[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0613; Product Identifier 2018-SW-041-AD;

Amendment 39-19391; AD 2018-18-12]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: We are adopting a new airworthiness directive (AD) for Airbus Helicopters Model AS350B, AS350B1, AS350B2, AS350B3, and AS350BA helicopters with a Pall Aerospace Corporation inlet barrier filter (IBF) element. This AD requires revising the Rotorcraft Flight Manual Supplement to prohibit operating a helicopter with an IBF element in wet weather and replacing the IBF element if wet. This AD is prompted by a forced landing after an engine flameout. The actions of this AD are intended to address 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-2018-0613; 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, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for Docket Operations (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 Pall Aerospace Corporation, 10540 Ridge Road, Suite 300, Newport Richey, Florida 34654; telephone 727-514-6491; email cam_dipronio@pall.com; website www.pall.com/aerospace. 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: Todd Jackson, Aerospace Engineer, Atlanta ACO Branch, Compliance and Airworthiness Division, FAA, 1701 Columbia Ave., College Park, GA, 30337, telephone 404-474-5567, email Todd.Jackson@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

In June 2017, we received a report of an incident involving an Airbus Helicopters Model AS350B3 helicopter fitted with an IBF. The helicopter took off in heavy rain and experienced an engine flameout as the pilot increased power. The helicopter was less than 10 feet off the ground when the pilot was forced to land immediately. An inspection showed that violent water ingestion damaged six axial compressor blades. During our investigation, the FAA received additional reports of previous incidents of helicopters equipped with IBFs or induction filter installations experiencing abnormal engine operations during heavy precipitation.

The FAA issued Special Airworthiness Information Bulletin SW-17-30, dated October 13, 2017[1] (SAIB), to warn operators that persistent or heavy rains may result in the inlet barrier filter media collecting and retaining water. The SAIB recommended the following to affected owners and operators:

- Use IBF covers when the rotorcraft is parked or towed outside, particularly when precipitation is reported in the area;
- During the helicopter preflight inspection, visually inspect the inlet and filter to verify that the inlet and filter medium are dry and free of accumulated moisture;
- If the filter medium has moisture during the preflight inspection, or if the rotorcraft is operating in heavy precipitation, open the bypass doors if equipped; and
- When operating in precipitation, sudden and rapid power transients should be avoided whenever practical.

Action Since the SAIB Was Issued

After the SAIB was issued, we continued to investigate this issue and determined that AD action was necessary for certain Pall Corporation IBF dry-media filter elements. Filters that have a hydrophobic coating resist water accumulation, while the dry-media filters that are the subject of this AD accumulate water. The risk of engine failure caused by the ingestion of an excessive amount of water through the IBF element results in an unsafe condition that requires AD action.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs.

[1] SAIB SW-17-30, dated October 13, 2017, may be viewed online at http://rgl/faa/gov.

Related Service Information

We reviewed Pall Corporation Service Information Letter CE01301F2SINFOL, Revision A, dated July 15, 2015, which recommends covering the engine inlet if the helicopter is outside while not operating. The letter also recommends conducting pre-flight inspections to ensure the engine inlet is clear of water.

AD Requirements

This AD requires, within 30 days, revising the rotorcraft flight manual supplement by inserting Appendix A of this AD into the limitations section.

Differences between this AD and the Service Information

The service information allows for removing water and reinstalling the IBF element if there is standing water on the engine inlet. This AD prohibits operation unless the IBF element is dry.

Interim Action

We consider this AD to be an interim action. The design approval holder is currently developing a modification that will address the unsafe condition identified in this AD. Once this modification is developed, approved, and available, we might consider additional rulemaking.

Costs of Compliance

We estimate that this AD will affect 81 helicopters of U.S. Registry and that labor costs average $85 per work-hour. Based on these estimates, we expect the following costs:

- Incorporating Appendix A of this AD into the rotorcraft flight manual requires 1 work-hour and no parts for a cost of $85 per helicopter and $6,885 for the U.S. fleet.

- Replacing the inlet barrier filter, if required, requires 2 work-hours and parts cost $3,995 for a cost of $4,165 per filter replacement.

FAA's Justification and Determination of the Effective Date

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the unsafe condition requires corrective action within 30 days. Therefore, we find good cause that notice and opportunity for prior public comment are impracticable. In addition, for the reason stated above, we find that good cause exists for making this amendment 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): 2018-18-12 **Airbus Helicopters:** Amendment 39-19391; Docket No. FAA-2018-0613; Product Identifier 2018-SW-041-AD.

(a) Applicability

This AD applies to Model AS350B, AS350B1, AS350B2, AS350B3, and AS350BA helicopters, certificated in any category, with a Pall Aerospace Inlet Barrier Filter element part number CE01301F2 or CE01301F2B installed.

(b) Unsafe Condition

This AD defines the unsafe condition as ingestion of an excessive amount of water by the engine. This condition could result in engine flame out and failure, leading to loss of helicopter control.

(c) Effective Date

This AD becomes effective [INSERT DATE 15 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

Within 30 days, revise the rotorcraft flight manual supplement (RFMS) by inserting Appendix A of this AD into the limitations section of the RFMS.

(f) Special Flight Permits

Special flight permits are prohibited.

. **(g) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Atlanta ACO Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Todd Jackson, Aerospace Engineer, Atlanta ACO Branch, Compliance and Airworthiness Division, FAA, 1701 Columbia Ave., College Park, GA, 30337, telephone 404-474-5567, email Todd.Jackson@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.

(h) Additional Information

Pall Corporation Service Information Letter CE01301F2SINFOL, Revision A, dated July 15, 2015, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Pall Aerospace Corporation, 10540 Ridge Road, Suite 300, Newport Richey, Florida 34654; telephone 727-514-6491; email cam_dipronio@pall.com; website www.pall.com/aerospace. You may review this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 7160, Engine Air Intake System

Appendix A to AD 2018-18-12

Rotorcraft Flight Manual Supplement

(1) Helicopter operation is prohibited if the filter is wet or when visible moisture (rain/snow/ice/water) is present in the inlet or on the filter (inspect filter by hand for wetness). If the filter is wet, it must be dried or replaced prior to operation.

(2) Helicopter flight is prohibited in visible moisture.

(3) If the helicopter inadvertently enters precipitation (rain/snow/ice/water), open bypass doors (if equipped), avoid sudden and rapid power transients, and land as soon as practical.

(4) Inlet covers must be installed when the rotorcraft is not in flight to prevent moisture from collecting in the inlet or on the filter.

(5) Inspect inlet and filter for visible moisture accumulation prior to flight. If moisture is present, helicopter operation is prohibited.

Issued in Fort Worth, Texas, on August 23, 2018.

Scott A. Horn,

Deputy Director for Regulatory Operations,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2018-19431 Filed: 9/7/2018 8:45 am; Publication Date: 9/10/2018]