

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

[Docket No. 97-NM-271-AD; Amendment 39-10230; AD 97-25-06]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 747 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain Boeing Model 747 series airplanes. This action requires disconnection of the electrical connector to the scavenge pump of the center wing tank.

This AD also requires a one-time inspection to identify the part number of the electrical connector; and replacement of the pump with a new pump, if necessary. This amendment is prompted by findings from a design review and analysis of scavenge pumps installed on certain Boeing Model 747 series airplanes that was undertaken as part of an accident investigation. The actions specified in this AD are intended to prevent potential failures within the electrical motor assembly of the scavenge pump, which could result in leakage of fuel from the electrical connector into the main landing gear wheel well, or electrical arcing within the scavenge pump motor; these conditions could result in a fuel fire in the wheel well.

DATES: Effective December 16, 1997.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of December 16, 1997.

Comments for inclusion in the Rules Docket must be received on or before January 30, 1998.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-103, Attention: Rules Docket No. 97-NM-271-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

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 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.

FOR FURTHER INFORMATION CONTACT:

Chris Hartonas, Aerospace Engineer, Systems and Equipment Branch, ANM-130S; or G. Michael Collins, Aerospace Engineer, Propulsion Branch, ANM-140S; FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2864 or (425) 227-2689; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: On July 17, 1996, a Boeing Model 747 series airplane was involved in an accident shortly after takeoff from John F. Kennedy International Airport in Jamaica, New York. The National Transport Safety Board (NTSB) has not yet determined the cause of that accident. In support of the subsequent accident investigation, the FAA recently conducted an engineering design review and analysis on certain Lear Romec scavenge pumps. Results of inspections on scavenge pumps removed from the center wing fuel tank of older Boeing Model 747 series airplanes indicated degradation of certain silicone insulating grommet material in electrical connectors of the pump due to the incompatibility of this material with fuel.

Damage to the electrical connector, which is part of the electrical motor assembly of the scavenge pump, could cause potential failures within the electrical motor assembly of the scavenge pump. Such failures could result in leakage of fuel from the electrical connector into the main landing gear wheel well, or electrical arcing within the scavenge pump motor. These conditions could result in a fuel fire in the wheel well.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-28A2206, dated September 25, 1997, which describes procedures for disconnection of the electrical connector to the scavenge pump of the center wing tank. The alert service bulletin also describes procedures for a one-time inspection to identify the part number of the electrical connector; and replacement of the pump with a new pump, if necessary.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other Boeing Model 747 series airplanes of the same type design,

this AD is being issued to prevent potential failures within the electrical motor assembly of the scavenge pump, which could result in a fuel fire in the wheel well. This AD requires disconnection of the electrical connector to the scavenge pump of the center wing tank. This AD also requires a one-time inspection to identify the part number of the electrical connector; and replacement of the pump with a new pump, if necessary. The actions are required to be accomplished in accordance with the alert service bulletin described previously.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this 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 under the caption "ADDRESSES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the 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 that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 97-NM-271-AD." The

postcard will be date stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein will 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 final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, 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.

§ 39.13 [Amended]

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

97-25-06 Boeing: Amendment 39-10230. Docket 97-NM-271-AD.

Applicability: Model 747 series airplanes having line positions 001 through 971 inclusive, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been otherwise 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 potential failures within the electrical motor assembly of the scavenge pump, which could result in a fuel fire in the wheel well, accomplish the following:

(a) Except as provided by paragraph (b) of this AD: Within 90 days after the effective date of this AD, disconnect the electrical connector to the scavenge pump of the center wing tank; and perform a one-time inspection of the pump to identify the part number of the electrical connector; in accordance with Boeing Alert Service Bulletin 747-28A2206, dated September 25, 1997.

(1) If an electrical connector having the correct part number (as specified in the alert service bulletin) is installed: Prior to further flight, reinstall the electrical connector. No further action is required by this AD.

(2) If an electrical connector having a part number other than the correct part number (as specified in the alert service bulletin) is installed: Prior to further flight, replace the scavenge pump with a new scavenge pump with an electrical connector having the correct part number (as specified in the alert service bulletin) in accordance with the Accomplishment Instructions of the alert service bulletin.

(b) If a scavenge pump with an electrical connector having the correct part number (as specified in Boeing Alert Service Bulletin 747-28A2206, dated September 25, 1997) is not available for installation: The airplane may be operated with the scavenge pump deactivated in accordance with the provisions and limitations specified in the FAA-approved Minimum Equipment List (MEL) and paragraph III.A.3. of the Accomplishment Instructions of the alert service bulletin.

(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 Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

(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.

(e) The actions required by this AD shall be done in accordance with Boeing Alert Service Bulletin 747-28A2206, dated September 25, 1997. 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.

(f) This amendment becomes effective on December 16, 1997.

Issued in Renton, Washington, on November 26, 1997.

Ronald T. Wojnar,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 97-31667 Filed 11-28-97; 10:56 am]

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