



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2008-0616; Directorate Identifier 2007-NM-353-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (NPRM); reopening of comment period.

SUMMARY: We are revising an earlier proposed airworthiness directive (AD) for all The Boeing Company Model 767 airplanes. That NPRM proposed to require repetitive operational tests of the engine fuel suction feed of the fuel system, and other related testing if necessary. That NPRM was prompted by reports of two in-service occurrences on Model 737-400 airplanes of total loss of boost pump pressure of the fuel feed system, followed by loss of fuel system suction feed capability on one engine, and in-flight shutdown of the engine. This action revises that NPRM by proposing to revise the maintenance program to incorporate a revision to the Airworthiness Limitations Section of the maintenance planning data (MPD) document, and to remove airplanes from the applicability. We are proposing this supplemental NPRM to detect and correct failure of the engine fuel suction feed capability of the fuel system, which could result in dual engine flameout, inability to restart the engines, and consequent forced landing of the airplane. Since these actions impose an additional burden over that proposed in the previous NPRM, we are reopening the comment period to allow the public the chance to comment on these proposed changes.

DATES: We must receive comments on this supplemental NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5280; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sue Lucier, Aerospace Engineer, Propulsion Branch, ANM-140S, 1601 Lind Avenue SW., Renton, Washington 98057-3352; phone: 425-917-6438; fax: 425-917-6590; email: suzanne.lucier@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2008-0616; Directorate Identifier 2007-NM-353-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We issued an NPRM to amend 14 CFR part 39 to include an AD that would apply to all The Boeing Company Model 767 airplanes. That NPRM published in the Federal Register on June 6, 2008 (73 FR 32252). That NPRM proposed to require repetitive operational tests of the engine fuel suction feed of the fuel system, and other related testing if necessary, according to a method approved by the FAA.

Actions Since Previous NPRM (73 FR 32252, June 6, 2008) was Issued

Since we issued the previous NPRM (73 FR 32252, June 6, 2008), we have received comments from operators indicating a high level of difficulty performing the actions in the previous NPRM during maintenance operations. It is standard practice for

operators to revise maintenance tasks to incorporate actions into their individual maintenance manuals as part of the maintenance program. Based on these comments, and a review of the previous NPRM, we determined a revision to the procedures was necessary. In conjunction with Boeing we developed an airworthiness limitation for the engine fuel suction feed system to address this issue.

Relevant Service Information

We reviewed Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D622T001-9, Revision October 2012 and Revision January 2013, of the Boeing 767 Maintenance Planning Data (MPD) Document. Among other things, Section 9 describes AWL No. 28-AWL-101, Engine Fuel Suction Feed Operational Test, of Section E., AWLS - Fuel Systems, which provides procedures for performing repetitive operational tests of the engine fuel suction feed of the fuel system.

Comments

We gave the public the opportunity to comment on the previous NPRM (73 FR 32252, June 6, 2008). The following presents the comments received on the previous NPRM and the FAA's response to each comment.

Request to Withdraw the Previous NPRM (73 FR 32252, June 6, 2008)

ABX Air asked that we withdraw the previous NPRM (73 FR 32252, June 6, 2008). ABX stated that there have been no incidents recorded in the NTSB or FAA databases for a Model 767 flameout due to the loss of fuel system suction feed capability. ABX added that it does not believe the subject unsafe condition is a critical safety concern.

We do not agree with the request to withdraw the previous NPRM (73 FR 32252, June 6, 2008), because, together with the manufacturer, we have evaluated this issue and determined it to be an important safety concern. Although the fuel system on Model 767 airplanes differs from the Model 737 with respect to the engine fuel feed system design,

service data of transport category airplanes indicates that multi-engine flameouts have generally resulted from a common cause, such as fuel mismanagement, crew action that inadvertently shut off the fuel supply to the engines, exposure to common environmental conditions, or engine deterioration on all engines of the same type. Successful in-flight restart of the engines is dependent on adequate fuel being supplied to the engines, solely through engine fuel suction feed. Deterioration of the fuel plumbing system can lead to line (vacuum) losses, reducing the engine fuel suction feed capability; therefore, directed maintenance is necessary to ensure this system is functioning correctly in order to maintain continued safe flight of the airplane. We have not changed the supplemental NPRM in this regard.

Request to Incorporate CMR Task into the Maintenance Program Instead of Issuing an NPRM

ABX, Japan Airlines International (JAL), and Qantas Airways Ltd. asked that a CMR task be developed for incorporation into the maintenance program instead of issuing an NPRM (73 FR 32252, June 6, 2008). The commenters stated that the maintenance program is already in use by operators and the procedures are understood and followed. Qantas added that the task associated with this action will generate an administrative burden for operators, with no benefit.

