DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Short Brothers PLC Model SD3 Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

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

SUMMARY: We are revising an earlier NPRM for the products listed above. This action revises the earlier NPRM by expanding the scope. 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:

Subsequent to accidents involving Fuel Tank System explosions in flight * * * and on ground, * * * Special Federal Aviation Regulation 88 (S FAR 88) * * * required a safety review of the aircraft Fuel Tank System * * *.

* * * * *

Fuel Airworthiness Limitations are items arising from a systems safety analysis that have been shown to have failure mode(s) associated with an ‘unsafe condition’ * * * *.

These are identified in Failure Conditions for which an unacceptable probability of ignition risk could exist if specific tasks and/or practices are not performed in accordance with the manufacturers’ requirements.

* * * * *

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 August 30, 2010.

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, Room W12–40, 1200 New Jersey Avenue, SE., Washington, DC 20590.

• Hand Delivery: U.S. Department of Transportation, Docket Operations, Room W12–40, 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 Short Brothers PLC, Airworthiness, P.O. Box 241, Airport Road, Belfast, BT3 9DZ, Northern Ireland; telephone +44(0)2890–462469; fax +44(0)2890–468444; e-mail michael.mulholland @aero.bombardier.com; Internet http://www.bombardier.com. You may view 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 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.


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–2010–0225; Directorate Identifier 2009–NM–203–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

We proposed to amend 14 CFR part 39 with an earlier NPRM for the specified products, which was published in the Federal Register on March 15, 2010 (75 FR 12154). That earlier NPRM proposed to supersede AD 2006–12–18, Amendment 39–14644 (71 FR 34801, June 16, 2006), to require actions intended to address the unsafe condition for the products listed above. Since that NPRM was issued, we have determined that the original NPRM did not include all the relevant service information for the affected airplanes.

Relevant Service Information

Bombardier has issued the temporary revisions (TRs) listed in the following table.
The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

Comments
We have considered the following comments received on the earlier NPRM.

Request To Include Additional Service Information
Bombardier requests that we add the TRs specified in the previous table to Table 3 of the NPRM.
We agree and have revised this supplemental NPRM accordingly.

Request To Revise Costs of Compliance
Bombardier requests that we revise the costs of compliance to account for any Model SD3–30 airplanes.
We agree that clarification may be necessary. The Costs of Compliance section accounts for 54 U.S.-registered airplanes, all of which are operated as transport category airplanes, not military airplanes.

Request To Remove Reference to Fuselage Pressure Shell
Bombardier requests that we revise paragraph (h) of the NPRM to remove reference to “longitudinal skin joints in the fuselage pressure shell.” Bombardier notes that this statement is erroneous because the Model SD3 airplanes are not pressurized.
We agree with the request and have removed “pressure” from the statement from paragraph (h) of this supplemental NPRM.

FAA’s Determination and Requirements of This Proposed AD
This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.
Certain changes described above expand the scope of the earlier NPRM. 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 proposed AD.

Differences Between This AD and the MCAI or Service Information
We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.
We might also have proposed different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are highlighted in a Note within the proposed AD.

Costs of Compliance
Based on the service information, we estimate that this proposed AD would affect about 54 products of U.S. registry.
The actions that are required by AD TR330–AMM–35 are similar to the A320 series and can be performed at the MRO facility. The operator is required to perform work at the MRO facility and then submit the maintenance record to the FAA. The work required is similar to the A320 series and can be performed at the MRO facility.

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.
We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it 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:


Comments Due Date

(a) We must receive comments by August 30, 2010.

Affected ADs

(b) This AD supersedes AD 2006–12–18, Amendment 39–7444.

Applicability

(c) This AD applies to all Shorts Brothers PLC Model SD3–60 SHERPA, SD3–SHERPA, SD3–30, and SD3–60 airplanes, certificated in any category.

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 (l) of this AD. The request should include a description of changes to the required inspections that will ensure the continued damage tolerance of the affected structure. The FAA has provided guidance for this determination in Advisory Circular (AC) 25–1529.

