This document is scheduled to be published in the Federal Register on 04/21/2017 and available online at **https://federalregister.gov/d/2017-07777**, and on **FDsys.gov**

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-4674; Directorate Identifier 2016-SW-001-AD; Amendment 39-18835; AD 2017-06-11]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

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

ACTION: Final rule; request for comments.

SUMMARY: We are superseding Emergency Airworthiness Directive (Emergency AD) 2015-24-51 for Airbus Helicopters Model EC120B. Emergency AD 2015-24-51 required inspections of the air conditioning system. This supersedure revises the applicability, some of the terminology, and the inspection requirements. This AD was prompted by a report of an abnormal noise during flight of a Model EC120B helicopter that resulted in a precautionary landing. We are issuing this AD to prevent an unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to http://www.regulations.gov. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.
- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- Hand Delivery: Deliver to the "Mail" address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-4674; or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the Supplemental Type Certificate (STC), the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800- 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

For service information identified in this final rule, contact Air Comm Corporation, 1575 West 124th Avenue, Westminster, CO 80234, telephone: (303) 440-4075 (during business hours) or (720) 233-8330 (after hours), email service@aircommcorp.com, website http://www.aircommcorp.com/contact.

You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: Richard R. Thomas, Aviation Safety Engineer, Denver Aircraft Certification Office, FAA, Technical Operations Center, 26805 East 68th Avenue, Room 214, Denver CO 80249; telephone (303) 342-1085; fax (303) 342-1088; email richard.r.thomas@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

This AD is a final rule that involves requirements affecting flight safety, and we did not provide you with notice and an opportunity to provide your comments prior to it becoming effective. However, we invite you to participate in this rulemaking by submitting written comments, data, or views. We also invite comments relating to the economic, environmental, energy, or federalism impacts that resulted from adopting this AD. The most helpful comments reference a specific portion of the AD, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit them only one time. We will file in the docket all comments that we receive, as well as a report summarizing each substantive public contact with FAA personnel concerning this rulemaking during the comment period. We will consider all the comments we receive and may conduct additional rulemaking based on those comments.

Discussion

On November 27, 2015, we issued Emergency AD 2015-24-51, which was made immediately effective to all known U.S. owners and operators of Airbus Helicopters Model EC120B helicopters. Emergency AD 2015-24-51 applied to Model EC120B

helicopters with an Air Comm Corporation (Air Comm) air conditioning system installed in accordance with STC No. SR00491DE. Emergency AD 2015-24-51 required, before further flight and at intervals not to exceed 25 hours time-in-service (TIS), manually inspecting the air conditioner compressor drive pulley (pulley) for movement (play) between the pulley and the tail rotor output wheel (wheel). If there was any movement, Emergency AD 2015-24-51 required replacing the pulley and the wheel before further flight. If no play existed, Emergency AD 2015-24-51 required an additional inspection for wear and, if needed, replacing the pulley and the wheel. Emergency AD 2015-24-51 also required reporting information to the FAA to enable us to obtain better insight into the cause of the unsafe condition.

Emergency AD 2015-24-51was prompted by a report that the operator of an Airbus Helicopters Model EC120B helicopter heard an abnormal noise during flight that gradually became more pronounced, resulting in a precautionary landing. While applying power to land, the helicopter yawed left. Application of the right pedal did not correct the rotation, requiring the pilot to perform a hovering auto rotation. A preliminary investigation showed that the pulley and wheel mating splines had worn away, allowing the pulley to rotate freely on the wheel. Failure of the pulley and wheel during flight may result in the loss of tail rotor drive and subsequent loss of directional control.

Actions Since AD 2014-24-51 Was Issued

After Emergency AD 2015-24-51 was issued, we received a comment from an operator requesting that we clarify the applicability of the AD. The commenter notes that there are two different configurations for the Air Comm conditioning system, the earlier of which has the output flange that is terminating action in the AD already installed.

