



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2023-1891; Project Identifier AD-2023-00612-R; Amendment 39-22774; AD 2024-12-10]

RIN 2120-AA64

Airworthiness Directives; Centerpointe Aerospace Inc. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for all Centerpointe Aerospace Inc. (Centerpointe) Model S-58BT, S-58DT, S-58ET, S-58FT, S-58HT, and S-58JT helicopters. This AD was prompted by an indication of a crack on the angle gearbox mount (AGBM). This AD requires repetitively performing a fluorescent penetrant inspection (FPI) of the AGBM at specified time intervals and, depending on the results, removing the AGBM from service. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2023-1891; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor,

Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For Centerpointe Aerospace service information identified in this AD, contact Centerpointe Aerospace Inc., 279 Blackland Road, Fate, TX 75189; phone: (972) 636-9601; email: Operations@avnresources.com; website: californiahelicopter.com.

- You may view this service information at the FAA, Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at regulations.gov under Docket No. FAA-2023-1891.

FOR FURTHER INFORMATION CONTACT: Jacob Fitch, Aviation Safety Engineer, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: (817) 222-4130; email: jacob.fitch@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Centerpointe Model S-58BT, S-58DT, S-58ET, S-58FT, S-58HT, and S-58JT helicopters. The NPRM published in the *Federal Register* on October 3, 2023 (88 FR 68002). The NPRM was prompted by fatigue cracking that was found on a Model S-58BT helicopter during a preflight inspection. The fatigue cracking was found in the angle supports and cross-members forming the edges of the AGBM. Due to their similarity to the Model S-58BT helicopter, the FAA determined that Centerpointe Model S-58DT, S-58ET, S-58FT, S-58HT, and S-58JT helicopters are also affected by the same unsafe condition. In the NPRM, the FAA proposed to require repetitive FPIs of the AGBM for a crack. The FAA is issuing this AD to address the unsafe condition on these products.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from one commenter, Midwest Helicopter Airways, Inc. (Midwest). Midwest disagrees with the FAA's determination of the unsafe condition in the proposed AD and opines that a supplemental enhanced visual inspection in

addition to inspections performed on the AGBM during routine maintenance is sufficient. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Change the Unsafe Condition

Midwest stated its opinion that the root cause for the failure of the AGBM structural member was not a result of fatigue cracking, but was due to improper installation, routing, or securing of an electrical wire. Midwest submitted photos sent from a representative of Centerpointe Aerospace to current S-58T operators that show abrasions in several locations on the failed angle support structure. According to Midwest, these abrasion marks look to be the result of a wire shown in the photos not properly routed or secured, that began to wear into the structural member. Several abrasions can be seen in the photo just above the crack with a larger abrasion being directly at the crack of the structure. Midwest stated that the chafing marks shown in the photos indicate improper installation, routing, or securing of an electrical wire and other damage from unsecured wiring and advises that wire installation requirements regarding chafing on the airframe are specified in the Acceptable Methods, Techniques, and Practices Aircraft Inspection and Repair, FAA Advisory Circular 43.13-1B Chg. I, Chapter 11, Section 8, Paragraph 11.96(q), which states: "Ensure that wires and cables are routed in such a manner that chafing will not occur against the airframe or other components."

The FAA disagrees with the comments regarding the cause of the unsafe condition as evidence shows that fatigue and not chafing is the root cause of the crack found on the AGBM. Additionally, there are other likely crack initiation points in the structure of the cracked AGBM leg that can be seen in other photos. The FAA did not change this AD as a result of this comment.

Comment Regarding Compliance with the Service Information

Midwest's second comment pertains to compliance with the proposed AD to perform the procedures specified in Centerpointe Aerospace Service Bulletin No. 58B75, dated April 26, 2023 (SB58B75). Midwest states that the proposed AD would require specific procedures to be performed which are outlined in SB58B75; that compliance

