DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0384; Product Identifier 2017-SW-061-AD; Amendment 39-19401; AD 2018-19-01]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Helicopters Model AS-365N2, AS 365 N3, EC 155B, EC155B1, SA-365N1, and SA-366G1 helicopters. This AD requires repetitive inspections of the aft fuselage outer skin. This AD was prompted by several reports of aft fuselage outer skin disbonding. The actions of this AD are intended to address an 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 certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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
http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html. 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. 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. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0384.

**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-2018-0384; 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 Aviation Safety Agency (EASA) AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for Docket Operations (phone: 800-647-5527) 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.

**FOR FURTHER INFORMATION CONTACT:** Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-5110; email matthew.fuller@faa.gov.
SUPPLEMENTARY INFORMATION:

Discussion

On May 9, 2018, at 83 FR 21194, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 by adding an AD that would apply to Airbus Helicopters Model AS-365N2, AS 365 N3, EC 155B, EC155B1, SA-365N1, and SA-366G1 helicopters.

The NPRM proposed to require a repetitive tap inspection of the aft fuselage outer skin for disbonds. Depending on the inspection results, the NPRM proposed to require reducing the compliance time interval of the tap inspections or repairing or replacing the panel to terminate the shorter compliance time interval. The NPRM also proposed to require a repetitive cleaning of the aft fuselage outer skin to visually inspect for distortion, wrinkling, and corrosion. Depending on the visual inspection results, the NPRM proposed to require an additional tap inspection of the area. The proposed requirements were intended to detect disbonds of the aft fuselage outer skin, which could result in loss of aft fuselage structural integrity and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2017-0165, dated September 5, 2017 (EASA AD 2017-0165), issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition for the Airbus Helicopters Model SA 365 N1, AS 365 N2, AS 365 N3, SA 366 G1, EC 155 B and EC 155 B1 helicopters. EASA advises of several reports of aft fuselage (baggage compartment area) outer skin disbonding found during a 600-hour inspection. EASA advises that most of the reports of disbonding occurred on Model EC 155 helicopters and may occur in the same
area on Model AS 365, SA 365, and SA 366 helicopters due to design similarity. According to EASA, the cause of the disbonding has not yet been determined and the investigation is continuing. Airbus Helicopters states possible causes that are being considered include exhaust gas heat from the exhaust pipes and environmental conditions. EASA states that this condition, if not detected and corrected, could reduce the structural integrity of the aft fuselage, possibly affecting safe flight and landing.

To address this unsafe condition, EASA AD 2017-0165 requires a repetitive tap inspection of the aft fuselage outer skin for disbonding, a repetitive visual inspection of the aft fuselage outer skin for distortion, wrinkling, and corrosion, and contacting Airbus Helicopters if there is any disbonding.

Comments

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM.

FAA’s Determination

These helicopters have been approved by the aviation authority of France and are approved for operation in the United States. Pursuant to our bilateral agreement with France, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.
Interim Action

We consider this AD to be an interim action. If final action is later identified, we might consider further rulemaking then.

Differences Between this AD and the EASA AD

If there is disbonding within the allowable limit, the EASA AD specifies reporting the inspection results to Airbus Helicopters, whereas this AD does not. If there is disbonding that exceeds the allowable limit, the EASA AD specifies contacting Airbus Helicopters for approved skin panel repair or replacement instructions, whereas this AD requires repairing or replacing the panel instead.

Related Service Information Under 1 CFR part 51

We reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. AS365-05.00.77 for Model AS365 N, N1, N2, and N3 and non-FAA-certificated Model AS365 F, Fs, Fi, K, and K2 helicopters; ASB No. SA366-05.48 for Model SA366 G1 and non-FAA-certificated Model SA366 GA helicopters; and ASB No. EC155-05A033 for Model EC155 B and B1 helicopters, all Revision 0 and all dated July 21, 2017. This service information specifies repetitive tap and visual inspections between aft fuselage outer skin frames X4630 and X6630 and defines the allowable limit of disbonding for this area. If there is distortion, wrinkling, or corrosion, this service information specifies performing a tap inspection. If there is disbonding within the allowable limit, this service information specifies reporting the inspection results to Airbus Helicopters and performing the recurring tap inspection at a shorter compliance time interval. If there is disbonding that exceeds the allowable limit, this service information specifies contacting Airbus Helicopters for repair before further flight.
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.

