

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 98-NM-32-AD; Amendment 39-10547; AD 98-11-22]

RIN 2120-AA64

Airworthiness Directives; Short Brothers Model SD3-60 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 SD3-60 series airplanes, that requires a one-time inspection to detect discrepancies of certain diode mounting assemblies on specified electrical panels; follow-on actions; and repair or replacement with serviceable components, if necessary. 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 overheating and possible failure of certain electrical diodes, which could result in loss of electrical service to one or more airplane electrical circuits.

DATES: Effective July 6, 1998.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 6, 1998.

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 SD3-60 series airplanes was published in the **Federal Register** on

April 1, 1998 (63 FR 15798). That action proposed to require a one-time inspection to detect discrepancies of certain diode mounting assemblies on specified electrical panels; follow-on actions; and repair or replacement with serviceable components, if necessary.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were submitted in response to the proposal or the FAA's determination of the cost to the public.

Conclusion

The FAA has determined that air safety and the public interest require the adoption of the rule as proposed.

Cost Impact

The FAA estimates that 88 airplanes of U.S. registry will be affected by this AD, that it will take approximately 14 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 \$73,920, or \$840 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:

98-11-22 Short Brothers, PLC: Amendment 39-10547. Docket 98-NM-32-AD.

Applicability: All Model SD3-60 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 (b) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent overheating and possible failure of certain electrical diodes, which could result in loss of electrical service to one or more airplane electrical circuits, accomplish the following:

(a) Within 90 days after the effective date of this AD, perform a one-time visual inspection to detect discrepancies of certain diode mounting assemblies on electrical panels 1C, 2C, 12P, 27C, and 51C, in accordance with Shorts Service Bulletin SD360-39-04, Revision 1, dated January 12, 1998.

(1) If no discrepancy is found, prior to further flight, perform the follow-on actions specified in the service bulletin in accordance with the Accomplishment Instructions of the service bulletin.

(2) If any discrepancy is found, prior to further flight, repair or replace the discrepant diode mounting assembly component with a serviceable component in accordance with a method approved by the Manager, International Branch, ANM-116, FAA, Transport Airplane Directorate.

(b) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, International Branch, ANM-116. 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 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the International Branch, ANM-116.

(c) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(d) The actions shall be done in accordance with Shorts Service Bulletin SD360-39-04, Revision 1, dated January 12, 1998. 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 3: The subject of this AD is addressed in British airworthiness directive 008-09-97.

(e) This amendment becomes effective on July 6, 1998.

Issued in Renton, Washington, on May 20, 1998.

Darrell M. Pederson,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 98-14026 Filed 5-29-98; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 96-NM-58-AD; Amendment 39-10546; AD 98-11-21]

RIN 2120-AA64

Airworthiness Directives; de Havilland Model DHC-8-102, -103, and -301 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain de Havilland Model DHC-8-102, -103, and -301 series airplanes, that requires a one-time inspection for wear and breakage of wire

segments of the individual lighting units of the ceiling and sidewall lights, and replacement of any damaged wiring. This amendment also requires installation of teflon spiral wrap on the wiring of the ceiling and sidewall lights. This amendment is prompted by reports of chafing found on the electrical wiring of the cabin ceiling lighting system. The actions specified by this AD are intended to prevent the possibility of a fire on an airplane due to such chafing and consequent short circuiting, overheating, and smoking of the wires on the aircraft structure.

DATES: Effective July 6, 1998.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of July 6, 1998.

ADDRESSES: The service information referenced in this AD may be obtained from Bombardier, Inc., Bombardier Regional Aircraft Division, Garratt Boulevard, Downsview, Ontario M3K 1Y5, Canada. 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 FAA, New York Aircraft Certification Office, 10 Fifth Street, Third Floor, Valley Stream, New York; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Peter Cuneo, Electrical Engineer, New York Aircraft Certification Office, Systems & Flight Test Branch (ANE-172), FAA, Engine and Propeller Directorate, 10 Fifth Street, Third Floor, Valley Stream, New York 11581-1200; telephone (516) 256-7506; fax (516) 568-2716.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain de Havilland Model DHC-8-102, -103, and -301 series airplanes was published in the **Federal Register** on September 13, 1996 (61 FR 48437). That action proposed to require a one-time inspection for wear and breakage of wire segments of the individual lighting units of the ceiling and sidewall lights, and replacement of any damaged wiring. That action also proposed to require installation of teflon spiral wrap on the wiring of the ceiling and sidewall lights.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due

consideration has been given to the comments received.

One commenter, an aerospace lighting manufacturer, requests that the proposed rule be revised to require, as a first step, an initial inspection of the entire cabin lighting system, and repetitive inspections of the entire cabin lighting system after a fixed number of flight hours after a trigger event such as any lighting component failure. The commenter contends that, despite initial inspections and installation of secondary insulation, cases of fire or smoke caused by arcing from fluorescent lighting high voltage wiring have continued in other airplane models. Further, the commenter notes that an existing AD [AD 95-08-04, amendment 39-9193, (60 FR 19348, April 18, 1995)] was issued for a similar electrical arcing problem of the fluorescent lighting system connector and requires an inspection and modification of some connectors. However, the commenter asserts that the requirement for repetitive inspections is not the total answer in preventing cases of fire or smoke due to arcing from fluorescent lighting high voltage wiring. An additional step would be to require certain protection circuitry for the fluorescent lighting systems that would provide for terminating action of the repetitive inspections. The commenter suggests that, since certain protection circuitry for fluorescent lighting components has been approved by the FAA, is in use on several different airplanes, and has had no negative in-service reports, the FAA should consider requiring installation of such protection circuitry as a terminating action for the requirements of the proposed rule.

The FAA does not concur that installation of protection circuitry should be required in this case. The FAA finds that, based on information provided by the airplane manufacturer, installation of the Teflon spiral wrap will provide an adequate level of safety. No change to the final rule is necessary. However, the FAA may approve a request for an alternative method of compliance under the provisions of paragraph (b) of this final rule if data are submitted to substantiate that an equivalent level of safety would be provided.

In regard to the commenter's reference to AD 95-08-04, the FAA acknowledges that the unsafe condition of both AD's are similar (possibility of a fire on an airplane). However, the FAA has determined that the causes of the unsafe condition are not the same. The earlier existing AD addresses a component failure in the high voltage circuitry of