(e) A coolant temperature indicator.

(f) An indicating means for the fuel strainer or filter required by § 23.997 to indicate the occurrence of contamination of the strainer or filter before it reaches the capacity established in accordance with § 23.997(d).

1. No indicator is required if the engine can operate normally for a specified period with the fuel strainer exposed to the maximum fuel contamination as specified in MIL–5007D and provisions for replacing the fuel filter at this specified period (or a shorter period) are included in the maintenance schedule for the engine installation.

(g) Power setting, in percentage.

(h) Fuel temperature.

(i) Fuel flow (engine fuel consumption).

b. In place of compliance with § 91.205, the following will be complied with: The diesel engine has no manifold pressure gauge as required by § 91.205, in its place, the engine instrumentation as installed is to be approved as equivalent. TCDS is to be modified to show power indication will be accepted to be equivalent to the manifold pressure indication.

9. Operating Limitations and Information—Powerplant limitations—Fuel grade or designation (Compliance with § 23.1521(d) requirements):

Instead of compliance with § 23.1521(d), the applicant must comply with the following:

The minimum fuel designation (for diesel engines) must be established so it is not less than that required for the operation of the engines within the limitations in paragraphs (b) and (c) of § 23.1521.

10. Markings And Placards—Miscellaneous markings and placards—Fuel, oil, and coolant filler openings (Compliance with § 23.1557(c)(1) requirements):

Instead of compliance with § 23.1557(c)(1), the applicant must comply with the following:

a. Fuel filler openings must be marked at or near the filler cover with—

(1) For diesel engine-powered airplanes—

(a) The words ''Jet Fuel''; and

(b) The permissible fuel designations, or references to the Airplane Flight Manual (AFM) for permissible fuel designations.

(c) A warning placard or note that states the following or similar:

''Warning—this airplane equipped with an aircraft diesel engine, service with approved fuels only.''

The colors of this warning placard should be black and white.

11. Powerplant—Fuel system—Fuel-Freezing:

If the fuel in the tanks cannot be shown to flow suitably under all possible temperature conditions, then fuel temperature limitations are required. These will be considered as part of the essential operating parameters for the aircraft and must be limitations.

a. The takeoff temperature limitation must be determined by testing or analysis to define the minimum cold-soaked temperature of the fuel that the airplane can operate on.

b. The minimum operating temperature limitation must be determined by testing to define the minimum operating temperature acceptable after takeoff (with minimum takeoff temperature established in (1) above).

12. Powerplant Installation—Vibration levels:

a. Vibration levels throughout the engine operating range must be evaluated and:

(1) Vibration levels imposed on the airframe must be less than or equivalent to those of the gasoline engine; or

(2) Any vibration level that is higher than that imposed on the airframe by the replaced gasoline engine must be considered in the modification and the effects on the technical areas covered by the following paragraphs must be investigated: 14 CFR part 23, 23.251; 23.613; 23.627; 23.629 (or CAR 3.159, as applicable to various models); 23.572; 23.573; 23.574 and 23.901.

b. Vibration levels imposed on the airframe can be mitigated to an acceptable level by use of isolators, dampers clutches, and similar provisions, so unacceptable vibration levels are not imposed on the previously certificated structure.

13. Powerplant Installation—One cylinder inoperative:

It must be shown by test or analysis, or by a combination of methods, that the airframe can withstand the shaking or vibratory forces imposed by the engine if a cylinder becomes inoperative. Diesel engines of conventional design typically have extremely high levels of vibration when a cylinder becomes inoperative. Data must be provided to the airframe installer/modifier so either appropriate design considerations or operating procedures, or both, can be developed to prevent airframe and propeller damage.

14. Powerplant Installation—High Energy Engine Fragments:

It may be possible for diesel engine cylinders (or portions thereof) to fail and physically separate from the engine at high velocity (due to the high internal pressures). This failure mode will be considered possible in engine designs with removable cylinders or other non-integral block designs. The following is required:

a. It must be shown that the engine construction type (massive or integral block with non-removable cylinders) is inherently resistant to liberating high energy fragments in the event of a catastrophic engine failure; or,

b. It must be shown by the design of the engine, that engine cylinders, other engine components or portions thereof (fragments) cannot be shed or blown off the engine in the event of a catastrophic engine failure; or

c. It must be shown that all possible liberated engine parts or components do not have adequate energy to penetrate engine cowlings; or

d. Assuming infinite fragment energy, and analyzing the trajectory of the probable fragments and components, any hazard due to liberated engine parts or components will be minimized and the possibility of crew injury is eliminated. Minimization must be considered during initial design and not presented as an analysis after design completion.

