

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

[Docket No. 99-NM-29-AD; Amendment 39-11345; AD 99-21-02]

RIN 2120-AA64

**Airworthiness Directives; Short Brothers Model SD3-30, SD3-60, SD3-SHERPA, and SD3-60 SHERPA Series Airplanes**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to all Short Brothers Model SD3-30, SD3-60, SD3-SHERPA, and SD3-60 SHERPA series airplanes, that requires detailed visual and borescopic inspections to detect corrosion of the engine mounting tube assembly, and replacement of corroded parts with new or serviceable parts. This amendment is prompted by issuance of mandatory continuing airworthiness information by a foreign civil airworthiness authority. The actions specified by this AD are intended to prevent failure of the engine mounting tube assembly, which could result in loss of the engine in flight.

**DATES:** Effective November 5, 1999.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of November 5, 1999.

**ADDRESSES:** The service information referenced in this AD may be obtained from Short Brothers, Airworthiness & Engineering Quality, P.O. Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland. 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:** Norman B. Martenson, Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2110; fax (425) 227-1149.

**SUPPLEMENTARY INFORMATION:** 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 all Short Brothers Model SD3-30, SD3-60, SD3-SHERPA, and SD3-60 SHERPA series airplanes

was published in the **Federal Register** on June 28, 1999 (64 FR 34582). That action proposed to require detailed visual and borescopic inspections to detect corrosion of the engine mounting tube assembly, and replacement of corroded parts with new or serviceable parts.

**Comments Received**

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

**Request To Extend Compliance Time**

The manufacturer requests that the FAA extend the proposed compliance time from 6 months to 9 months. The manufacturer supports its request based on the results of an airframe structural analysis, ongoing inspections, and the Civil Aviation Authority of the United Kingdom's acceptance of the 3-month extension. The FAA has reviewed the data presented by the manufacturer and concurs with the request. The final rule has been revised accordingly.

**Explanation of Additional Change to Proposal**

The FAA has added a note to the final rule to clarify the definition of a detailed visual inspection.

**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 described previously. 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**

The FAA estimates that 137 Model SD3-30, SD3-60, SD3-SHERPA, and SD3-60 SHERPA series airplanes of U.S. registry will be affected by this AD, that it will take approximately 25 work hours per airplane to accomplish the required actions, and that the average labor rate is \$60 per work hour. Based on these figures, the cost impact of the AD on U.S. operators is estimated to be \$205,500, or \$1,500 per airplane.

The cost impact figure discussed above is based on assumptions that no operator has yet accomplished any of the requirements of this AD action, and that no operator would accomplish those actions in the future if this AD were not adopted.

**Regulatory Impact**

The regulations adopted herein will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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.

**§ 39.13 [Amended]**

2. Section 39.13 is amended by adding the following new airworthiness directive:

**99-21-02 Short Brothers PLC:** Amendment 39-11345. Docket 99-NM-29-AD.

*Applicability:* All Model SD3-30, SD3-60, SD3-SHERPA, and SD3-60 SHERPA series airplanes; certificated in any category.

**Note 1:** This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in

accordance with paragraph (c) 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 failure of the engine mounting tube assembly, which could result in loss of the engine in flight, accomplish the following:

**Inspections**

(a) Within 9 months after the effective date of this AD, perform a detailed visual inspection of the taper pins of the engine mounting tube assembly for corrosion in accordance with Shorts Service Bulletins SD330-71-23, dated November 20, 1998, or Revision 1, dated April 26, 1999 (for Model SD3-30 series airplanes); SD3 SHERPA-71-1, Revision 1, dated February 3, 1999, or Revision 2, dated April 26, 1999 (for Model SD3-SHERPA series airplanes); SD3-60 SHERPA-71-1, Revision 1, dated February 3, 1999, or Revision 2, dated April 26, 1999 (for Model SD3-60 SHERPA series airplanes); or SD360-71-18, Revision 1, dated February 3, 1999, or Revision 2, dated April 26, 1999 (for Model SD3-60 series airplanes); as applicable. If corrosion is found on any taper pin, prior to further flight, replace the pin with a new or serviceable pin.

