

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 34091 6/27/2001]

[Docket No. 2000-NM-308-AD; Amendment 39-12287; AD 2001-13-07]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-300, 737-400, 737-500, 737-600, 737-700, 737-800, 757-200, 757-200PF, 757-200CB, and 757-300 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 737-300, 737-400, 737-500, 737-600, 737-700, 737-800, 757-200, 757-200PF, 757-200CB, and 757-300 series airplanes. This AD requires a test of the two electrical circuits that close the fuel shutoff valve on the wing spar, and repair, if necessary. This action is necessary to prevent inability to shut off the flow of fuel to an engine after an uncontained engine failure, which could result in a fire spreading to other parts of the airplane. This action is intended to address the identified unsafe condition.

**DATES:** Effective August 1, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of August 1, 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:** Kathrine Rask, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1547; fax (425) 227-1181.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Boeing Model 737-300, 737-400, 737-500, 737-600, 737-700, 737-800, 757-200, 757-200PF, 757-200CB, and 757-300 series airplanes was published in the Federal Register on December 29, 2000 (65 FR 82957). That action proposed to require a test of the two electrical circuits that close the fuel shutoff valve on the wing spar, and repair, if necessary.

**Explanation of New Relevant Service Information**

The FAA has reviewed and approved Boeing Service Bulletin 737-28-1164, Revision 1, dated May 10, 2001, which describes procedures for a one-time test of the two electrical circuits that close the fuel shutoff valve on each wing spar to determine if there is continuity, and location and repair of any discontinuity. The procedures described in Revision 1 of the service bulletin are essentially similar to those described in the original issue of the service bulletin, dated August 24, 2000, which was listed in the proposed rule as the appropriate source of service information for Boeing Model 737-300, 737-400, and 737-500 series airplanes. Revision 1 merely corrects the location of two electrical connectors. Accomplishment of the actions specified in Revision 1 of the service bulletin is

intended to adequately address the identified unsafe condition.

In consideration of this new service information, the FAA has revised paragraph (a) of this final rule to refer to Boeing Service Bulletin 737-28-1164, Revision 1, in addition to the original issue of the service bulletin, as an acceptable source of service information for accomplishment of paragraph (a) on Boeing Model 737-300, -400, and -500 series airplanes.

#### **Comments**

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

#### **Support for the Proposal**

Two commenters support the proposed rule.

#### **Provide Credit for Use of Telexes**

One commenter requests that the FAA revise the proposed AD to give credit for accomplishment of the proposed actions using the following telexes:

- Boeing All Base Telex M-7200-00-01064, dated April 24, 2000
- Boeing Telex SWA-DAL-00-00182H, dated March 27, 2000
- Boeing Telex CAL-IAH-00-00681H, dated April 7, 2000
- Boeing All Base Telex M-7200-00-01231, dated May 31, 2000
- Boeing Telex AAL-AFW-00-00324H, dated March 27, 2000

The commenter states that the instructions in these telexes are consistent with those in the service bulletins referenced in the proposed AD. The airplane manufacturer issued the telexes to provide adequate instructions to operators that wanted to perform the tests on their airplanes before the applicable service bulletins were available.

The FAA concurs with the commenter's request, and has added Note 3 to this AD to give credit for using the referenced telexes to accomplish the requirements of this AD before the effective date of this AD.

#### **Revise Cost Impact Estimate**

Two commenters state that the proposed actions have already been accomplished on certain airplanes in their fleets. The FAA infers that the commenters are requesting that the FAA revise the "Cost Impact" section of the proposed AD to reflect the accomplishment of the proposed requirements on some airplanes. The FAA concurs with the commenters' request and has revised the "Cost Impact" section of this AD to reflect that some airplanes have already complied with this AD.

