

Proposed Rules

Federal Register

Vol. 74, No. 109

Tuesday, June 9, 2009

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0521; Directorate Identifier 2008-NM-187-AD]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 737-300, -400, and -500 Series Airplanes Equipped With a Digital Transient Suppression Device (DTSD) Installed in Accordance With Supplemental Type Certificate (STC) ST00127BO

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Boeing Model 737-300, -400, and -500 series airplanes. This proposed AD would require revising the maintenance program to include new fuel system limitations for airplanes modified in accordance with STC ST00127BO. This AD also requires inspections and checks of the DTSDs and corrective actions, if necessary. This proposed AD results from fuel system reviews conducted by the manufacturer. We are proposing this AD to prevent a potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in a fuel tank fire or explosion and consequent loss of the airplane.

DATES: We must receive comments on this proposed AD by July 24, 2009.

ADDRESSES: You may send comments 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 AD, contact Goodrich Corporation, Fuel and Utility Systems, 100 Pantan Road, Vergennes, Vermont 05491-1008; telephone 802-877-4476; e-mail lgd.TechPubs.Oakville@goodrich.com; Internet <http://www.goodrich.com/TechPubs>. 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 or 425-227-1152.

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 (telephone 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Marc Ronell, Aerospace Engineer, ANE-150, FAA, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (781) 238-7776; fax (781) 238-7170.

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-2009-0521; Directorate Identifier 2008-NM-187-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

The FAA has examined the underlying safety issues involved in fuel tank explosions on several large transport airplanes, including the adequacy of existing regulations, the service history of airplanes subject to those regulations, and existing maintenance practices for fuel tank systems. As a result of those findings, we issued a regulation titled "Transport Airplane Fuel Tank System Design Review, Flammability Reduction and Maintenance and Inspection Requirements" (66 FR 23086, May 7, 2001). In addition to new airworthiness standards for transport airplanes and new maintenance requirements, this rule included Special Federal Aviation Regulation No. 88 ("SFAR 88," Amendment 21-78, and subsequent Amendments 21-82 and 21-83).

Among other actions, SFAR 88 requires certain type design (*i.e.*, type certificate (TC) and supplemental type certificate (STC)) holders to substantiate that their fuel tank systems can prevent ignition sources in the fuel tanks. This requirement applies to type design holders for large turbine-powered transport airplanes and for subsequent modifications to those airplanes. It requires them to perform design reviews and to develop design changes and maintenance procedures if their designs do not meet the new fuel tank safety standards. As explained in the preamble to the rule, we intended to adopt airworthiness directives to mandate any changes found necessary to address unsafe conditions identified as a result of these reviews.

In evaluating these design reviews, we have established four criteria intended to define the unsafe conditions associated with fuel tank systems that require corrective actions. The percentage of operating time during which fuel tanks are exposed to flammable conditions is one of these criteria. The other three criteria address the failure types under evaluation: single failures, single failures in combination with another latent

condition(s), and in-service failure experience. For all four criteria, the evaluations included consideration of previous actions taken that may mitigate the need for further action.

We have determined that revising the maintenance program to include new fuel system limitations for airplanes modified in accordance with Supplemental Type Certificate (STC) ST00127BO are necessary to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

Relevant Service Information

We have reviewed Goodrich Instructions for Continued Airworthiness (ICA) for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007. The ICA includes Section 2.2.3, "Scheduled Inspections/Operational Checks," and Section 10.1, "Fuel System Limitations" (hereafter referred to as "the instructions"). These fuel system limitations are identified as critical design configuration control limitations (CDCCLs), which are limitation requirements to preserve a critical ignition source prevention feature of the fuel tank system design that is necessary to prevent the occurrence of an unsafe condition. The purpose of a CDCCL is to provide instructions to retain the critical ignition source prevention feature during configuration changes that may be caused by alterations, repairs, or maintenance actions. A CDCCL is not a periodic inspection.

The scheduled inspections/operational checks are periodic inspections/checks of certain features for latent failures that could contribute to an ignition source. The instructions describe the following procedures to detect discrepancies of the following

components of the left wing, right wing, and center tanks:

- *Digital transient suppression devices (DTSD)*: Initial operational check.

- *DTSD safe-side harnesses*:

Inspection for critical bond damage, which includes measuring the bonding resistance across the ground strap and verifying the resistance is less than 2.0 milliohms.

- *DTSD safe-side harnesses*:

Inspection for physical separation of the harness from other airplane wiring, hydraulic tubing, structure, control cables, and bleed air ducts. Separation is required to ensure that threat conditions do not develop that could compromise the safety of the wiring entering the fuel tank.

Accomplishing the actions specified in the service information is intended to adequately address the unsafe condition.

