

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

[Docket No. 99-NM-75-AD]

RIN 2120-AA64

**Airworthiness Directives; Boeing Model 727 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 727 series airplanes, that currently requires repetitive inspections to detect cracking of the rear spar web or fuel leakage of the wing center section, and repair, if necessary. That action also provides for an optional modification of the rear spar web that constitutes terminating action for the repetitive inspections. That action was prompted by several reports of fuel leakage due to cracking of the rear spar web of the wing center section. This action would require accomplishment of the previously optional terminating action. The actions specified by the proposed AD are intended to prevent cracking of the rear spar web, which could permit fuel leakage into the airflow multiplier, and could result in an electrical short that could cause a fire.

**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-75-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:** Walter Sippel, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington

98055-4056; telephone (425) 227-2774; 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-75-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-75-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

**Discussion**

On December 3, 1997, the FAA issued AD 97-25-15, amendment 39-10239 (62 FR 65355, December 12, 1997), applicable to certain Boeing Model 727 series airplanes, to require repetitive inspections to detect cracking of the rear spar web or fuel leakage of the wing center section, and repair, if necessary. That action also provides for an optional modification of the rear spar web that constitutes terminating action for the repetitive inspections. That action was prompted by several reports of fuel leakage due to cracking of the rear spar web of the wing center section. The requirements of that AD are intended to detect and correct such cracking of the rear spar web, which could permit fuel leakage into the airflow multiplier, and

could result in an electrical short that could cause a fire.

**Actions Since Issuance of Previous Rule**

When AD 97-25-15 was issued, it contained a provision for the optional modification of the rear spar web, which, if accomplished, would constitute terminating action for the repetitive inspections required by that AD. In the preamble to AD 97-25-15, the FAA indicated that the actions required by that AD were considered "interim action" and that further rulemaking action was being considered to require the modification of the rear spar web of the wing center section. The FAA now has determined that further rulemaking action is indeed necessary, and this proposed AD follows from that determination.

**Explanation of Relevant Service Information**

The FAA has reviewed and approved Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. The procedures described in Revision 1 are essentially similar to those described in the original issue of the service bulletin, which was referenced as the appropriate source of service information for the actions in AD 97-25-15. Accomplishment of the modification specified in the 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 supersede AD 97-25-15, to continue to require repetitive inspections to detect cracking of the rear spar web or fuel leakage of the wing center section, and repair, if necessary. This proposed AD would also require modification of the rear spar web, which would constitute terminating action for the repetitive inspections. These actions would be required to be accomplished in accordance with the service bulletin described previously.

**Cost Impact**

There are approximately 970 airplanes of the affected design in the worldwide fleet. The FAA estimates that 659 airplanes of U.S. registry would be affected by this proposed AD: 641 "Group 1" airplanes and 18 "Group 2" airplanes, as listed in the service bulletin.

The inspection that is currently required by AD 97-25-15 takes approximately 2 work hours per

airplane to accomplish, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the currently required actions on U.S. operators is estimated to be \$79,080, or \$120 per airplane, per inspection cycle.

The new modification that is proposed in this AD action would take approximately 60 work hours per airplane to accomplish, at an average labor rate of \$60 per work hour. Required parts would cost approximately \$6,434 per airplane for "Group 1" airplanes, and \$6,689 per airplane for "Group 2" airplanes. Based on these figures, the cost impact of the proposed requirements of this AD on U.S. operators is estimated to be \$6,616,996, or \$10,034 per "Group 1" airplane and \$10,289 per "Group 2" airplane.

The cost impact figures discussed above are based on assumptions that no operator has yet accomplished any of the current or 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 removing amendment AD 97-25-15, amendment 39-10239 (62 FR 65355, December 27, 1997), and by adding a new airworthiness directive (AD), to read as follows:

**Boeing:** Docket 99-NM-75-AD. Supersedes AD 97-25-15, Amendment 39-10239.

**Applicability:** Model 727 series airplanes having line numbers 858 through 864 inclusive, 867 through 869 inclusive, 872 through 883 inclusive, and 885 through 1832 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 (e)(1) 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 cracking of the rear spar web, which could permit fuel leakage into the airflow multiplier, and could result in an electrical short that could cause a fire, accomplish the following:

#### Restatement of the Requirements of AD 97-25-15

##### Inspections

(a) Prior to the accumulation of 15,000 total flight cycles, or within 300 flight cycles after December 27, 1997 (the effective date of AD 97-25-15, amendment 39-10239), whichever occurs later: Accomplish the inspections specified in either paragraph (a)(1) or (a)(2) of this AD, in accordance with Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. For purposes of the AD, the access panels specified in the alert service bulletin need not be removed; the access panels need only be opened.

**Note 2:** The fuel tank of the wing center section may be filled with fuel to assist in detecting cracking or fuel leakage during the accomplishment of the visual inspections required by this AD.