We do not agree with the requests to develop a CMR task. CMRs are developed by the Certification Maintenance Coordination Committee (CMCC) during the type certification process. The CMCC is made up of manufacturer representatives (typically maintenance, design, and safety engineering personnel), operator representatives designated by the Industry Steering Committee chairperson, FAA Aircraft Certification Office specialists, and the Maintenance Review Board (MRB) chairperson. CMRs developed during this process become a part of the certification basis of the airplane upon issuance of the type certificate. We do not have a process for convening the CMCC outside of the type certification process; based on this, the CMR is not an option for

replacing this AD. Therefore, if the airworthiness limitation items (ALIs) were not in the maintenance program at the time of initial certification, an AD is required to make the ALI task a required action. We have not changed the supplemental NPRM in this regard.

Requests to Allow the Use of Later Revisions of the Maintenance Documents

Air New Zealand (ANZ), ABX, Continental Airlines (CAL), and Boeing asked that we allow using later revisions of the referenced maintenance documents, because those documents could be revised over time and would require frequent requests for alternative methods of compliance (AMOCs).

We do not agree with the request. Allowing later revisions of service documents in an AD is not allowed by the Office of the Federal Register regulations for approving materials incorporated by reference. We have made no change to the supplemental NPRM in this regard.

Request to Clarify Reason for the Unsafe Condition

Boeing asked that we clarify the reason for the unsafe condition identified in the previous NPRM (73 FR 32252, June 6, 2008). Boeing asked that the AD include the results from a report of in-service occurrences of loss of fuel system suction feed capability on one engine, due to two in-service engine flameout events on a Model 737-400 airplane while operating on suction feed with undetected air leak failures. Boeing stated that there are no known reports of any engine flameout related to events on Model 767 airplanes. Boeing acknowledged that undetected air leaks could exist and that this maintenance procedure is a proactive measure to ensure engine flameout will not occur during suction feed operation.

We agree to clarify the unsafe condition. We have revised the Summary section and paragraph (e) of this supplemental NPRM accordingly.

Requests for Changes to Certain Maintenance Document References

JAL, ANZ, and Boeing asked that we remove the airplane maintenance manual

(AMM) reference to Section 28-22-00 specified in paragraph (f) of the previous NPRM (73 FR 32252, June 6, 2008). The commenters stated that the AMM is covered in Boeing 767 Task Card 28-020-02, and noted that having fewer references included lessens the chance of errors.

We acknowledge and agree with the commenters concerns regarding the maintenance documents referenced in the previous NPRM (73 FR 32253, June 6, 2008). However, these maintenance documents are not FAA-approved and we do not have the publication controls associated with AD-related service documents. We do not agree with the requested changes because we have decided to mandate an FAA-approved document which should eliminate these concerns. We changed paragraph (f) of the previous NPRM (paragraph (g) in this supplemental NPRM) to require revising the maintenance program to incorporate new procedures into the maintenance documents.

Requests to Extend Repetitive Test Intervals

CAL and Air Canada asked that we extend the repetitive operational test interval specified in paragraph (f) of the previous NPRM (73 FR 32252, June 6, 2008).

CAL stated that a re-evaluation of the proposed repetitive interval limit after doing the initial inspection should be done, since CAL's service history has revealed no reported engine flameout events or related operational discrepancies. CAL asked that the repetitive interval be extended to a normal maintenance 2C-check or within 12,000 flight hours, whichever occurs first.

Air Canada asked that the repetitive interval be extended to a calendar time of 24 months. Air Canada does not understand the logic behind a repetitive frequency of 7,500 flight hours.

We do not agree with the requests that the repetitive intervals be extended. In developing an appropriate compliance time for the actions specified in paragraph (g) of this supplemental NPRM (paragraph (f) of the previous NPRM (73 FR 32252, June 6,

2008)), we considered the safety implications and normal maintenance schedules for the timely accomplishment of the specified actions. We have determined that the proposed compliance time will ensure an acceptable level of safety and allow the actions to be done during scheduled maintenance intervals for most affected operators. However, affected operators may request an AMOC to request an extension of the repetitive operational test interval under the provisions of paragraph (h) of this supplemental NPRM by submitting data substantiating that the change would provide an acceptable level of safety. We have not changed the supplemental NPRM in this regard.

Request to Clarify That Engine Fuel Suction Feed Test is Allowed in Lieu of the Operational Test

JAL asked that we clarify that the engine fuel suction feed test procedure in the Boeing 767 Maintenance Planning Data (MPD) document is an option for performing the operational test in the previous NPRM (73 FR 32252, June 6, 2008). JAL asked that we consider adding the pressure leak check of the fuel lines and fittings procedure as an alternative procedure to performing the operational test specified in Section 28-22-00 of the Boeing 767 Aircraft Maintenance Manual (AMM).

We agree to provide clarification. The pressure leak check is not equivalent to the operational test (Task 28-22-00-710-802) since certain fuel line seal details may function normally under positive pressure, but fail to hold in-line vacuum when under fuel suction feed. Additionally, a fuel suction feed test would be required after reconnecting the fuel line to the manifold to verify final system integrity. Therefore, we have not changed the supplemental NPRM in this regard.

