

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2008-0375; Directorate Identifier 2007-NM-272-AD; Amendment 39-15627; AD 2008-16-09]

RIN 2120-AA64

Airworthiness Directives; Short Brothers Model SD3-60 Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is superseding two existing airworthiness directives (ADs), which apply to all Short Brothers Model SD3-60 airplanes. One of the ADs currently requires inspection of the welded joints of the balance weight brackets for the elevator trim tabs for cracking; repetitive inspections, as applicable; and corrective actions including the eventual replacement of all brackets. The other AD currently requires, for certain airplanes, repetitive inspections for cracking of the balance weight brackets and replacement of any cracked bracket, and provides for an optional terminating action for the repetitive inspections. This new AD requires an additional inspection to detect cracks of the balance weight brackets, applicable related investigative and corrective actions, and replacement of a certain balance weight bracket when it has reached its maximum life limit. This AD results from a report indicating that several reworked balance weight brackets have exhibited signs of premature failure. We are issuing this AD to prevent failure of the balance weight brackets of the elevator trim tabs,

which could cause loss of the balance weight. This could result in incorrect trim during takeoff and landing, and reduced controllability of the airplane.

DATES: This AD becomes effective September 15, 2008.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of September 15, 2008.

On March 14, 2005 (70 FR 9212, February 25, 2005), the Director of the Federal Register approved the incorporation by reference of Short Brothers Alert Service Bulletin SD360-55-A21, dated December 16, 2004.

On August 3, 2004 (69 FR 38813, June 29, 2004), the Director of the Federal Register approved the incorporation by reference of Short Brothers Service Bulletin SD360-55-20, dated June 26, 2003.

ADDRESSES: For service information identified in this AD, contact Short Brothers, Airworthiness & Engineering Quality, P.O. Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland.

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 AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (telephone 800-647-5527) is the Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer,

International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that supersedes AD 2004-13-08, amendment 39-13690 (69 FR 38813, June 29, 2004); and AD 2005-04-13, amendment 39-13985 (70 FR 9212, February 25, 2005). The existing ADs apply to all Short Brothers Model SD3-60 airplanes. That NPRM was published in the **Federal Register** on April 1, 2008 (73 FR 17260). That NPRM proposed to retain the requirements of the existing ADs. That NPRM also proposed to require an additional inspection to detect cracks of the balance weight brackets, applicable related investigative and corrective actions, and replacement of a certain balance weight bracket when it has reached its maximum life limit.

Comments

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

Conclusion

We have carefully reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

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
Inspections (required by AD 2004-13-08).	12	\$80	(¹)	\$960, per inspection cycle	21	\$20,160, per inspection cycle.
Replacement (required by AD 2004-13-08).	8	80	\$632	\$1,272	21	\$26,712.
Inspections (required by AD 2005-04-13).	12	80	(¹)	\$960, per inspection cycle	21	\$20,160, per inspection cycle.
Inspection (new required action).	12	80	(¹)	\$960, per inspection cycle	21	\$20,160, per inspection cycle.
Replacement (new required action).	8	80	864	\$1,504, per replacement cycle.	21	\$31,584, per replacement cycle.

¹ None.

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 have determined that this AD will not have federalism implications under Executive Order 13132. This AD 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.

For the reasons discussed above, I certify that this AD:

- (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.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket. See the **ADDRESSES** section for a location to examine the regulatory evaluation.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

■ Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 Federal Aviation Administration (FAA) amends § 39.13 by removing amendments 39–13690 (69 FR 38813, June 29, 2004), and 39–13985 (70 FR 9212, February 25, 2005), and by adding the following new airworthiness directive (AD):

2008–16–09 Short Brothers PLC:

Amendment 39–15627. Docket No. FAA–2008–0375; Directorate Identifier 2007–NM–272–AD.

Effective Date

(a) This AD becomes effective September 15, 2008.