However, the applicability of Emergency AD 2015-24-51 does not distinguish between the two configurations. Pictures from another operator we received with an inspection report showed this earlier configuration where the compressor is driven by a pulley mounted forward of the rotor brake.

We agree with the request to clarify the applicability. Pulleys installed forward of the rotor brake are not part of the tail rotor drive train and their failure would not result in a loss of directional control. We have revised this AD to apply only to those helicopters with an Air Comm air conditioning kit installed in accordance with STC No. SR00491DE where the compressor is driven by a pulley installed aft of the rotor brake. Helicopters that have an Air Comm air conditioning kit installed in accordance with STC No. SR00491DE where the compressor is driven by a pulley forward of the rotor brake are excluded from this AD's requirements.

We are replacing the term "tail rotor output pinion" used in Emergency AD 2015-24-51 with "tail rotor output wheel," because it is the more commonly known term for this part.

We also received a comment from an operator stating that if play between the pulley and the wheel is found during the inspection, and if the Air Comm pulley is replaced with an Airbus output flange, the AD should not require that the wheel be replaced if it passes the damage and wear criteria in the Airbus Helicopters maintenance manual. We agree that in the absence of wear, regardless of any play, the wheel should not have to be replaced. We are revising the required actions in this AD to remove the inspection for play and instead require an inspection of the wheel for damage and wear, using criteria consistent with that in the Airbus Helicopters maintenance manual.

We also obtained additional information from Air Comm about the effect of the terminating action in Emergency AD 2015-24-51 and whether it is necessary to deactivate the airconditioning system. As a result, we are removing from the terminating action the requirement to fully or partially deactivate the air conditioning system. Replacing the Air Comm pulley with Airbus Helicopters output flange part number C632A2158201 partially deactivates the system. With the Air Comm pulley replaced, the system is sufficiently deactivated. Cooling will no longer be available, but the evaporator blowers will remain operable to circulate air. Neither the air conditioning system nor the helicopter will be damaged by removing the compressor drive belt and leaving the circuit breakers engaged.

We also have learned that this AD affects five helicopters of U.S. registry, and not only the two helicopters noted in Emergency AD 2015-24-51.

FAA's Determination

We have reviewed the relevant information and determined that an unsafe condition exists and is likely to exist or develop on other helicopters of this same type design and that air safety and the public interest require adopting the AD requirements as proposed.

Related Service Information

We reviewed Air Comm Service Bulletin SB-EC120-111815, Revision A, dated November 20, 2015. Air Comm reports that the pulley, mounted to the Thomas coupling just aft of the main rotor brake caliper, is an integral piece of the power transmission components for the tail rotor. A field report indicated that the spline joint on the pulley can wear beyond its capability to ensure power transmission to the tail rotor shaft. Given

that the installation is flight critical, the Air Comm service bulletin specifies an inspection of the pulley-output wheel interface. If excessive play or wear is found, the aircraft must be made inoperable until unairworthy parts are replaced.

AD Requirements

This AD requires, before further flight and at intervals not to exceed 25 hours TIS, removing the pulley and visually inspecting the pulley splines for wear and inspecting the exposed portion of the wheel splines for cracks, scoring, metal pick-up, and measuring for wear. If any of the splines on the pulley are not straight, contain any inconsistent cross-sections end-to-end, or contain any localized material deformation or any material loss, this AD requires replacing the pulley before further flight. If there is cracking, any scoring or metal pick-up, or if a measurement shows wear, this AD requires replacing the wheel before further flight.

This AD also requires reporting certain information to the FAA within 10 days.

Replacing the Air Comm pulley with Airbus Helicopters output flange part number C632A2158201 constitutes terminating action for this AD.

Differences between this AD and the Service Information

The service information specifies recurring inspections after 100 flight hours, while this AD requires recurring inspections at intervals not to exceed 25 hours TIS. The service information requires inspecting the pulley and drive shaft (wheel) splines for excessive wear or chatter and replacing the pulley and wheel if there is any play. This AD requires replacing the pulley if any splines are not straight, have inconsistent cross-sections, or contain material deformation or loss. This AD requires replacing the wheel if cracking, scoring, or metal pick-up are found, or measurement of the splines indicates

excessive wear. The service information requests that information be submitted to Air Comm, while this AD requires the inspection results be reported to the FAA.