Subject

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

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

Subsequent to accidents involving Fuel Tank System explosions in flight * * * and on ground, the FAA published Special Federal Aviation Regulation 88 (SFAR88) in June 2001. SFAR 88 required a safety review of the aircraft Fuel Tank System to determine that the design meets the requirements of FAR [Federal Aviation Regulation] § 25.901 and § 25.981(a) and (b).

A similar regulation has been recommended by the JAA [Joint Aviation Authorities] to the European National Aviation Authorities in FAA letter 04/00/02/07/03–L024 of 3 February 2003. The review was requested to be mandated by NAA’s [National Airworthiness Authorities] using JAR [Joint Aviation Requirement] § 25.901(c), § 25.1309.

In August 2005 EASA [European Aviation Safety Agency] published a policy statement on the process for developing instructions for maintenance and inspection of Fuel Tank System ignition source prevention (EASA D 2005/CFPRO. http://www.easa.eu.int/home/cert_policy_statements_en.html) that also included the EASA expectations with regard to compliance times of the corrective actions on the unsafe and the not unsafe part of the harmonised design review results. On a global scale the TC [type certificate] holders committed themselves to the EASA published compliance dates (see EASA policy statement). The EASA policy statement has been revised in March 2006: The date of 31–12–2005 for the unsafe related actions has now been set at 01–07–2006.

Fuel Airworthiness Limitations are items arising from a systems safety analysis that have been shown to have failure mode(s) associated with an ‘unsafe condition’ as defined in FAA’s memo 2003–112–15 ‘SFAR 88—Mandatory Action Decision Criteria’. These are identified in Failure Conditions for which an unacceptable probability of ignition risk could exist if specific tasks and/or practices are not performed in accordance with the manufacturers’ requirements.

This EASA Airworthiness Directive mandates the Fuel System Airworthiness Limitations, comprising maintenance/inspection tasks and Critical Design Control Limitations (CDCCL) for the type of aircraft, that resulted from the design reviews and the FAA recommendation and EASA policy statement mentioned above.

Revision History: PAD [proposed airworthiness directive] 06–018R1 has been issued to endorse comments received for PAD 06–018 and due to the change of the EASA policy statement on fuel tank safety on March 2006.

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.

Restatement of Requirements of AD 2006–12–18, With Revised Service Information

Revision of Airplane Flight Manual (AFM) With Additional AFM References in Table 1 of This AD

(g) Within 30 days after July 21, 2006 (the effective date of AD 2006–12–18), revise the Limitations and Normal Procedures sections of the AFMs as specified in Table 1 of this AD to include the information in the applicable Shorts advance amendment bulletins as specified in Table 1 of this AD. The advance amendment bulletins address operation during icing conditions and fuel system failures. Thereafter, operate the airplane according to the limitations and procedures in the applicable advance amendment bulletin.

Note 2: The requirements of paragraph (g) of this AD may be done by inserting a copy of the applicable advance amendment bulletin into the AFM. When the applicable advance amendment bulletin has been included in general revisions of the AFM, the general revisions may be inserted into the AFM and the advance amendment bulletin may be removed, provided the relevant information in the general revision is identical to that in the advance amendment bulletin.

Revision of Airworthiness Limitation (AWL) Section

(h) Within 180 days after July 21, 2006: Revise the AWL section of the Instructions for Continued Airworthiness by incorporating airplane maintenance manual (AMM) Sections 5–20–01 and 5–20–02 as introduced by the Shorts temporary revisions (TR) specified in Table 2 of this AD into the AWL section of the AMMs for the airplane models specified in Table 2 of this AD, except as required by paragraph (j) of this AD. Thereafter, except as provided by paragraph (l)(1) of this AD, no alternative structural inspection intervals may be approved for the longitudinal skin joints in the fuselage shell.

Note 3: The requirements of paragraph (h) of this AD may be done by inserting a copy of the applicable TR into the applicable AMM. When the TR has been inserted in general revisions of the AMM, the general revisions may be inserted in the AMM and the TR may be removed, provided the relevant information in the general revision is identical to that in the TR.