**Costs of Compliance**

We estimate that this AD affects 46 helicopters of U.S. Registry. We estimate that operators may incur the following costs in order to comply with this AD.

Tap inspecting the aft fuselage outer skin takes about 3 work-hours for an estimated cost of $255 per helicopter and $11,730 for the U.S. fleet per inspection cycle. Visually inspecting the aft fuselage outer skin takes about 0.3 work-hour for an estimated cost of $26 per helicopter and $1,196 for the U.S. fleet per inspection cycle. Repairing a panel takes about 5 work-hours and parts cost about $500 for an estimated cost of $925. Replacing a panel takes about 10 work-hours and parts cost about $20,000 for an estimated cost of $20,850.

**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 helicopters 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. 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):

   Product Identifier 2017-SW-061-AD.

   (a) Applicability

   This AD applies to Model AS-365N2, AS 365 N3, EC 155B, EC155B1, SA-365N1, and SA-366G1 helicopters, certificated in any category.

   (b) Unsafe Condition

   This AD defines the unsafe condition as disbonding of the aft fuselage outer skin. This condition could result in loss of aft fuselage structural integrity and subsequent loss of control of the helicopter.

   (c) Effective Date

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

   (d) 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.
(e) Required Actions

(1) Within 110 hours time-in-service (TIS), tap inspect the aft fuselage outer skin for disbonding between frames X4630 and X6630 in the areas depicted in Figure 1 of Airbus Helicopters Alert Service Bulletin (ASB) No. AS365-05.00.77, ASB No. SA366-05.48, or ASB No. EC155-05A033, all Revision 0 and dated July 21, 2017 (ASB AS365-05.00.77, ASB SA366-05.48, or ASB EC155-05A033), as applicable for your model helicopter. Examples of acceptable and unacceptable disbonding areas are depicted in Figure 2 of ASB AS365-05.00.77, ASB SA366-05.48, and ASB EC155-05A033, as applicable for your model helicopter.

(i) If there is no disbonding, repeat the tap inspection at intervals not to exceed 660 hours TIS.

(ii) If there is disbonding within one square-shaped area measuring 3.94 in. x 3.94 in. (10 cm x 10 cm) that does not cross two skin panels, repeat the tap inspection at intervals not to exceed 110 hours TIS.

(iii) If there is disbonding that exceeds one square-shaped area measuring 3.94 in. x 3.94 in. (10 cm x 10 cm) or crosses two skin panels, before further flight, repair or replace the panel. Thereafter, tap inspect the panel at intervals not to exceed 660 hours TIS.

(2) Within 220 hours TIS, and thereafter at intervals not to exceed 110 hours TIS, clean the aft fuselage outer skin and using a light, visually inspect for distortion, wrinkling, and corrosion between frames X4630 and X6630 as depicted in Figure 1 of ASB AS365-05.00.77, ASB SA366-05.48, or ASB EC155-05A033, as applicable for your model helicopter. If there is any distortion, wrinkling, or corrosion, before further
flight, tap inspect the area for disbonding by following the inspection instructions in paragraph (e)(1) of this AD.

(f) **Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, 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, 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.

(g) **Additional Information**


(h) **Subject**

Joint Aircraft Service Component (JASC) Code: 5302, Rotorcraft tail boom.

(i) **Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference 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.


(ii) Airbus Helicopters ASB No. SA366-05.48, Revision 0, dated July 21, 2017.

(iii) Airbus Helicopters ASB No. EC155-05A033, Revision 0, dated July 21, 2017.

(3) For Airbus Helicopters 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 http://www.helicopters.airbus.com/website/en/ref/Technical-Support_73.html.

(4) You may view this service information at 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, call (202) 741-6030, or go to:


Issued in Fort Worth, Texas, on September 4, 2018.

Lance T. Gant,

Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2018-19750 Filed: 9/14/2018 8:45 am; Publication Date: 9/17/2018]