[Federal Register Volume 85, Number 224 (Thursday, November 19, 2020)]
[Rules and Regulations]
[Pages 73604-73607]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2020-25472]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0513; Product Identifier 2019-SW-037-AD; Amendment 39-21321; AD 2020-23-05]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2018-08-01 for Airbus Helicopters Model EC225LP helicopters. AD 2018-08-01 required inspecting the control rod attachment yokes (yoke) of certain main rotor rotating swashplates (swashplate). This new AD retains the inspection requirements of AD 2018-08-01, expands the applicability, establishes a life limit, and adds a one-time inspection of stripped yokes. This AD was prompted by the identification of additional swashplate serial numbers affected by the unsafe condition and the establishment of a life limit for the swashplates. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective December 24, 2020.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of December 24, 2020.

ADDRESSES: For service information identified in this final rule, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. It is also available on the internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0513.

Examining the AD Docket

You may examine the AD docket on the internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0513; 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 AD, the

European Union Aviation Safety Agency (EASA) AD, any service information that is incorporated by reference, any comments received, and other information. The address for Docket Operations is Document Operations, 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: Matthew Fuller, AD Program Manager, Operational Safety Branch, Airworthiness Products Section, General Aviation & Rotorcraft Unit, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email Matthew.Fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2018-08-01, Amendment 39-19254 (83 FR 17617, April 23, 2018) (AD 2018-08-01) and add a new AD. AD 2018-08-01 applied to Airbus Helicopters Model EC225LP helicopters with certain serial-numbered swashplates part number (P/N) 332A31-3074-00 or P/N 332A31-3074-01 installed. The NPRM published in the Federal Register on June 3, 2020 (85 FR 34118). The NPRM proposed to require determining the date of manufacture of the swashplate and establishing a life limit of 12 years since the date of manufacture. The NPRM proposed to retain the repetitive visual inspections of AD 2018-08-01 to inspect each yoke for a crack at intervals not to exceed 15 hours time-in-service (TIS) for swashplates that have accumulated less than 7 years since the date of manufacture. For a swashplate that has accumulated 7 or more years, but less than 12 years since the date of manufacture, the NPRM proposed to require removing the grease and stripping certain areas of the yokes and inspecting these areas for corrosion, pitting, loss of material, and a crack. If there are no cracks, the NPRM proposed to require performing a dye penetrant inspection of the yoke for a crack. Depending on the results of this inspection, the NPRM proposed to require either repairing the surface of the swashplate or removing it from service.

The NPRM was prompted by EASA AD No. 2019-0074, dated March 28, 2019 (EASA AD 2019-0074) issued by EASA, which is the Technical Agent for the Member States of the European Union, to supersede EASA AD No. 2017-0191R2, dated December 15, 2017 (EASA AD 2017-0191R2). EASA AD 2019-0074 followed Airbus Helicopters revising Emergency Alert Service Bulletin (EASB) No. 05A051, Revision 1, dated November 16, 2017, to Revision 2, dated February 26, 2019, to establish a life limit (also called a service life limit) of 12 years for the swashplate and add a reporting requirement if there is a crack or corrosion in a yoke. EASA advises that additional analysis determined that it is necessary to introduce the new life limit for the affected swashplates. Accordingly, EASA AD 2019-0074 retains the requirements of EASA AD 2017-0191R2 and adds a life limit and a reporting requirement.

Additionally, when the FAA issued AD 2018-08-01 to address the unsafe condition of a crack in a swashplate yoke, the FAA did not require stripping certain yokes and performing a one-time inspection within 100 hours TIS for corrosion and a crack as specified in EASA AD 2017-0191R2, as there was sufficient time to allow for notice and comment prior to this long-term AD requirement going into effect. The FAA has determined that this inspection is needed to address this unsafe condition. Accordingly, the NPRM also proposed to require, within 100 hours TIS and for certain yokes, removing the grease and stripping certain areas of the yokes and inspecting these areas for corrosion, pitting, loss of material, and a crack.