Table 1—AFM Revisions

<table>
<thead>
<tr>
<th>Airplane Model—</th>
<th>Shorts Advance Amendment Bulletin—</th>
<th>AFM—</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD3–30 airplanes</td>
<td>1/2004, dated July 13, 2004</td>
<td>SBH.3.2, SBH.3.3, SBH.3.6, SBH.3.7, SBH.3.8, and SBH.3.9, SB.4.3, SB.4.6, and SB.4.8</td>
</tr>
<tr>
<td>SD3–60 airplanes</td>
<td>1/2004, dated July 13, 2004</td>
<td>SB.5.2 or 6.2, SB.6.2 or 5.2.</td>
</tr>
<tr>
<td>SD3–60 SHERPA airplanes</td>
<td>1/2004, dated July 13, 2004</td>
<td></td>
</tr>
<tr>
<td>SD3–SHERPA airplanes</td>
<td>1/2004, dated July 13, 2004</td>
<td></td>
</tr>
</tbody>
</table>
Resistance Check, Inspection, and Jumper Installation

(i) Within 180 days after July 21, 2006: Perform the insulation resistance check, general visual inspections, and bonding jumper wire installations; in accordance with Shorts Service Bulletin SD330–28–37, SD360–28–23, SD360 SHERPA–28–3, or SD3 SHERPA–28–2; all dated June 2004; as applicable. If any defect or damage is discovered during any inspection or check required by this AD, before further flight, repair the defect or damage using a method approved by the Manager, International Branch, ANM–116, Transport Airplane Directorate, FAA; the Civil Aviation Authority (CAA) (or its delegated agent); or EASA (or its delegated agent).

Note 4: For the purposes of this AD, a general visual inspection is: “A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to ensure visual access to all surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked.”

New Requirements of This AD

Revision of AWL Section: New Limitations and CDCCLs

(j) Within 90 days after the effective date of this AD: Revise the AWL section of the Instructions for Continued Airworthiness by incorporating aircraft maintenance manual (AMM) Sections 5–20–01 and 5–20–02 as introduced by the Bombardier and Shorts temporary revisions (TRs) specified in Table 3 of this AD into the AWL section of the AMMs for the airplane models specified in Table 3 of this AD. Doing this revision terminates the requirement to incorporate the temporary revisions specified in paragraph (h) of this AD. After doing this revision the temporary revisions required by paragraph (h) of this AD may be removed.

### Table 2—AMM Temporary Revisions

<table>
<thead>
<tr>
<th>Airplane model—</th>
<th>Temporary revision—</th>
<th>Dated—</th>
<th>AMM—</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD3–60 airplanes</td>
<td>TR360–AMM–32</td>
<td>July 27, 2004</td>
<td>SD3–60 AMM.</td>
</tr>
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<td>SD3–60 airplanes</td>
<td>TR360–AMM–33</td>
<td>July 27, 2004</td>
<td>SD3–60 AMM.</td>
</tr>
<tr>
<td>SD3–60 SHERPA airplanes</td>
<td>TRSD360S–AMM–14</td>
<td>July 29, 2004</td>
<td>SD3–60 SHERPA AMM.</td>
</tr>
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<td>SD3–60 SHERPA airplanes</td>
<td>TRSD360S–AMM–15</td>
<td>July 29, 2004</td>
<td>SD3–60 SHERPA AMM.</td>
</tr>
<tr>
<td>SD3–SHERPA airplanes</td>
<td>TRSD3S–AMM–15</td>
<td>July 28, 2004</td>
<td>SD3 SHERPA AMM.</td>
</tr>
<tr>
<td>SD3–SHERPA airplanes</td>
<td>TRSD3S–AMM–16</td>
<td>July 28, 2004</td>
<td>SD3 SHERPA AMM.</td>
</tr>
</tbody>
</table>

### Table 3—AMM Temporary Revisions

<table>
<thead>
<tr>
<th>Model—</th>
<th>Temporary revision —</th>
<th>Dated—</th>
<th>To this AMM—</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD3–SHERPA airplanes ...</td>
<td>Shorts TR TRSD3S–AMM–36 ..........</td>
<td>June 19, 2006</td>
<td>Shorts SD3–SHERPA MM.</td>
</tr>
<tr>
<td>SD3–SHERPA airplanes ...</td>
<td>Shorts TR TRSD3S–AMM–37 ..........</td>
<td>June 19, 2006</td>
<td>Shorts SD3–SHERPA MM.</td>
</tr>
</tbody>
</table>

Note 5: The requirements of paragraph (j) of this AD may be done by inserting a copy of the applicable TR into the applicable AMM. When the TR has been included in general revisions of the AMM, the general revisions may be inserted in the AMM and the TR may be removed, provided the relevant information in the general revision is identical to that in the TR.