Costs of Compliance

We estimate that this AD will affect 5 helicopters of U.S. Registry and that labor costs average $85 a work-hour. Based on these estimates we expect that inspecting the pulley and wheel will take about 7.5 work-hours for a cost of $638 per helicopter and $3,190 for the U.S. fleet per inspection cycle. Replacing an Air Comm pulley will cost $2,380 for parts and 0.5 additional work-hour for a cost of $2,423 per helicopter. Replacing an Airbus wheel will cost $19,231 for parts and 10 additional work-hours for a cost of $20,081 per helicopter. The optional terminating action of installing an Airbus output flange will cost $2,327 for parts and 0.5 additional work-hour for a cost of $2,370 per helicopter. Reporting the required inspection information to the FAA will take about 0.5 work-hour for a cost of about $43 per helicopter and $215 for the U.S. fleet.

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting required by this AD is mandatory. Comments concerning the accuracy of this burden and

suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave., SW, Washington, DC 20591. ATTN: Information Collection Clearance Officer, AES-200.

FAA's Justification and Determination of the Effective Date

Providing an opportunity for public comments prior to adopting these AD requirements would delay implementing the safety actions needed to correct this known unsafe condition. Therefore, we find that the risk to the flying public justifies waiving notice and comment prior to the adoption of this rule because the required corrective actions must be accomplished before further flight.

Since an unsafe condition exists that requires the immediate adoption of this AD, we determined that notice and opportunity for prior public comment before issuing this AD are impracticable and contrary to the public interest and that good cause exists to make this AD effective in less than 30 days.

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 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, 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);

3. Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and

4. 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 an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

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 FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2017-06-11 **Airbus Helicopters:** Amendment 39-18835; Docket No. FAA-2016-4674; Directorate Identifier 2016-SW-001-AD.

(a) Applicability

This AD applies to Airbus Helicopters Model EC120B helicopters with an Air Comm Corporation (Air Comm) air conditioning kit installed in accordance with supplemental type certificate (STC) No. SR00491DE, where the compressor is driven by a pulley installed aft of the rotor brake, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as failure of an air conditioner compressor drive pulley (pulley) or tail rotor output wheel (wheel), leading to loss of tail rotor drive and helicopter control.

(c) Affected ADs

This AD supersedes Emergency AD 2015-24-51, Directorate Identifier 2015-SW-086-AD, dated November 27, 2015.

(d) Effective Date

This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(f) Required Actions

(1) Before further flight, and at intervals not to exceed 25 hours time-in-service, disassemble the tail rotor drive system and remove the pulley.

(i) Visually inspect the pulley splines for wear. If any splines are not straight, contain any inconsistent cross-sections end-to-end, or contain any localized material deformation or any material loss, replace the pulley before further flight.

Note 1 to paragraph (f)(1)(i) of this AD: End-to-end (fore-and-aft) movement witness marks and polishing are acceptable as the pulley is allowed to slip fore and aft on the wheel per its intended function.

(ii) Inspect the exposed portion of each wheel spline for cracking, scoring, metal pick-up, and wear by using Figure 1 to paragraph (f)(1)(ii) of this AD. To inspect for wear, position two 3 mm (0.118 inch) rods in all diametrically opposed splines and measure to determine whether there is a minimum of 37.3 mm (1.47 inches) across the outside diameter of the rods. If there is any cracking, scoring or metal pick-up, or if a measurement is less than 37.3 mm, replace the wheel.