Issued in Kansas City, Missouri on June 22, 2005.

John Colomy,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05–12720 Filed 6–27–05; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2003–NM–127–AD; Amendment 39–14168; AD 2005–13–31]

RIN 2120–AA64

Airworthiness Directives; Short Brothers Model SD3–60 Airplanes

AGENCY: Federal Aviation Administration, Department of Transportation.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to all Short Brothers Model SD3–60 airplanes, that requires performing repetitive inspections of the shear attachment fittings of the vertical stabilizer for corrosion, and performing corrective actions if necessary. The actions specified by this AD are intended to detect and correct corrosion in the area of the main spar web fittings of the vertical stabilizer, which could

result in reduced structural integrity of the vertical stabilizer. This action is intended to address the identified unsafe condition.

DATES: Effective August 2, 2005.

The incorporation by reference of a certain publication listed in the regulations is approved by the Director of the Federal Register as of August 2, 2005.

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.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM–116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–1175; 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 airplanes was published as a supplemental notice of proposed rulemaking (NPRM) in the **Federal Register** on April 1, 2005 (70 FR 16764). That action proposed to require performing repetitive inspections of the shear attachment fittings of the vertical stabilizer for corrosion, and performing corrective actions if necessary. The actions specified by this AD are intended to detect and correct corrosion in the area of the main spar web fittings of the vertical stabilizer, which could result in reduced structural integrity of the vertical stabilizer.

Comments

We provided the public the opportunity to participate in the development of this AD. No comments have been submitted on the proposed AD or on the determination of the cost to the public.

Explanation of Change to Applicability

We have revised the applicability of the proposed AD to identify model designations as published in the most recent type certificate data sheet for the affected models.

Explanation of Change to Final Rule

The proposed AD had an incorrectly numbered ''Note'' paragraph. We have corrected the number of that Note in the final rule.

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD with the changes described previously. We have determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

Cost Impact

The following table provides the estimated costs for U.S. operators to comply with this AD.

ESTIMATED COSTS

Action	Work hours	Average labor rate per hour	Parts	Cost per airplane	Number of U.S.-registered airplanes	Fleet cost
Inspection, per inspection cycle.	4	$65	None	$260	46	$11,960, per inspection cycle.

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. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

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 Impact

The regulations adopted herein will 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. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

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:

2005–13–31 Short Brothers PLC: Amendment 39–14168. Docket 2003–NM–127–AD.

Applicability: All Model SD3–60 airplanes, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To detect and correct corrosion in the area of the main spar web fittings of the vertical stabilizer, which could result in reduced structural integrity of the vertical stabilizer, accomplish the following:

Inspection and Previous Actions

(a) Except as provided by paragraphs (a)(1) and (a)(2) of this AD, within 4,800 flight hours or 90 days after the effective date of this AD, whichever occurs first, do a borescope inspection to detect corrosion of the shear attachment fittings of the vertical stabilizer, in accordance with the Accomplishment Instructions of Short Brothers Service Bulletin SD360–53–45, dated December 2003.

(1) If an airplane (the shear attachment fitting) has been inspected in accordance with the Accomplishment Instructions of Short Brothers Service Bulletin SD360–53–44, Revision 1, dated January 24, 2003, before the effective date of this AD, and was found to have no corrosion on the fittings, then the initial inspection specified in paragraph (a) of this AD is not required.

(2) If the shear attachment fitting has been inspected in accordance with the Accomplishment Instructions of Short Brothers Service Bulletin SD360–53–44, Revision 1, dated January 24, 2003, and was found to have corrosion, but the corroded fitting is not yet replaced, then a review of the inspection results is required to determine if the corrosion was within the acceptable limits specified in Short Brothers Service Bulletin SD360–53–45, dated December 2003.

Corrective Actions and Repetitive Inspections

(b) If any corrosion is found during the inspection required by paragraph (a) of this AD, do the applicable actions required by paragraph (b)(1) or (b)(2) of this AD.