Affected ADs

(b) This AD supersedes ADs 2004–13–08 and 2005–04–13.

Applicability

(c) This AD applies to all Short Brothers Model SD3–60 airplanes, certificated in any category.

Unsafe Condition

(d) This AD results from a report indicating that several reworked balance weight brackets have exhibited signs of premature failure. We are issuing this AD to prevent failure of the balance weight bracket of the elevator trim tab, which could cause loss of the balance weight. This could result in incorrect trim during takeoff and landing, and reduced controllability of the airplane.

Compliance

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

Requirements of AD 2004–13–08

Service Bulletin Reference

(f) The term "service bulletin," as used in paragraphs (g) through (j) of this AD, means the Accomplishment Instructions of Short Brothers Service Bulletin SD360–55–20, dated June 26, 2003; or Revision 1, dated June 20, 2005.

Initial Inspection

(g) Within 2 months after August 3, 2004 (the effective date of AD 2004–13–08): Do a dye penetrant inspection for cracking in the welded joints of the balance weight brackets for the left and right elevator trim tabs, in accordance with the service bulletin.

Investigative and Corrective Actions if No Cracking Is Found

(h) If no cracking is found during the inspection required by paragraph (g) of this AD, do the actions required by paragraphs (h)(1) and (h)(2) of this AD at the applicable compliance times.

(1) Repeat the inspection required by paragraph (g) of this AD at intervals not to exceed 4,800 flight hours until the bracket is replaced per paragraph (h)(2) or (i) of this AD.

(2) Prior to the accumulation of 28,800 total flight hours, or within 6 months after

August 3, 2004, whichever occurs later:

Replace any bracket that has not been replaced per paragraph (i) of this AD with a new bracket or with a serviceable bracket that has been inspected in accordance with paragraph (g) of this AD. Replace in accordance with the service bulletin. Replacement of the brackets constitutes terminating action for the repetitive inspections required by paragraph (h)(1) of this AD.

Corrective Actions if Any Cracking Is Found

(i) If any cracking is found during any inspection required by paragraph (g) or (h) of this AD: Before further flight, accomplish the applicable action in paragraph (i)(1) or (i)(2) of this AD in accordance with the service bulletin.

(1) For airplanes that have accumulated less than 28,800 flight hours and on which all cracking on brackets is less than 0.25 inch in length: Repair the affected bracket in accordance with part B of the service bulletin (including the additional dye penetrant inspection of the repaired welded joint) and repeat the inspection required by paragraph (g) of this AD at intervals not to exceed 4,800 flight hours; or replace the bracket in accordance with paragraph (h)(2) of this AD. Replacement of the bracket constitutes terminating action for the repetitive inspections.

(2) For any airplane on which any cracking on a bracket is 0.25 inch in length or greater, and for any airplane that has accumulated 28,800 flight hours or more on which any cracking of any length is found on a bracket: Replace the affected bracket with a new bracket or with a serviceable bracket that has been inspected in accordance with paragraph (g) of this AD. Replacement of the bracket constitutes terminating action for the repetitive inspections required by paragraph (i)(1) of this AD.

Refitting

(j) Before further flight following any inspection per paragraph (g) or (h) of this AD; or before further flight following repair or replacement of a bracket per paragraph (h)(2) or (i) of this AD: Refit the balance weights, covers, and trim tabs, in accordance with the service bulletin. Where the service bulletin specifies to contact the manufacturer for disposition of certain conditions while refitting, obtain further disposition instructions from the Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate; or the European Aviation Safety Agency (EASA) (or its delegated agent).

Parts Installation

(k) As of August 3, 2004, no person may install on any airplane a balance weight bracket unless the welded joint has been inspected in accordance with paragraph (g) of this AD.

Requirements of AD 2005–04–13

Service Bulletin Reference

(l) The following information applies to the service bulletin referenced in paragraphs (l) through (o) of this AD:

(1) The term "service bulletin," as used in paragraphs (l) through (o) of this AD, means

the Accomplishment Instructions of Short Brothers Alert Service Bulletin SD360–55–A21, dated December 16, 2004.