One commenter states that the test, as proposed, takes two hours. Though the commenter does not specify which airplane model its estimate applies to, the FAA infers that the commenter is requesting that the FAA increase the estimate of work hours for Model 737-300, -400, and -500 series airplanes from one to two work hours. The FAA concurs with this request, and has revised the "Cost Impact" section of this AD accordingly.

#### **Request To Consider Need for Repetitive Tests**

One commenter requests that the FAA and the airplane manufacturer review the Maintenance Planning Document for the affected airplane models to assess whether repetitive tests of the circuits subject to the proposed AD are necessary. The commenter does not request a change to the proposed rule.

The FAA acknowledges the commenter's concern. At this time, the Maintenance Planning Document for the Model 737 and 757 series airplanes includes only a check of the fuel shutoff valve. The procedure for this check is similar to the functional test that is performed during production of the airplane, which was described in the proposed AD, in that the test only verifies that one of the two circuits needed to supply power for the fuel shutoff valve operates correctly. The FAA and the airplane manufacturer are coordinating development of a new functional test that would verify that both circuits work correctly. No change to the final rule is necessary in this regard.

#### **Request To Extend Compliance Time**

One commenter requests that the FAA extend the compliance time from 6 months to 18 months for the test specified in the proposed AD. The commenter states that an 18-month compliance time

will allow operators to perform the test in the proposed AD at a regularly scheduled maintenance interval. The commenter notes that a 6-month compliance time does not align with the provisions of Air Transport Association Specification 111, which states, "to capture the majority of scheduled maintenance periods, a nominal 'intermediate' check described by an interval of 18 months and an aircraft downtime of one-to-three days should be considered."

The FAA does not concur with the commenter's request. The commenter provides no technical justification for increasing the compliance time as requested. The unsafe condition addressed by this AD--inability to shut off the flow of fuel to an engine after an uncontained engine failure--is a significant safety issue, and the FAA has determined that the compliance time of 6 months, as proposed, is warranted. This decision is based on the anticipated rate of latent failures in the system. In developing an appropriate compliance time for the actions required by this AD, the FAA considered not only those safety issues, but the manufacturer's recommendations, parts availability, and the practical aspect of accomplishing the required test within an interval paralleling normal scheduled maintenance for the majority of affected operators. In light of all of these factors, the FAA considers 6 months an appropriate compliance time wherein safety will not be adversely affected. No change to the final rule is necessary in this regard.

### **Conclusion**

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes previously described. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

### **Cost Impact**

There are approximately 3,403 Model 737-300, 737-400, 737-500, 737-600, 737-700, 737-800, 757-200, 757-200PF, 757-200CB, and 757-300 airplanes of the affected design in the worldwide fleet.

The FAA estimates that this AD will affect 795 Model 737-300, -400, and -500 airplanes of U.S. registry. The required test will take approximately 2 work hours, at an average labor rate of \$60 per work hour. A commenter has advised the FAA that two of these U.S.-registered airplanes have already been tested according to the requirements of this AD. Therefore, based on the figures stated above, the FAA estimates the future cost impact of this AD on U.S. operators of Model 737-300, -400, and -500 series airplanes to be \$95,160, or \$120 per airplane.

The FAA estimates that this AD will affect 820 Model 737-600, 737-700, 737-800, 757-200, 757-200PF, 757-200CB, and 757-300 airplanes of U.S. registry. The required test will take approximately 3 work hours on each of these airplanes, at an average labor rate of \$60 per work hour. A commenter has advised the FAA that 30 of these U.S.-registered airplanes have already been tested according to the requirements of this AD. Therefore, based on these figures, the FAA estimates the future cost impact of this AD on U.S. operators of these airplanes to be \$142,200, or \$180 per airplane.

The cost impact figures discussed above are based on assumptions that not all operators have yet accomplished the requirements of this AD action, and that no more operators would accomplish those actions in the future if this AD were not adopted. As explained previously, commenters have advised the FAA that some airplanes have been tested according to the requirements of this AD, and the estimated future cost impact has been reduced accordingly in this final rule. 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).