Comments

The FAA gave the public the opportunity to participate in developing this AD. The FAA received no comments on the NPRM or on the determination of the cost to the public.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is issuing this AD after evaluating all of the known relevant information and determining that an unsafe condition is likely to exist or develop on other helicopters of the same type design and that air safety and the public interest require adopting the AD requirements as proposed.

Differences Between This AD and the EASA AD

The EASA AD requires performing a non-destructive inspection only if there is doubt whether there is a crack. Instead, this AD requires a visual inspection and if there are no cracks, requires a non-destructive inspection. The EASA AD specifies instructions for reporting inspection reports; this AD does not.

Related Service Information Under 1 CFR Part 51

The FAA reviewed one document that co-publishes two Airbus Helicopters EASB identification numbers: EASB No. 05A051 for Model EC225LP helicopters and EASB No. 05A046 for non-FAA type-certificated Model EC725AP helicopters, each Revision 2 and dated February 26, 2019 (EASB 05A051 and EASB 05A046). EASB 05A051 is incorporated by reference in this AD. EASB 05A046 is not incorporated by reference in this AD.

This service information specifies inspections for swashplate P/N 332A31-3074-00 and P/N 332A31-3074-01. This service information specifies procedures for a repetitive inspection of the yokes for a crack and a one-time inspection of the stripped yokes for corrosion and a crack. If in doubt about whether there is a crack, this service information specifies performing a non-destructive inspection. This service information also specifies touching up the swashplate with varnish if there is corrosion, removing any damage within allowable limits, and refinishing the yokes. If there is a crack in a yoke, this service information specifies replacing the swashplate. This service information also specifies a life limit of 12 years since the date of manufacture for the swashplates and reporting requirements if a crack or corrosion is discovered.

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.

Other Related Service Information

The FAA reviewed one document that co-publishes two Airbus Helicopters EASB identification numbers: EASB No. 05A051 for Model EC225LP helicopters and EASB No. 05A046 for non-FAA type-certificated Model EC725AP helicopters, each Revision 1 and dated November 16, 2017. Revision 1 of this service information specifies the same inspections as Revision 2 of this service information. However, Revision 2 of this service information clarifies some of the inspection instructions and adds a life limit and a reporting requirement.

Costs of Compliance

The FAA estimates that this AD affects 26 helicopters of U.S. registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor rates are estimated at $85 per work-hour.

Determining the date of manufacture of the swashplate takes about 0.5 work-hour for an estimated cost of $43 per helicopter and $1,118 for the U.S. fleet.

Inspecting the yokes takes about 0.25 work-hour for an estimated cost of $21 per helicopter and $546 for the U.S. fleet per inspection cycle.

Removing grease, stripping the yokes, and inspecting the stripped yokes takes about 8 work-hours, for a total estimated cost of $680 per helicopter.

Dye-penetrant inspecting a yoke for a crack takes about 6 work-hours and parts cost about $50, for an estimated cost of $560 per yoke.

Removing any corrosion or repairing damage within the allowable limit takes about 3 work-hours, for an estimated cost of $255 per yoke.

Replacing the swashplate takes about 6 work-hours, and parts cost about $85,661 for an estimated cost of $86,171 per instance.

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.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA 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. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2018-08-01, Amendment 39-19254 (83 FR 17617, April 23, 2018), and adding the following new AD:2020-23-05

2020-23-05 Airbus Helicopters: Amendment 39-21321; Docket No. FAA-2020-0513; Product Identifier 2019-SW-037-AD.

(a) Applicability

This airworthiness directive (AD) applies to Airbus Helicopters Model EC225LP helicopters, certificated in any category, with a main rotor (M/R) rotating swashplate (swashplate) part number (P/N) 332A31-3074-00 or P/N 332A31-3074-01 installed.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in a swashplate control rod attachment yoke (yoke). This condition could result in failure of the yoke, loss of M/R control, and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD replaces AD 2018-08-01, Amendment 39-19254 (83 FR 17617, April 23, 2018).

(d) Effective Date

This AD is effective December 24, 2020.