(2) Although the service bulletin specifies to return subject parts to the manufacturer, this AD does not include that requirement.

Repetitive Inspections

(m) For airplanes equipped with balance weight brackets of the elevator trim tabs having part number SD3–07–6011xA, and having a serial number beginning with “X3” or “X4”: Prior to the accumulation of 250 flight hours since installation of the subject balance weight bracket of the elevator trim tab, or within 30 flight hours after March 14, 2005 (the effective date of AD 2005–04–13), whichever is later, do a dye penetrant inspection for cracking of the balance weight brackets for the left and right elevator trim tabs, in accordance with the service bulletin.

(1) For a balance weight bracket on which no cracking is found: Do paragraph (o) of this AD, and repeat the inspection thereafter at intervals not to exceed 250 flight hours until paragraph (n) of this AD is accomplished.

(2) For a balance weight bracket on which any cracking is found: Before further flight, replace the bracket with a new or reworked balance weight bracket that conforms to the approved design standard in accordance with the service bulletin, and do paragraph (o) of this AD.

Optional Terminating Action

(n) For airplanes equipped with balance weight brackets of the elevator trim tabs having part number SD3–07–6011xA, and having a serial number beginning with “X3” or “X4”: Replacement of any subject balance weight bracket with a new or reworked balance weight bracket that conforms to the approved design standard, in accordance with the service bulletin, constitutes terminating action for the repetitive inspections required by paragraph (m) of this AD for the replaced bracket.

Refitting

(o) For airplanes equipped with balance weight brackets of the elevator trim tabs having part number SD3–07–6011xA, and having a serial number beginning with “X3” or “X4”: Before further flight following any inspection or replacement of a bracket in accordance with paragraphs (m) and (n) of this AD: Refit the balance weights, covers, and trim tabs, in accordance with the service bulletin. Where the service bulletin specifies to contact the manufacturer for disposition of certain conditions while refitting, obtain further disposition instructions from the Manager, International Branch, ANM–116, FAA, Transport Airplane Directorate; or the European Aviation Safety Agency (EASA) (or its delegated agent).

Parts Installation

(p) For all airplanes: As of March 14, 2005, no person may install, on any airplane subject to this AD, a balance weight bracket having part number SD3–07–6011xA, and having a serial number beginning with “X3” or “X4,” unless the bracket is also marked “Rework batch number R–Bxxxxx” (where “xxxxx” is a number).

New Requirements of This AD

Inspection(s) and Replacements

(q) For airplanes equipped with balance weight brackets of the elevator trim tabs having part number SD3–07–6011xA manufactured in the year 2003 or 2004, including reworked brackets, installed in accordance with paragraph (h)(2), (i)(2), or (n) of this AD, as applicable: Do the actions specified in paragraphs (q)(1) and (q)(2) of this AD in accordance with Parts A and B of the Accomplishment Instructions of Shorts Alert Service Bulletin SD360–55–A21, Revision 1, dated March 29, 2007.

(1) Within 30 flight hours after the effective date of this AD, or within 250 flight hours since installation of the balance weight brackets of the elevator trim tabs or since the last inspection required by paragraph (g), (h)(1), (i)(1), or (m) of this AD, whichever occurs later: Do a dye penetrant inspection to detect cracks of the balance weight brackets of the elevator trim tabs.

(i) If no crack is detected, repeat the dye penetrant inspection at intervals not to exceed 250 flight hours, until the replacement required by paragraph (q)(2) of this AD is done.

(ii) If any crack is detected, before further flight, do the replacement specified in paragraph (q)(2) of this AD.