(k) After accomplishing the actions specified in paragraph (j) of this AD, no alternative inspections, inspection intervals, or CDCCLs may be used unless the inspections, intervals, or CDCCLs are approved as an alternative method of compliance (AMOC), in accordance with the procedures specified in paragraph (l) of this AD.

Explanation of CDCCL Requirements

Note 6: Notwithstanding any other maintenance or operational requirements, components that have been identified as airworthy or installed on the affected airplanes before the revision of the AMM, as required by paragraph (h) or (j) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the AMM has been revised, future maintenance actions on these components must be done in accordance with the CDCCLs.

FAA AD Differences

Note 7: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(l) The following provisions also apply to this AD:

1. **Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM–116, Transport Airplane Directorate, 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: Todd Thompson, Aerospace Engineer, International Branch, ANM–116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW, Renton, Washington 98057–3356; telephone (425) 227–1175; fax (425) 227–1149. 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.

2. **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

3. **Reporting Requirements:** For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of
**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

14 CFR Part 39


**RIN 2120–AA64**

Airworthiness Directives; The Boeing Company Model 747 Airplanes and Model 767 Airplanes Equipped With General Electric Model CF6–80C2 or CF6–80A Series Engines

**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 certain Model 747 airplanes and Model 767 airplanes. The original NPRM would have required revising the airplane flight manual (AFM) to advise the flightcrew to use certain procedures during descent in certain icing conditions. The original NPRM resulted from reports of several in-flight engine flameouts, including multiple dual engine flameout events and one total power loss event, in ice-crystal icing conditions. This action revises the original NPRM by revising the text of the proposed AFM revision. We are proposing this supplemental NPRM to ensure that the flightcrew has the proper procedures to follow in certain icing conditions. These certain icing conditions could cause a multiple engine flameout during flight with the potential inability to restart the engines, and consequent forced landing of the airplane.

**DATES:** We must receive comments on this supplemental NPRM by August 30, 2010.

**ADDRESSES:** You may send comments by any of the following methods:

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.

**Examiner 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:**


**SUPPLEMENTAL 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–2008–0402; Directorate Identifier 2007–NM–165–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 a notice of proposed rulemaking (NPRM) (the “original NPRM”) to amend 14 CFR part 39 to include an airworthiness directive (AD) that would apply to certain Model 747 airplanes and Model 767 airplanes. That original NPRM was published in the Federal Register on April 7, 2008 (73 FR 18721). That original NPRM proposed to require revising the airplane flight manual (AFM) to advise the flightcrew to use certain procedures during descent in certain icing conditions.

**Actions Since Original NPRM Was Issued**

Since we issued the original NPRM, we have received a report of another significant flameout event on a Model 747 airplane. As a result of this latest event, Boeing has revised the AFM instructions to include the activation of wing anti-ice for those altitudes where wing anti-ice can be used while still ensuring that other systems that use bleed air are adequately supplied with bleed air. Therefore, we have revised the AFM text specified in paragraph (g) of this supplemental NPRM to include this new text.

**Other Relevant Rulemaking**

Related NPRM, Docket FAA–2008–0403, Directorate Identifier 2007–NM–166–AD (73 FR 18719, April 7, 2008), proposed to require similar actions for Model MD–11 and MD–11F airplanes, certified in any category, equipped with General Electric (GE) CF6–80C2 series engines. These airplanes have been determined to be subject to the identified unsafe condition addressed in this supplemental NPRM.

**Support for the Original NPRM**

The Air Line Pilots Association, International supports the intent and language of the original NPRM. The National Transportation Safety Board (NTSB), based on the success of similar AFM requirements to address this unsafe condition on Hawker Beechcraft Corporation Model 400, 400A, and 400T series airplanes, and Model MU–300 airplanes, supports the adoption of the proposed requirements.