FAA's Determination and Requirements of This Proposed AD

We are proposing this AD because we evaluated all relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. This proposed AD would require revising the maintenance program to include the scheduled inspections/operational checks specified in Section 2.2.3 and the fuel system limitations specified in Section 10.1 of the Goodrich ICA for airplanes modified in accordance with STC ST00127BO, and accomplishing the actions specified in the scheduled inspections/operational checks and the CDCCLs described previously, except as described below in "Differences Between the Instructions and This Proposed AD."

Differences Between the Instructions and This Proposed AD

The instructions do not specify an initial compliance time for doing the

scheduled inspections/operational checks. This proposed AD would require an operational check of the DTSDs prior to the accumulation of 39,000 flight hours after modification in accordance with STC ST00127BO, or within 12 months, whichever occurs later. This proposed AD would require a general visual inspection for critical bond damage of the DTSD safe-side harnesses (critical bond damage includes measuring the bonding resistance across the ground strap and verifying the resistance is less than 2.0 milliohms) prior to the accumulation of 4,000 flight hours after modification in accordance with STC ST00127BO, or within 6 months, whichever occurs later. This proposed AD would also require a general visual inspection for physical separation of the DTSD safe-side harnesses from other airplane wiring, hydraulic tubing, structure, control cables, and bleed air ducts prior to the accumulation of 24,000 flight hours after modification in accordance with STC ST00127BO, or within 12 months, whichever occurs later.

The instructions also do not specify corrective actions if any discrepancy is found. This proposed AD would require that if any discrepancy is found, applicable corrective actions must be done in accordance with the applicable section of the Goodrich Aircraft Maintenance Manual (AMM) Supplement with Wiring Diagrams for 737-300/-400/-500 FQIS with Goodrich Digital Indicators and Transient Suppression Device, STC Number: STC ST00127BO, Revision 5, dated December 20, 2006, as specified in the instructions.

Costs of Compliance

We estimate that this proposed AD would affect 12 airplanes of U.S. registry. The following table provides the estimated costs for U.S. operators to comply with this proposed AD. The average labor rate is \$80 per work hour.

ESTIMATED COSTS

Action	Work hours	Cost per product (\$)	Fleet cost (\$)
Revision to maintenance program	8	640	7,680
Operational check, per cycle	1	80	960
Bond damage inspection, per cycle	1	80	960
Separation inspection, per cycle	1	80	960

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), 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.

You can find our regulatory evaluation and the estimated costs of compliance in the AD Docket.

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 AD:

Boeing: Docket No. FAA-2009-0521;
Directorate Identifier 2008-NM-187-AD.

Comments Due Date

- (a) We must receive comments by July 24, 2009.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Boeing Model 737-300, -400, and -500 series airplanes, certificated in any category, equipped with a digital transient suppression device (DTSD) installed in accordance with Supplemental Type Certificate (STC) STC ST00127BO.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections 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 (m) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Subject

(d) Air Transport Association (ATA) of America Code 28: Fuel.

Unsafe Condition

(e) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent a potential of ignition sources inside fuel tanks, which in combination with flammable fuel vapors, could result in a fuel tank fire or explosion and consequent loss of the airplane.

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

Revision to the Maintenance Program To Add CDCCLs

(g) Within 30 days after the effective date of this AD, revise the maintenance program to incorporate the fuel system limitations specified in Section 10.1 of the Goodrich Instructions for Continued Airworthiness (ICA) for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007.

Revision to the Maintenance Program To Add Scheduled Inspections/Operational Checks

(h) Within 30 days after the effective date of this AD: Revise the maintenance program to incorporate the scheduled inspections/operational checks specified in Section 2.2.3 of the Goodrich ICA for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007; except that the initial inspections/checks required by paragraphs (i), (j), and (k) of this AD must be done at the compliance times specified in those paragraphs. Repeat the inspections/checks thereafter at the applicable compliance times in the column, "Frequency," of the table specified in Section 2.2.3 of the Goodrich ICA for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007.

Initial Inspections and Repair if Necessary

(i) Prior to the accumulation of 39,000 flight hours after modification in accordance with STC ST00127BO, or within 12 months after the effective date of this AD, whichever occurs later: Do an operational check of the digital transient suppression devices (DTSD) in accordance with Section 2.2.3., "Scheduled Inspections/Operational Checks," of the Goodrich ICA, for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007. If the DTSD fails the operational check, repair before further flight in accordance with the section of the Goodrich Aircraft Maintenance Manual (AMM) Supplement with Wiring Diagrams for 737-300/-400/-500 FQIS with Goodrich Digital Indicators and Transient Suppression Device, STC Number: STC ST00127BO, Revision 5, dated December 20, 2006, that corresponds to the operational check specified in Goodrich ICA for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007.

