

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

[Docket No. 99-NM-54-AD]

RIN 2120-AA64

**Airworthiness Directives; Boeing Model 767-200, -300, and -300F 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 767-200, -300, and -300F series airplanes. This proposal would require either an inspection to detect damage or chafing of the insulation or wires, modification of the cable assembly, and repairs, if necessary; or replacement of the cable assembly of the lower anti-collision light with a new cable assembly. This proposal is prompted by reports of electrical arcing on structure near the lower body anti-collision light due to chafing of the cable. The actions specified by the proposed AD are intended to prevent such chafing as a result of improper installation of the lower body anti-collision light assembly, which could result in electrical arcing or sparking in a flammable leakage zone of the airplane.

**DATES:** Comments must be received by March 20, 2000.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-54-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:** Elias Natsiopoulou, Aerospace Engineer, Systems and Flight Test Branch, ANM-130S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, S.W., Renton,

Washington 98055-4056; telephone (425) 227-1279; 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-54-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-54-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

**Discussion**

The FAA has received reports of evidence of electrical arcing on structure near the lower body anti-collision light on Boeing Model 767-200 and -300 series airplanes. The lower body anti-collision light is installed below the center fuel tank in a flammable leakage zone. Results of an operator survey and a review of installation drawings revealed that it is possible to install the lower body anti-collision light assembly backwards with the aft edge forward. This incorrect orientation of the light assembly results in misalignment of the connector and cable with the opening of the web, which necessitates a sharp bend of the cable for routing through the web opening. A sharply bent cable loop

against the structure causes chafing and eventual wire damage of the cable. This condition, if not corrected, could result in electrical arcing or sparking in a flammable leakage zone of the airplane.

The subject cable assembly of the lower anti-collision light on Boeing Model 767-300F series airplanes is identical to that of the affected Boeing Model 767-200 and -300 series airplanes. Therefore, all of these airplanes may be subject to the same unsafe condition.

**Explanation of Relevant Service Information**

The FAA has reviewed and approved Boeing Service Bulletin 767-33A0075, Revision 1, dated May 27, 1999. The service bulletin describes procedures for repetitive general visual inspections to detect damage or chafing of the insulation or wires of the lower body anti-collision light, and repair, if necessary. In lieu of accomplishing the repetitive inspections, the service bulletin also describes procedures for either modification of the cable assembly, and repairs, if necessary; or replacement of the cable assembly of the lower anti-collision light with a new cable assembly. The modification involves removing the strain relief and bushing, installing a backshell extender with a new strain relief, and re-identifying the part number of the cable assembly.

Boeing Service Bulletin 767-33A0075, Revision 1, dated May 27, 1999, refers to Grimes Service Bulletin 60-3414-33-SB01, dated December 8, 1998, as an additional source of service information for accomplishment of the modification described previously.

**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 service bulletin described previously, except as discussed below.

**Differences Between Proposed Rule and Service Bulletin**

The proposed AD would differ from the service bulletin in that it would mandate, within 1,800 flight hours after the effective date of this AD, either a one-time general visual inspection to detect damage or chafing of the insulation or wires, modification of the cable assembly of the lower body anti-collision cable assembly, and repairs, if necessary; or replacement of the cable

assembly of the lower anti-collision light with a new cable assembly. The service bulletin provides for the modification or replacement as optional.

The FAA has determined that long-term continued operational safety will be better assured by design changes to remove the source of the problem, rather than by repetitive inspections. Long-term inspections may not be providing the degree of safety assurance necessary for the transport airplane fleet. This, coupled with a better understanding of the human factors associated with numerous continual inspections, has led the FAA to consider placing less emphasis on inspections and more emphasis on design improvements. The proposed modification or replacement requirement is in consonance with these conditions.

#### Cost Impact

There are approximately 740 airplanes of the affected design in the worldwide fleet. The FAA estimates that 263 airplanes of U.S. registry would be affected by this proposed AD.

In lieu of accomplishing the replacement, it would take approximately 3 work hours (1 work hour per airplane for the inspection and 2 work hours per airplane for the modification) to accomplish the proposed inspection and modification. Required parts would cost approximately \$157 per airplane. Based on these figures, the cost impact of the inspection and modification proposed by this AD on U.S. operators is estimated to be \$337 per airplane.

In lieu of accomplishing the inspection and modification, it would take approximately 3 work hours per airplane to accomplish the proposed replacement, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$1,552 (for Group 1 airplanes) or \$2,234 (for Group 2 airplanes) per airplane. Based on these figures, the cost impact of this replacement proposed by this AD on U.S. operators is estimated to be \$1,732 (for Group 1 airplanes) or \$2,414 (for Group 2 airplanes) per airplane.

