.

**Differences Between Proposed Rule and Alert Service Bulletin**

Operators should note that, although the service bulletin recommends accomplishing the replacement of the IRU's with modified IRU's at the earliest opportunity when manpower, parts, and facilities are available, the FAA has determined that such a compliance time would not address the identified unsafe condition in a timely manner. In developing an appropriate compliance time for this AD, the FAA considered not only the manufacturer's recommendation, but the degree of urgency associated with addressing the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to perform the replacement (one hour). In light of all of these factors, the FAA finds a compliance time of 12 months after the effective date of this AD for completing the required actions to be warranted, in that it represents an appropriate interval of time allowable for affected airplanes to continue to operate without compromising safety.

**Cost Impact**

There are approximately 429 airplanes of the affected design in the worldwide fleet. The FAA estimates that 50 airplanes of U.S. registry would be affected by this proposed AD, that it would take approximately 1 work hour per airplane to accomplish the proposed replacement, and that the average labor rate is \$60 per work hour. Required parts would be supplied by the parts manufacturer at no cost to the operators. Based on these figures, the cost impact of the proposed AD on U.S. operators is estimated to be \$3,000, or \$60 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would

accomplish those actions in the future if this AD were not adopted.

### Regulatory Impact

The regulations proposed herein would not have substantial direct effects 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. Therefore, in accordance with Executive Order 12612, it is determined that this proposal would not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this 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) if promulgated, 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. A copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

### The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend part 39 of the Federal Aviation Regulations (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. Section 39.13 is amended by adding the following new airworthiness directive:

**Boeing:** Docket 99-NM-248-AD.

**Applicability:** Model 747-400 series airplanes, having line numbers 696 through 1187 inclusive, certificated in any category; equipped with Honeywell inertial reference units (IRU).

**Note 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or

repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

**Compliance:** Required as indicated, unless accomplished previously.

To prevent loss of multiple IRU's in flight, which could result in the loss of navigation data, and compromise the ability of the flight crew to maintain the safe flight and landing of the airplane, accomplish the following:

#### Replacement

(a) Within 12 months after the effective date of this AD, remove the left, center, and right IRU's, and install modified IRU's, in accordance with Boeing Alert Service Bulletin 747-34A2638, Revision 1, dated April 8, 1999.

**Note 2:** Removal of existing left, center, and right IRU's and replacement with modified IRU's in accordance with Boeing Alert Service Bulletin 747-34A2638, dated January 29, 1999, is considered acceptable for compliance with paragraph (a) of this AD.

#### Spares

(b) As of the effective date of this AD, no person shall install an IRU having Boeing part number S242T101-110, S242T101-111, or S242T101-112, on any airplane.

#### Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Avionics Inspector, who may add comments and then send it to the Manager, Seattle ACO.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

#### Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on September 29, 1999.

#### D.L. Riggins,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 99-25935 Filed 10-5-99; 8:45 am]

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 99-NM-233-AD]

RIN 2120-AA64

### Airworthiness Directives; Lockheed Model L-1011-385 Series Airplanes

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the superseding of an existing airworthiness directive (AD), applicable to certain Lockheed Model L-1011-385 series airplanes, that currently requires repetitive inspections to detect cracking of the canted pressure bulkhead at fuselage station (FS) 1212, and repetitive inspections to detect cracking of the web at the fastener rows of the vertical stiffener-to-web; and repair or replacement of the web with a new web, if necessary. This action would require that the initial inspections be accomplished at a reduced threshold. This proposal is prompted by a report of fatigue cracking of the canted pressure bulkhead at FS 1212. The actions specified by the proposed AD are intended to detect and correct fatigue cracking of the canted pressure bulkhead at FS 1212, which could result in blowout of a panel between adjacent stiffeners and consequent cabin depressurization.

**DATES:** Comments must be received by November 22, 1999.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-233-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays.

The service information referenced in the proposed rule may be obtained from Lockheed Martin Aircraft & Logistics Center, 120 Orion Street, Greenville, South Carolina 29605. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Small Airplane Directorate, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia.

**FOR FURTHER INFORMATION CONTACT:** Thomas Peters, Program Manager,