**2001-13-07 Boeing:** Amendment 39-12287. Docket 2000-NM-308-AD.

Applicability: The following models and series of airplanes as listed in the service bulletins below, certificated in any category:

<b>Airplane Model</b>	<b>Boeing special attention service bulletin</b>
737-300, 737-400, 737-500.....	737-28-1164, dated August 24, 2000.
737-600, 737-700, 737-800.....	737-28-1160, Revision 1, dated October 26, 2000.
757-200, 757-200PF, 757-200CB.....	757-28-0060, Revision 1, dated October 26, 2000.
757-300.....	757-28-0061, Revision 1, dated October 26, 2000.

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 inability to shut off the flow of fuel to an engine after an uncontained engine failure, which could result in a fire spreading to other parts of the airplane, accomplish the following:

## **Test and Repair**

(a) Within 6 months after the effective date of this AD, perform a test to determine if there is continuity or to measure voltage, as applicable, of the two electrical circuits that close the fuel shutoff valve on the wing spar. Do the test per Boeing Special Attention Service Bulletin 737-28-1164, dated August 24, 2000, or Boeing Service Bulletin 737-28-1164, Revision 1, dated May 10, 2001 (for Boeing Model 737-300, 737-400, and 737-500 series airplanes); or Boeing Special Attention Service Bulletin 737-28-1160, Revision 1 (for Boeing Model 737-600, 737-700, and 737-800 series airplanes); Boeing Special Attention Service Bulletin 757-28-0060, Revision 1 (for Boeing Model 757-200, 757-200PF, and 757-200CB series airplanes); or Boeing Special Attention Service Bulletin 757-28-0061, Revision 1 (for Boeing Model 757-300 series airplanes); all dated October 26, 2000; as applicable.

(1) For Boeing Model 737-300, 737-400, and 737-500 series airplanes: If any discontinuity is detected, prior to further flight, repair per Boeing Service Bulletin 737-28-1164.

(2) For airplane models other than those listed in paragraph (a)(1) of this AD: If any measurement is not between 21 and 34 volts direct current (DC), prior to further flight, repair per the applicable service bulletin.

Note 2: Tests accomplished per Boeing Special Attention Service Bulletin 737-28-1160 (for Boeing Model 737-600, 737-700, and 737-800 series airplanes), dated June 5, 2000; Boeing Special Attention Service Bulletin 757-28-0060 (for Boeing Model 757-200, 757-200PF, and 757-200CB series airplanes), dated June 15, 2000; or Boeing Special Attention Service Bulletin 757-28-0061, dated June 15, 2000 (for Boeing Model 757-300 series airplanes); as applicable; are acceptable for compliance with paragraph (a) of this AD.

Note 3: Tests accomplished prior to the effective date of this AD per Boeing All Base Telex M-7200-00-01064, dated April 24, 2000; Boeing Telex SWA-DAL-00-00182H, dated March 27, 2000; Boeing Telex CAL-IAH-00-00681H, dated April 7, 2000; Boeing All Base Telex M-7200-00-01231, dated May 31, 2000; or Boeing Telex AAL-AFW-00-00324H, dated March 27, 2000; are acceptable for compliance with paragraph (a) of this AD.

### **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) The actions shall be done in accordance with Boeing Special Attention Service Bulletin 737-28-1164, dated August 24, 2000; Boeing Service Bulletin 737-28-1164, Revision 1, dated May 10, 2001; Boeing Special Attention Service Bulletin 737-28-1160, Revision 1, dated October 26, 2000; Boeing Special Attention Service Bulletin 757-28-0060, Revision 1, dated October 26, 2000; or Boeing Special Attention Service Bulletin 757-28-0061, Revision 1, dated October 26, 2000; as applicable. 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 August 1, 2001.

Issued in Renton, Washington, on June 19, 2001.

Kalene C. Yanamura, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.