(1) Perform a visual inspection using a borescope or mirror to detect cracking of the rear spar web and/or fuel leakage of the wing center section between right body buttock line (BBL) 40 and left BBL 40, in accordance with Part I of the Accomplishment Instructions of the service bulletin. Thereafter, repeat this inspection at intervals not to exceed 300 flight cycles. Or

(2) Perform an ultrasonic and high frequency eddy current (HFEC) inspection to detect cracking of the rear spar web of the wing center section between right BBL 40 and left BBL 40, in accordance with Part II of the Accomplishment Instructions of the service bulletin. Thereafter, repeat this inspection at intervals not to exceed 3,000 flight cycles.

##### Repair

(b) If any cracking of the rear spar web and/or fuel leakage of the wing center section is detected between right BBL 40 and left BBL 40 near the upper machined land radius, prior to further flight, repair in accordance with Part III of the Accomplishment Instructions in Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this repair constitutes terminating action for the repetitive inspection requirements of this AD.

(c) If any cracking of the rear spar web and/or fuel leakage of the wing center section is detected that is outside the area specified in paragraph (b) of this AD, prior to further flight, repair in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. For a repair method to be approved by the Manager, Seattle ACO, as required by this paragraph, the Manager's approval letter must specifically reference this AD.

### New Requirements of this AD

#### Modification

(d) Prior to the accumulation of 60,000 total flight cycles, or within 3,000 flight cycles after the effective date of this AD, whichever occurs later, accomplish an ultrasonic and HFEC inspection in accordance with the requirements of paragraph (a)(2) of this AD.

(1) If no cracking is detected, prior to further flight, modify the rear spar web of the center section of the fuel tank between right BBL 40 and left BBL 40, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this modification constitutes terminating action for the repetitive inspection requirements of this AD.

(2) If any cracking is detected, prior to further flight, repair and modify in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 727-57A0182, dated September 18, 1997, or Boeing Service Bulletin 727-57A0182, Revision 1, dated February 25, 1999. Accomplishment of this modification constitutes terminating action for the

repetitive inspection requirements of this AD.

#### Alternative Methods of Compliance

(e)(1) 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 ACO. 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.

(e)(2) Alternative methods of compliance, approved previously in accordance with AD 97-25-15, amendment 39-10239, are approved as alternative methods of compliance with this AD.

**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

(f) 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, provided the limitations specified in paragraphs (f)(1) through (f)(6) of this AD are included in the special flight permit:

“(1) Required trip and reserve fuel must be carried in the No. 1 and No. 3 outer wing tanks.

(2) Wing center tank No. 2 must be empty of fuel.

(3) The fuel system must be checked for normal operation prior to flight by verifying that all boost pumps are operational; configuring the fuel system by turning on all boost pumps in the No. 1 and 3 outer wing tanks and by opening all crossfeed valve selectors; and by confirming that fuel is not bypassing tank No. 2 check valves by observing that there is not leakage into tank No. 2.

(4) Maintain a minimum of 5,300 pounds of fuel in tanks No. 1 and No. 3 to prevent uncovering the fuel bypass valve.

(5) The fuel quantity indication system must be operational in all three tanks.

(6) The effects of loading fuel only in the wing tanks on the airplane weight and balance must be considered and accounted for.”

Issued in Renton, Washington, on September 30, 1999.

#### D.L. Riggins,

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

[FR Doc. 99-26089 Filed 10-5-99; 8:45 am]

BILLING CODE 4910-13-U

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 99-NM-222-AD]

RIN 2120-AA64

#### Airworthiness Directives; Airbus Model A310 and A300-600 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 Airbus Model A310 and A300-600 series airplanes. This proposal would require wiring modifications to the engine and auxiliary power unit (APU) fire detection system. This proposal is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by the proposed AD are intended to prevent the fire warning from terminating prematurely, which could result in an unnoticed, uncontained engine/APU fire.

**DATES:** Comments must be received by November 5, 1999.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 99-NM-222-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 Airbus Industrie, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington.

**FOR FURTHER INFORMATION CONTACT:** Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

#### 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-222-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-222-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

#### Discussion

The Direction Générale de l'Aviation Civile (DGAC), which is the airworthiness authority for France, notified the FAA that an unsafe condition may exist on certain Airbus Model A310 and A300-600 series airplanes. The DGAC advises that investigations into an uncontained engine fire revealed that the operating logic of the fire detection and associated fire warning triggering systems may lead to situations in which the auxiliary power unit (APU)/engine fire warning terminates shortly after triggering, even though the fire has not gone out. This condition, if not corrected, could result in an unnoticed, uncontained engine/APU fire.

#### Explanation of Relevant Service Information

Airbus has issued Service Bulletins A310-26-2024, Revision 04, dated March 5, 1999 (for Model A310 series airplanes); and A300-26-6038, dated March 5, 1999, and Revision 1, dated September 8, 1998 (for Model A300-600 series airplanes). These service bulletins