Request to Include Warning Information

CAL suggested that the Boeing service manuals include a critical design configuration control limitation (CDCCL) warning identification statement to alert maintenance personnel of the importance of regulatory compliance, as well as the configuration control requirement. CAL did not include any justification for this request.

We agree that a CDCCL warning statement would serve as direct communication to maintenance personnel that there is an AD associated with certain maintenance actions. New service information has been added to this supplemental NPRM since issuance of the previous NPRM (73 FR 32252, June 6, 2008), which should eliminate the commenter's concern. The airplane maintenance manual will be a "referred to" document within the AWL task, which gives operators flexibility in developing maintenance programs based on equivalent procedures. We have made no change to the supplemental NPRM in this regard.

Request to Include Corrective Action

CAL asked that the related testing language specified in paragraph (f) of the previous NPRM (73 FR 32252, June 6, 2008) be changed. CAL stated that the language should specify correcting discrepancies before further flight if the engine fails the operational test. CAL added that the corrective actions should be done in accordance with the procedures in the "Right (Left) Engine Fails the Suction Feed Test" procedure in the Boeing 767 Fault Isolation Manual (FIM) 28-22-00/101.

We acknowledge and agree with the commenters concern. However, as stated previously, we are issuing this supplemental NPRM to revise the maintenance program to incorporate a revision to the Airworthiness Limitations Section of the MPD document to include the "Engine Fuel Suction Feed Operational Test" procedure. Therefore, the language identified by the commenter has been removed from this supplemental NPRM. We have made no change to the supplemental NPRM in this regard.

FAA's Determination

We are proposing this supplemental NPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. Certain changes described above expand the scope of the previous NPRM (73 FR 32252, June 6, 2008). As a result, we

have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this supplemental NPRM.

Proposed Requirements of the Supplemental NPRM

This supplemental NPRM revises the previous NPRM (73 FR 32252, June 6, 2008) by proposing to remove the actions in paragraph (f) of the previous NPRM and replace with a revision to the maintenance program to incorporate procedures for the Engine Fuel Suction Feed Operational Test Airworthiness Limitations Section of the MPD document, and to remove airplanes from the applicability.

This AD requires revisions to certain operator maintenance documents to include new actions (e.g., inspections) and/or CDCCLs. Compliance with these actions and/or CDCCLs is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by this AD, the operator may not be able to accomplish the actions described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance according to paragraph (i)(1) of this AD. The request should include a description of changes to the required actions that will ensure the continued operational safety of the airplane.

Costs of Compliance

We estimate that this proposed AD affects 406 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Revise airworthiness limitations	1 work-hour X \$85 per hour = \$85	\$0	\$85	\$34,510

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs" describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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.

For the reasons discussed above, I certify 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),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2008-0616; Directorate Identifier 2007-NM-353-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 767-200, -300, -300F, and -400ER series airplanes, certificated in any category, that have received a certificate of airworthiness or foreign export before November 2, 2012.

Note 1 to paragraph (c) of this AD: November 2, 2012, is the original publication date of Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), D622T001-9, Revision October 2012, of the Boeing 767 Maintenance Planning Data (MPD) Document, or Revision January 2013 of the Boeing 767 Maintenance Planning Data (MPD) Document; including Airworthiness Limitations

(AWLS) – Fuel Systems of Airworthiness Limitation (AWL) No. 28-AWL-101, Engine Fuel Suction Feed Operational Test.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2800, Aircraft Fuel System.

(e) Unsafe Condition

This AD results from reports of two in-service occurrences on Model 737-400 airplanes of total loss of boost pump pressure of the fuel feed system, followed by loss of fuel system suction feed capability on one engine, and in-flight shutdown of the engine. We are issuing this AD to detect and correct failure of the engine fuel suction feed capability of the fuel system, which could result in dual engine flameout, inability to restart the engines, and consequent forced landing of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Maintenance Program Revision

Within 90 days after the effective date of this AD: Revise the maintenance program to incorporate AWL No. 28-AWL-101, Engine Fuel Suction Feed Operational Test, of Section E., AWLS – Fuel Systems of Section 9, AWLs and CMRs, D622T001-9, Revision October 2012 or Revision January 2013, of the Boeing 767 MPD Document.

(h) No Alternative Actions, Intervals, and/or Critical Design Configuration Control Limitations (CDCCLs)

After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., tests), intervals, or CDCCLs may be used unless the actions, intervals, or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (i) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to:

9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) For more information about this AD, contact Sue Lucier, Aerospace Engineer, Propulsion Branch, ANM-140S, 1601 Lind Avenue SW., Renton, Washington 98057-3352; phone: 425-917-6438; fax: 425-917-6590; email: suzanne.lucier@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5280; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service

information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on July 21, 2013.

Stephen P. Boyd,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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