

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 33016 6/20/2001]

[Docket No. 2000-NM-320-AD; Amendment 39-12269; AD 2001-12-14]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747-400 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 747-400 series airplanes, that requires an inspection to detect miswiring of diodes in the heating system of the pitot static probes, and corrective action, if necessary. The actions specified by this AD are intended to prevent reduced power to the heating system of the pitot static probes, leading to ice accumulation on the pitot static probes, which could result in erroneous airspeed or altitude indications to the flight crew, and consequent reduced operational safety in all phases of flight. This action is intended to address the identified unsafe condition.

DATES: Effective July 25, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 25, 2001.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Don Eiford, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2788; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: A Notice of Proposed Rulemaking (NPRM) to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) applicable to certain Boeing Model 747-400 series airplanes was published in the Federal Register on February 21, 2001 (66 FR 10972). That action proposed to require an inspection to detect miswiring of diodes in the heating system of the pitot static probes, and corrective action, if necessary.

Editorial Change

The compliance time for rewiring of any miswiring, detected during the special detailed inspection required by paragraph (a) of this AD, was inadvertently omitted. Paragraph (a) of this AD has been changed to require rewiring of any miswiring prior to further flight.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the single comment received.

The commenter supports the proposed rule.

Conclusion

After careful review of the available data, including the comment noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the change

described previously. The FAA has determined that this change will neither increase the economic burden on any operator nor increase the scope of this AD.

Cost Impact

There are approximately 497 Model 747-400 series airplanes of the affected design in the worldwide fleet. The FAA estimates that 69 airplanes of U.S. registry will be affected by this AD, that it will take approximately 2 work hours per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$8,280, or \$120 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

Regulatory Impact

The regulations adopted herein 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (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. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends 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.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

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

We post ADs on the internet at "av-info.faa.gov"

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).

2001-12-14 Boeing: Amendment 39-12269. Docket 2000-NM-320-AD.

Applicability: Model 747-400 series airplanes, as listed in Boeing Alert Service Bulletin 747-30A2078, Revision 1, dated November 16, 2000; certificated in any category.

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 (b) 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 reduced power to the heating system of the pitot static probes, leading to ice accumulation on the pitot static probes, which could result in erroneous airspeed or altitude indications to the flight crew, and consequent reduced operational safety in all phases of flight, accomplish the following:

Inspection

(a) Within 15 months after the effective date of this AD, perform a special detailed inspection to detect miswiring of diodes in the heating system of the pitot static probes by using a multimeter to verify continuity between certain relay sockets, absence of a diode between certain relay sockets, and diode orientation between certain relay sockets, per Boeing Alert Service Bulletin 747-30A2078, Revision 1, dated November 16, 2000. If any miswiring is found, prior to further flight, rewire per Boeing 747-400 Wiring Diagrams 30-31-11 and 30-31-21, as referenced in the service bulletin.

Note 2: Inspections accomplished prior to the effective date of this AD per Boeing Alert Service Bulletin 747-30A2078, dated August 24, 2000, are considered acceptable for compliance with the applicable action specified in this amendment.

Note 3: For the purposes of this AD, a special detailed inspection is defined as: "An intensive examination of a specific item(s), installation, or assembly to detect damage, failure, or irregularity. The examination is likely to make extensive use of specialized inspection techniques and/or equipment. Intricate cleaning and substantial access or disassembly procedures may be required."

Alternative Methods of Compliance

(b) 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. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 4: 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

(c) 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.

Incorporation by Reference

(d) Except as provided by paragraph (a) of this AD, The actions shall be done in accordance with Boeing Alert Service Bulletin 747-30A2078, Revision 1, dated November 16, 2000. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(e) This amendment becomes effective on July 25, 2001.

FOR FURTHER INFORMATION CONTACT: Don Eiford, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2788; fax (425) 227-1181.

Issued in Renton, Washington, on June 11, 2001.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.