(2) Before the accumulation of 1,750 flight hours since installation of the balance weight brackets of the elevator trim tabs, or within 180 days after the effective date of this AD, whichever occurs later: Replace the balance weight brackets with new balance weight brackets manufactured in 2005 or later. Thereafter, replace any balance weight bracket with a new bracket manufactured in 2005 or later at intervals not to exceed the accumulation of 1,750 flight hours on that bracket. Accomplishment of the initial replacement ends the repetitive inspection requirements of this AD.

(r) For airplanes equipped with balance weight brackets of the elevator trim tabs having part number SD3–31–6213xB inspected in accordance with paragraph (g), (h)(1), or (i)(1) of this AD and retained or refitted following approved repair in accordance with paragraph (j) of this AD: Do the actions specified in paragraphs (r)(1) and (r)(2) of this AD in accordance with Parts A and B of the Accomplishment Instructions of Shorts Service Bulletin SD360–55–20, Revision 2, dated March 29, 2007.

(1) Within 4,800 flight hours since last inspection, or within 180 days after the effective date of this AD, whichever occurs later, and thereafter at intervals not to exceed 4,800 flight hours: Do a dye penetrant inspection to detect cracks of the balance weight brackets of the elevator trim tabs.

(i) If no crack is detected, repeat the dye penetrant inspection at intervals not to exceed 4,800 flight hours, until the replacement required by paragraph (r)(2) of this AD is done.

(ii) If any crack is detected, before further flight, do the replacement specified in paragraph (r)(2) of this AD.

(2) Before the accumulation of 28,800 flight hours since any balance weight bracket of the elevator trim tabs is new, or within 180 days after the effective date of this AD, whichever occurs later: Replace the balance weight brackets with new balance weight brackets manufactured in 2005 or later. Thereafter, replace any balance weight bracket with a new bracket manufactured in 2005 or later at intervals not to exceed the accumulation of 28,800 flight hours on that bracket. Accomplishment of the initial replacement ends the repetitive inspection requirements of this AD.

Part Installation

(s) For all airplanes: As of the effective date of this AD, no person may install, on any airplane, a balance weight bracket of the elevator trim tab manufactured earlier than 2005.

Alternative Methods of Compliance (AMOCs)

(t) 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, FAA, Transport Airplane Directorate, 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 appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Related Information

(u) European Aviation Safety Agency emergency airworthiness directive 2007–0107–E, dated April 18, 2007, also addresses the subject of this AD.

Material Incorporated by Reference

(v) You must use the service bulletins specified in Table 1 of this AD to perform the actions that are required by this AD, unless the AD specifies otherwise.

TABLE 1—MATERIAL INCORPORATED BY REFERENCE

Service Bulletin	Revision level	Date
Short Brothers Alert Service Bulletin SD360–55–A21	Original	December 16, 2004.
Short Brothers Service Bulletin SD360–55–20	Original	June 26, 2003.
Shorts Alert Service Bulletin SD360–55–A21	Revision 1	March 29, 2007.
Shorts Service Bulletin SD360–55–20	Revision 1	June 20, 2005.

TABLE 1—MATERIAL INCORPORATED BY REFERENCE—Continued

Service Bulletin	Revision level	Date
Shorts Service Bulletin SD360–55–20	Revision 2	March 29, 2007.

(1) The Director of the Federal Register approved the incorporation by reference of Shorts Alert Service Bulletin SD360–55–A21, Revision 1, dated March 29, 2007; Shorts Service Bulletin SD360–55–20, Revision 1, dated June 20, 2005; and Shorts Alert Service Bulletin SD360–55–20, Revision 2, dated March 29, 2007; in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On March 14, 2005 (70 FR 9212, February 25, 2005), the Director of the Federal Register approved the incorporation by reference of Short Brothers Alert Service Bulletin SD360–55–A21, dated December 16, 2004.

(3) On August 3, 2004 (69 FR 38813, June 29, 2004), the Director of the Federal Register approved the incorporation by reference of Short Brothers Service Bulletin SD360–55–20, dated June 26, 2003.