The cost impact figures discussed above are 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-54-AD.

**Applicability:** Model 767-200, -300, -300F series airplanes, line numbers 1 through 739 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 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 chafing as a result of improper installation of the cable assembly of the lower body anti-collision light, which could result in electrical arcing or sparking in a flammable leakage zone of the airplane, accomplish the following:

#### Modification or Replacement

(a) Within 1,800 flight hours after the effective date of this AD, perform the actions in either paragraph (a)(1) or (a)(2) of this AD in accordance with Boeing Service Bulletin 767-33A0075, Revision 1, dated May 27, 1999.

(1) Perform a one-time general visual inspection to detect damage or chafing of the insulation or wires, and modify the cable assembly of the lower body anti-collision cable assembly. If any damage or chafing is detected, prior to further flight, repair the damaged or chafed part.

**Note 2:** Boeing Service Bulletin 767-33A0075, Revision 1, May 27, 1999, refers to Grimes Service Bulletin 60-3414-33-SB01, dated December 8, 1998, as an additional source of service information for accomplishment of the modification required by paragraph (a)(1) of this AD.

**Note 3:** For the purposes of this AD, a general visual inspection is defined as "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or drop-light, and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(2) Replace the cable assembly of the lower body anti-collision cable assembly with a new cable assembly.

#### 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, 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 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 §§ 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 January 27, 2000.

**Donald L. Riggan,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 00-2225 Filed 2-1-00; 8:45 am]

BILLING CODE 4910-13-U

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 98-NM-285-AD]

RIN 2120-AA64

#### **Airworthiness Directives; Boeing Model 747 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 Boeing Model 747 series airplanes, that currently requires repetitive inspections for damage or cracking of the aft pressure bulkhead, and repair, if necessary. That action also removes certain repetitive inspections for cracking of the bulkhead web to Y-ring lap joint area, but retains the initial inspection for cracking in that area. That action also adds a one-time detailed visual inspection from the forward side of the bulkhead to detect fatigue cracking of the upper segment of the bulkhead web, and follow-on corrective actions, if necessary. This action would require that the one-time inspection be accomplished repetitively, and would add additional repetitive inspections. The actions specified by the proposed AD are intended to detect and correct fatigue cracking of the bulkhead web, which could result in rapid depressurization of the airplane, and consequent reduced controllability of the airplane.

**DATES:** Comments must be received by March 20, 2000.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 98-NM-285-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:** Rick Kawaguchi, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1153; 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 98-NM-285-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. 98-NM-285-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

##### **Discussion**

On September 14, 1998, the FAA issued AD 98-20-20, amendment 39-10786 (63 FR 50495, September 22,

1998), applicable to certain Boeing 747 series airplanes, to require certain repetitive inspections for damage or cracking of the aft pressure bulkhead, and repair, if necessary. In addition, that AD removes repetitive detailed visual inspections for cracking of the bulkhead web to Y-ring lap joint area, but retains the initial inspection for cracking in that area. That AD also adds a one-time detailed visual inspection from the forward side of the bulkhead to detect fatigue cracking of the upper segment of the bulkhead web, and follow-on corrective actions, if necessary. That action was prompted by reports indicating that the inspections required by AD 87-23-10, amendment 39-5758 (52 FR 41551, October 29, 1987), may not detect cracking of the bulkhead web in a timely manner. The requirements of AD 98-20-20 are intended to detect and correct fatigue cracking of the upper segment of the bulkhead web, which could result in rapid depressurization of the airplane, and consequent reduced controllability of the airplane.

##### **Actions Since Issuance of Previous Rule**

In the preamble of AD 98-20-20, the FAA specified that the actions required by that AD were considered to be interim action. The FAA indicated that it may consider further rulemaking action to require repetitive detailed visual inspections and surface probe high frequency eddy current (HFEC) inspections to detect cracking of the upper and lower segments of the aft pressure bulkhead web, and repair if necessary. The FAA has determined that further rulemaking is indeed necessary; this proposed AD follows from that determination.

##### **Explanation of Relevant Service Information**

The FAA has reviewed and approved Boeing Alert Service Bulletin 747-53A2275, Revision 6, dated August 27, 1998, which describes procedures for, among other things, repetitive inspections from the forward side of the bulkhead web at body station (BS) 2360 to detect cracking. The inspections to detect cracking include a detailed visual inspection of the upper half of the bulkhead and a surface probe HFEC inspection of the upper and lower segments of the bulkhead. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.