with the SB would require replacement of the AGBM assembly, if the affected part is cracked; and that replacing the AGBM would remove privileges the maintenance organization and technicians have under their certifications and repair abilities. Midwest further states that SB58B75 does not provide guidance with regards to blending of material, removal of corrosion, or limitations for repair of the AGBM. Additionally, Midwest states that SB58B75 requires a qualified engineer to provide guidance, without explanation of what qualifications must be obtained to determine airworthiness. Midwest then states that SB58B75 does not address preparation of the structure for the inspection to be completed and that this would potentially cause delays in service and additional costs to operators. Instead of compliance with SB58B75, Midwest suggests thoroughly cleaning and conducting a visual inspection for damage to the mounting structure including gouges, dents, deformity, chafing, loose fasteners, and corrosion. If gouging or chafing, caused by plumbing or wiring, are evident, Midwest suggests taking action to remove or reposition the cause of the discrepancy and evaluate the discrepancy of the mount for limitations of wear. In addition, Midwest suggests an enhanced visual inspection using a 10-power magnification device and a bright light to identify potential cracks; primarily inspecting the areas around the fastener holes and attaching hardware. Subsequently, if this visual or enhanced inspection results in a suspected crack, Midwest suggests verifying using an FPI, as specified in SB58B75. Additionally, Midwest states based on the historical data of the S-58T helicopters, that the AGBM is a durable structure, and this unsafe condition is unlikely to exist or develop on any S-58T or similar model helicopter.

The FAA would like to clarify that this AD refers to SB58B75 for the locations of the eight inspection areas only. The AD requires performing an FPI of the areas shown in figures in SB58B75 by a Level II or Level III inspector certified in the FAA-acceptable standards for nondestructive inspection personnel; it is understood that the accomplishment of the FPI must be done with acceptable procedures. An alternative method of compliance (AMOC) under the provisions of paragraph (h) of this AD may be requested. The FAA did not change this AD as a result of this comment.

Conclusion

The FAA reviewed the relevant data, considered any comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, this AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed SB58B75, which specifies procedures for repetitively performing an FPI and reporting the results to the manufacturer. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Differences Between this AD and the Service Information

Where the service information specifies that the initial FPI be performed within 120 days after receipt of the service information, this AD requires the initial FPI to be performed within 250 hours time-in-service. The service information specifies reporting the results of the FPI to the manufacturer, whereas this AD does not.

Where the service information requires compliance with the Procedures in the Accomplishment Instructions specified in the service bulletin, this AD requires accomplishing the Required Actions specified in paragraph (g) of this AD using standard procedures and Figures 1A and 1B of the Accomplishment Instructions of the service bulletin.

Costs of Compliance

The FAA estimates that this AD affects 14 helicopters of U.S. registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Performing an FPI of the AGBM takes about 5 work-hours and parts cost \$150 for an estimated cost of \$575 per helicopter, and \$8,050 for the U.S. fleet, per inspection cycle.

If necessary, replacing an AGBM takes about 41 work-hours and parts cost are approximately \$30,000, for an estimated cost of \$33,485 per helicopter.

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.

The FAA is 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

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) Will not affect intrastate aviation in Alaska, 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.

List of Subjects in 14 CFR Part 39

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

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 FAA amends § 39.13 by adding the following new airworthiness directive:
2024-12-10 Centerpointe Aerospace Inc.: Amendment 39-22774; Docket No. FAA-2023-1891; Project Identifier AD-2023-00612-R.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Centerpointe Aerospace Inc. Model S-58BT, S-58DT, S-58ET, S-58FT, S-58HT, and S-58JT helicopters, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code: 6300, Main Rotor Drive System.

(e) Unsafe Condition

This AD was prompted by the discovery of a fatigue crack on the angle gearbox mount (AGBM). The FAA is issuing this AD to detect fatigue cracking of the AGBM. The unsafe condition, if not addressed, could lead to loss of the angle gearbox, resulting in loss of main rotor drive and subsequent loss of control of the helicopter.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within 250 hours time-in-service (TIS) after the effective date of this AD, and thereafter at intervals not to exceed 250 hours TIS, perform a fluorescent penetrant inspection (FPI) to inspect for any crack on the AGBM in the eight areas depicted in the Accomplishment Instructions, Figures 1A and 1B, of Centerpointe Aerospace Service Bulletin No. 58B75, dated April 26, 2023. This FPI must be accomplished by a Level II or Level III inspector certified in the FAA-acceptable standards for nondestructive inspection personnel.

(2) If there is any crack, before further flight, remove the AGBM from service.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Central Certification Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i) of this AD and email to: AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(i) Additional Information

For more information about this AD, contact Jacob Fitch, Aviation Safety Engineer, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; phone: (817) 222-4130; email: jacob.fitch@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Centerpointe Aerospace Service Bulletin No. 58B75, dated April 26, 2023.

(ii) [Reserved]

(3) For Centerpointe Aerospace service information identified in this AD, contact Centerpointe Aerospace Inc., 279 Blackland Road, Fate, TX 75189; phone: (972) 636-9601; email: Operations@avnresources.com; website: californiahelicopter.com.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on July 16, 2024.

James D. Foltz,
Deputy Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2024-16012 Filed: 7/19/2024 8:45 am; Publication Date: 7/22/2024]