**Note 2:** For the purposes of this AD, a detailed visual inspection is defined as: "As an intensive visual examination of a specific structural area, system, installation, or

assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good light at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(b) Within 9 months after the effective date of this AD, perform a borescopic inspection of the internal surface of the engine mounting tubes and fittings for corrosion, in accordance with Shorts Service Bulletins SD330-71-23, dated November 20, 1998, or Revision 1, dated April 26, 1999 (for Model SD3-30 series airplanes); SD3 SHERPA-71-1, Revision 1, dated February 3, 1999, or Revision 2, dated April 26, 1999 (for Model SD3-SHERPA series airplanes); SD3-60 SHERPA-71-1, Revision 1, dated February 3, 1999, or Revision 2, dated April 26, 1999 (for Model SD3-60 SHERPA series airplanes); or SD360-71-18, Revision 1, dated February 3, 1999, or Revision 2, dated April 26, 1999 (for Model SD3-60 series airplanes); as applicable.

(1) If no corrosion is found on the internal surface of the engine mounting tubes and fittings, no further action is required by this paragraph.

(2) If corrosion is found that is within the limits as defined in the applicable service bulletin, repeat the borescopic inspection thereafter at intervals not to exceed 9 months. Replacement of all corroded parts with new or serviceable parts in accordance with the applicable service bulletin constitutes terminating action for the repetitive borescopic inspections required by this AD.

(3) If corrosion is found that is outside the limits as defined in the applicable service bulletin, prior to further flight, replace the corroded parts with new or serviceable parts, in accordance with the applicable service bulletin.

**Alternative Methods of Compliance**

(c) 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, International Branch, ANM-116, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, International Branch, ANM-116.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

**Special Flight Permits**

(d) 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**

(e) The actions shall be done in accordance with the following Shorts service bulletins, as applicable, which contain the specified effective pages:

Service bulletin referenced and date	Page No.	Revision level shown on page	Date shown on page
SD330-71-23, November 20, 1998 .....	1-11	Original .....	November 20, 1998.
SD330-71-23, Revision 1, April 26, 1999 .....	1, 2	1 .....	April 26, 1999.
	3-11	Original .....	November 20, 1998.
SD3 SHERPA-71-1, Revision 1, February 3, 1999	1, 6-8	1 .....	February 3, 1999.
	2-5, 9-11	Original .....	November 20, 1998.
SD3 SHERPA-71-1, Revision 2, April 26, 1999 .....	1, 2	2 .....	April 26, 1999.
	3-5, 9-11	Original .....	November 20, 1998.
	6-8	1 .....	February 3, 1999.
SD3-60 SHERPA-71-1, Revision 1, February 3, 1999.	1, 6-8	1 .....	February 3, 1999.
	2-5, 9-11	Original .....	November 20, 1998.
SD3-60 SHERPA-71-1, Revision 2, April 26, 1999	1, 2	2 .....	April 26, 1999.
	3-5, 9-11	Original .....	November 20, 1998.
	6-8	1 .....	February 3, 1999.
SD360-71-18, Revision 1, February 3, 1999 .....	1, 6, 8	1 .....	February 3, 1999.
	2-5, 7, 9-11	Original .....	November 24, 1998.
	11		
SD360-71-18, Revision 2, April 26, 1999 .....	1, 2	2 .....	April 26, 1999.
	3-5, 7, 9-11	Original .....	November 24, 1998.
	11		
	6, 8	1 .....	February 3, 1999

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 Short Brothers, Airworthiness & Engineering Quality, P.O. Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland. 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.

**Note 4:** The subject of this AD is addressed in British airworthiness directives 014-11-98, 018-11-98, 011-11-98, and 012-11-98.

(f) This amendment becomes effective on November 5, 1999.

Issued in Renton, Washington, on September 27, 1999.

**D. L. Riggin,**

*Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.*  
[FR Doc. 99-25596 Filed 9-30-99; 8:45 am]

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