(j) Prior to the accumulation of 4,000 flight hours after modification in accordance with STC ST00127BO, or within 6 months after the effective date of this AD, whichever occurs later: Do a general visual inspection for critical bond damage of the DTSD safe-side harnesses (critical bond damage includes measuring the bonding resistance across the ground strap and verifying the resistance is less than 2.0 milliohms), in accordance with Section 2.2.3., "Scheduled Inspections/Operational Checks," of Goodrich ICA for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007, which includes Items 5, 6, 7, and 8 of Table 6 in Section 10.1, "Fuel System Limitations." If any damage is found, repair before further flight in accordance with the section of the Goodrich Aircraft Maintenance Manual Supplement with Wiring Diagrams for 737-300/-400/-500 FQIS with Goodrich Digital Indicators and Transient Suppression Device, STC Number: STC ST00127BO, Revision 5, dated December 20, 2006, that corresponds to the general visual inspection specified in Goodrich ICA for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007.

(k) Prior to the accumulation of 24,000 flight hours after modification in accordance with STC ST00127BO, or within 12 months after the effective date of this AD, whichever occurs later: Do a general visual inspection for physical separation of the DTSD safe-side harnesses from other airplane wiring, hydraulic tubing, structure, control cables, and bleed air ducts, in accordance with Section 2.2.3., "Scheduled Inspections/Operational Checks," of the Goodrich ICA for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007. If any damage is found, repair before further flight in accordance with the section of the Goodrich Aircraft Maintenance Manual Supplement with Wiring Diagrams for 737-300/-400/-500 FQIS with Goodrich Digital Indicators and Transient Suppression Device, STC Number: STC ST00127BO, Revision 5, dated

December 20, 2006, that corresponds to the general visual inspection specified in Goodrich ICA for Boeing Model 737-300/400/500 Airplanes, Document T2007-0010-0101, Revision D, dated January 16, 2007.

No Alternative Inspections/Checks, Inspection/Check Intervals, or CDCCLs

(l) After accomplishing the actions specified in paragraphs (g) and (h) of this AD, no alternative inspections/checks, inspection/check intervals, or CDCCLs may be used unless the inspections/checks, intervals, or CDCCLs are approved as an Alternative Method of Compliance (AMOC) in accordance with the procedures specified in paragraph (m) of this AD.

AMOCs

(m)(1) The Manager, Boston 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. Send information to ATTN: Marc Ronell, Aerospace Engineer, ANE-150, FAA, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, Massachusetts 01803; telephone (781) 238-7776; fax (781) 238-7170.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

Issued in Renton, Washington, on June 2, 2009.

Stephen P. Boyd,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-13494 Filed 6-8-09; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2009-0522; Directorate Identifier 2008-NM-127-AD]

RIN 2120-AA64

Airworthiness Directives; 328 Support Services GmbH Dornier Model 328-100 and -300 Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for the products listed above that would supersede an existing AD. This proposed AD results from mandatory

continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

* * * A number of * * * rudder spring tab lever assemblies [of the rudder] were found cracked.

This condition, if not corrected, could lead to failure of the rudder flight control system and consequent loss of control of the aircraft.

* * *

The proposed AD would require actions that are intended to address the unsafe condition described in the MCAI.

DATES: We must receive comments on this proposed AD by July 9, 2009.

ADDRESSES: You may send comments 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, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact 328 Support Services GmbH, Global Support Center, P.O. Box 1252, D-82231 Wessling, Federal Republic of Germany; telephone +49 8153 88111 6666; fax +49 8153 88111 6565; e-mail

gsc.op@328support.de; Internet <http://www.328support.de>. 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 or 425-227-1152.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office 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 Operations office (telephone (800) 647-5527) is in the **ADDRESSES** section. Comments will

be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149.

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-2009-0522; Directorate Identifier 2008-NM-127-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 based on 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

On April 26, 2004, we issued AD 2004-09-16, Amendment 39-13605 (69 FR 24953, May 5, 2004). (A correction of that AD was published in the **Federal Register** on May 12, 2004 (69 FR 26434)). That AD required actions intended to address an unsafe condition on the products listed above.

Since we issued AD 2004-09-16, we have determined that it is necessary to reduce the repetitive interval and require the replacement of certain rudder spring tab lever assemblies.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2008-0107, dated June 23, 2008 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

On 14 March 2002, an incident occurred with a Dornier 328-100 where the captain reported that the rudder was unresponsive. The aircraft landed without any further difficulties. A visual inspection of the rudder assembly was carried out and the spring tab assembly was found to be cracked and partially missing. During subsequent inspections of other aircraft, a number of additional rudder spring tab lever assemblies were found cracked.

This condition, if not corrected, could lead to failure of the rudder flight control system