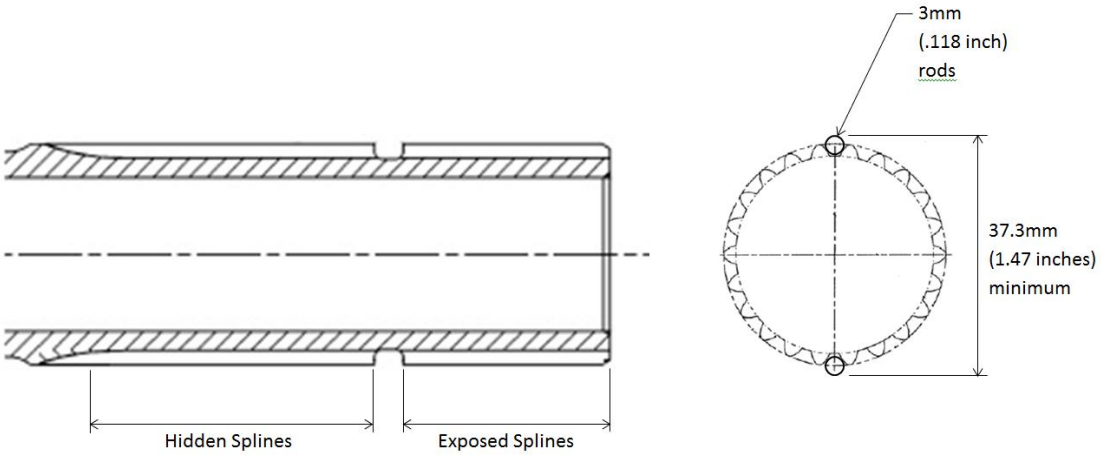

Figure 1 to paragraph (f)(1)(ii)

(2) Within 10 days after completing the initial inspection, report the information requested in Appendix 1 to this AD by mail to the Denver Aircraft Certification Office, FAA, Technical Operations Center, 26805 East 68th Avenue, Room 214, Denver CO 80249, attn. Richard R. Thomas; by fax to (303) 342-1088; or by email to richard.r.thomas@faa.gov.

(3) Replacing the Air Comm pulley with Airbus Helicopters output flange part number C632A2158201 constitutes terminating action for this AD.

(g) Special Flight Permits

Special flight permits are prohibited.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Denver Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Richard R. Thomas, Aerospace Engineer, Denver Aircraft Certification Office, FAA, Technical Operations Center, 26805 East 68th Avenue, Room 214, Denver CO 80249; fax (303) 342-1088; email richard.r.thomas@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

(i) Additional Information

(i) Air Comm Service Bulletin No. SB-EC120-111815, Revision A, dated November 20, 2015, which is not incorporated by reference, contains additional

information about the subject of this AD. For service information identified in this AD, contact: Air Comm Corporation, 1575 West 124th Avenue, Westminster, CO 80234, telephone: (303) 440-4075 (during business hours) or (720) 233-8330 (after hours); email: service@aircommcorp.com, website: http://www.aircommcorp.com/contact.

(ii) You may view a copy of Supplemental Type Certificate No. SR00491DE, reissued on November 24, 2014, on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2016-4674.

(iii) You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 6500, Tail Rotor Drive System.

Issued in Fort Worth, Texas, on February 1, 2017.

Scott A. Horn,

Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.

Appendix 1 to AD 2017-06-11

Please report the following to the Denver Aircraft Certification Office, FAA, Technical Operations Center, by mail to 26805 East 68th Avenue, Room 214, Denver CO 80249, attn. Richard R. Thomas; by fax to (303) 342-1088; or by email to richard.r.thomas@faa.gov:

(1) Condition of the splined joint. Document any damage found with photographs.

(2) Flight hours since the air-conditioning kit was installed.

(3) Aircraft serial number.

(4) Pulley serial number (etched on the pulley's face).

(5) Output wheel serial number from main gearbox, MAIN MODULE hard card.

(6) Primary operating location of the aircraft.

(7) Approximate average percentage of time the air conditioner is used.

(8) Operator and maintenance facility contact information.

(9) If parts are replaced, will air conditioning system remain fully or partially operable?

[FR Doc. 2017-07777 Filed: 4/20/2017 8:45 am; Publication Date: 4/21/2017]