(4) Contact Short Brothers, Airworthiness & Engineering Quality, P.O. Box 241, Airport Road, Belfast BT3 9DZ, Northern Ireland, for a copy of this service information. You may review copies at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on July 23, 2008.

Ali Bahrami,

*Manager, Transport Airplane Directorate,
Aircraft Certification Service.*

[FR Doc. E8–17744 Filed 8–8–08; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA–2008–0450; Directorate Identifier 2007–SW–39–AD; Amendment 39–15634; AD 2008–16–16]

RIN 2120–AA64

Airworthiness Directives; Bell Helicopter Textron Canada (BHTC) Model 230 Helicopters

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

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for BHTC Model 230 helicopters. This AD results from mandatory continuing

airworthiness information (MCAI) issued by the aviation authority of Canada which indicates that the existing rigging procedures for the tail rotor pitch change mechanism have to be changed due to the possibility of parts interference. The cumulative effect of individual part tolerances resulting in the total assemblage of those parts being out of tolerance could result in the tail rotor yoke striking another part other than the flapping stop (parts interference) as cited in the MCAI. Also, the misalignment of the tail rotor counterweight bellcrank may result in higher tail rotor pedal forces and a higher pilot workload after failure of the No. 1 hydraulic system. Both parts interference and the misaligned counterweight bellcrank create an unsafe condition. This AD requires actions that are intended to address these unsafe conditions.

DATES: This AD becomes effective on September 15, 2008.

The incorporation by reference of certain publications is approved by the Director of the Federal Register as of September 15, 2008.

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations office, U.S. Department of Transportation, 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.

You may get the service information identified in this AD from Bell Helicopter Textron Canada, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4, telephone (450) 437–2862 or (800) 363–8023, fax (450) 433–0272.

Examining the Ad Docket: The AD docket contains the Notice of proposed rulemaking (NPRM), the economic evaluation, any comments received, and other information. The street address and operating hours for the Docket Operations office (telephone (800) 647–5527) are in the **ADDRESSES** section of this AD. Comments will be available in the AD docket shortly after they are received.

FOR FURTHER INFORMATION CONTACT: Tyrone Millard, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, Fort Worth,

Texas 76193–0111, telephone (817) 222–5439, fax (817) 222–5961.

SUPPLEMENTARY INFORMATION:

Discussion

We issued an NPRM to amend 14 CFR part 39 to include an AD that would apply to the BHTC Model 230 helicopters on April 14, 2008. That NPRM was published in the **Federal Register** on April 23, 2008 (73 FR 21855). That NPRM proposed to require, within the next 150 hours time-in-service (TIS) or at the next annual inspection, whichever occurs first, adjusting the rigging of the tail rotor pitch change mechanism, and if a gap exists between the tail rotor yoke and the flapping stop, replacing the tail rotor yoke with an airworthy tail rotor yoke. If no gap exists between the tail rotor yoke and the flapping stop at either full right or full left pedal position, adjusting the tail rotor pitch change mechanism and the tail rotor pedal forces was proposed.

Comments

By publishing the NPRM, we gave the public an opportunity to participate in developing this AD. However, we received no comment on the NPRM or on our determination of the cost to the public. Therefore, based on our review and evaluation of the available data, we have determined that air safety and the public interest require adopting the AD as proposed.

Related Service Information

Bell Helicopter Textron has issued Alert Service Bulletin 230–07–36, dated January 9, 2007. The actions described in the MCAI are intended to correct the same unsafe condition as that identified in the service information.

Differences Between This AD and the MCAI

The compliance times in this AD differ from the MCAI in that compliance is required within the next 150 hours TIS or at the next annual inspection, whichever occurs first, instead of “at the next 150 hour or annual inspection but no later than 31 December 2007.”

Costs of Compliance

We estimate that this AD will affect about 20 helicopters of U.S. registry. We also estimate that it will take 2 work-hours per helicopter to adjust the