(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

Before further flight, review Appendix 4.A. of Airbus Helicopters Emergency Alert Service Bulletin No. 05A051, Revision 2, dated February 26, 2019 (EASB 05A051) to determine the date of manufacture of the swashplate.

(1) If the swashplate has accumulated 12 or more years since the date of manufacture, remove from service the swashplate.

(2) If the swashplate has accumulated less than 12 years since the date of manufacture, create a component history card or equivalent record indicating a life limit of 12 years since the date of manufacture. Thereafter, continue to record the life limit of the swashplate on its component history card or equivalent record and remove from service any swashplate before accumulating 12 years since the date of manufacture.

(3) For each swashplate that has accumulated less than 7 years since the date of manufacture, within 15 hours time-in-service (TIS) and thereafter at intervals not to exceed 15 hours TIS, until the swashplate accumulates 7 years since the date of manufacture, visually inspect each yoke for a crack, paying particular attention to the areas shown in Details B, C, and D of Figure 1 of EASB 05A05.

(i) If there are no cracks, perform a dye penetrant inspection of the yoke for a crack.

(ii) If there is a crack on a yoke, before further flight, remove from service the swashplate.

(4) For each swashplate that has accumulated 7 or more years, but less than 12 years, since the date of manufacture, within 100 hours TIS:

(i) Remove the grease from areas (E), (F), (G), (H), (J), and (K) of each yoke as shown in Details B, C, and D of Figure 1 of EASB 05A051. Using a plastic spatula, strip areas (E), (F), (G), (H), (J), and (K) of each yoke as shown in Details B, C, and D of Figure 1 of EASB 05A051. Do not use a metal tool to strip any area of a yoke.

(ii) Inspect areas (E), (F), (G), (H), (J) and (K) of each yoke as shown in Details B, C, and D of Figure 1 of EASB 05A051 for corrosion, pitting, and loss of material.

(A) If there is any corrosion less than 0.0078 in. (0.2 mm), before further flight, remove the corrosion and apply varnish (Vernelec 43022 or equivalent) to the surface of areas (E), (F), (G), (H), (J) and (K).

(B) If there is any pitting or loss of material of less than 0.0078 in. (0.2 mm), before further flight, remove the damage by sanding with sandpaper 200/400 or 330.

(C) If there is any corrosion, pitting, or loss of material of 0.0078 in. (0.2 mm) or greater, before further flight, remove from service the swashplate.

(iii) Visually inspect each yoke for a crack, paying particular attention to the areas shown in Details B, C, and D of Figure 1 of EASB 05A051.

(A) If there are no cracks, perform a dye penetrant inspection of the yoke for a crack.

(B) If there is a crack on a yoke, before further flight, remove from service the swashplate.

(g) Credit for Previous Actions

If you performed the actions in paragraph (f)(4) of this AD before the effective date of this AD using Airbus Helicopters Emergency Alert Service Bulletin No. 05A051, Revision 1, dated November 16, 2017, you met the requirements of paragraph (f)(4) of this AD.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matthew Fuller, AD Program Manager, Operational Safety Branch, Airworthiness Products Section, General Aviation & Rotorcraft Unit, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests 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

(1) Airbus Helicopters Emergency Alert Service Bulletin No. 05A051, Revision 1, dated November 16, 2017, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html. You may view 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.

(2) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD No. 2019-0074, dated March 28, 2019. You may view the EASA AD on the internet at https://www.regulations.gov in Docket No. FAA-2020-0513.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 6230, Main Rotor Mast/Swashplate.

(k) 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) Airbus Helicopters Emergency Alert Service Bulletin (EASB) No. 05A051, Revision 2, dated February 26, 2019.

(ii) [Reserved]

Note 1 to paragraph (k)(2): Airbus Helicopters EASB No. 05A051, Revision 2, dated February 26, 2019, is co-published as one document along with Airbus Helicopters EASB No. 05A046, Revision 2, dated February 26, 2019, which is not incorporated by reference in this AD.

(3) For service information identified in this AD, contact Airbus Helicopters, 2701 N Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html.

(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 service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on October 29, 2020.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020-25472 Filed 11-18-20; 8:45 am]