(1) If any corrosion is within the limits specified in the Accomplishment Instructions of Short Brothers Service Bulletin SD360–53–45, dated December 2003, do the actions required by paragraphs (b)(1)(i) and (b)(1)(ii) of this AD.

(i) Repeat the inspection required by the service bulletin at intervals not to exceed 6 months.

(ii) Within 18 months after the initial inspection required by paragraph (a) of this AD, replace all corroded shear attachment fittings in accordance with the Accomplishment Instructions of the service bulletin. Accomplishing the replacement ends the repetitive inspections required by paragraph (b)(1)(i) of this AD.

(2) If any corrosion is outside the limits specified in the Accomplishment Instructions of Short Brothers Service Bulletin SD360–53–45, dated December 2003, before further flight, replace the corroded fitting with a new fitting, in accordance with the Accomplishment Instructions of the service bulletin.

(c) If no corrosion is found during the inspection required by paragraph (a) or if the fitting was replaced with a new fitting in accordance with Short Brothers Service Bulletin SD360–53–45, dated December 2003, do the actions in paragraphs (c)(1) and (c)(2) of this AD.

(1) Within 24 months after the initial inspection required by paragraph (a) of this AD or within 24 months after replacement of the fitting with a new one, whichever occurs later, do a borescope (intrascope) detailed inspection for corrosion, in accordance with Part A of the Accomplishment Instructions of Short Brothers Service Bulletin SD360–53–45, dated December 2003. Repeat this inspection thereafter at intervals not to exceed 24 months. Do corrective actions in accordance with paragraph (b) of this AD.

(2) Thereafter, except as provided in paragraph (f) of this AD, no alternative borescope inspections may be approved.

Previous Repetitive Inspections

(d) Borescope (intrascope) detailed inspections done before the effective date of this AD in accordance with Bombardier Temporary Revisions (TR) TR360–MPSUPP–04 and TR360–MPSUPP–03, both dated August 20, 2003, are acceptable for compliance with the requirements of paragraph (c)(1) of this AD.

Disposition of Repairs for Corroded/Oversized Holes

(e) Where Short Brothers Service Bulletin SD360–53–45, dated December 2003, says to contact the manufacturer for action on any corroded or oversized hole found during the inspection required by paragraph (a) or (c) of this AD, before further flight, repair in accordance with a method approved by either the Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate; or the Civil Aviation Authority (or its delegated agent).

Alternative Methods of Compliance

(f) In accordance with 14 CFR 39.19, the Manager, International Branch, ANM–116, is authorized to approve alternative methods of compliance for this AD.

Note 1: The subject of this AD is addressed in British airworthiness directive G–2004–0005, effective March 16, 2004.

Incorporation by Reference

(g) You must use Short Brothers Service Bulletin SD360–53–45, dated December 2003, to perform the actions that are required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approves the incorporation by reference of this document in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get copies of the service information, contact Short Brothers, Airworthiness & Engineering Quality, P.O. Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland. To inspect copies of this service information, go to the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or to the National Archives and Records Administration (NARA). For information on the availability of this material at the NARA, call (202) 741–6030, or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

Effective Date

(h) This amendment becomes effective on August 2, 2005.

Issued in Renton, Washington, on June 14, 2005.

Kevin M. Mullin,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05–12508 Filed 6–27–05; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2004–18716; Directorate Identifier 2003–NM–240–AD; Amendment 39–14156; AD 2005–13–19]

RIN 2120–AA64

Airworthiness Directives; BAE Systems (Operations) Limited Model BAe 146 and Avro 146–RJ Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all BAE Systems (Operations) Limited Model BAe 146 and Avro 146–RJ series airplanes. This AD requires repetitive external eddy current inspections of the forward fuselage skin to detect cracking due to fatigue, and repair if necessary. This AD is prompted by evidence of cracking due to fatigue along the edges of the chemi-etched pockets in certain front fuselage canopy skin panels. We are issuing this AD to detect and correct this cracking, which could result in reduced structural integrity of the airplane fuselage.

DATES: This AD becomes effective August 2, 2005.

The incorporation by reference of a certain publication listed in the AD is approved by the Director of the Federal Register as of August 2, 2005.

ADDRESSES: For service information identified in this AD, contact British Aerospace Regional Aircraft American Support, 13850 Mclearen Road, Herndon, Virginia 20171.