DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0914; Product Identifier 2020-NM-058-AD;
Amendment 39-21463; AD 2021-05-20]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

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

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2018-16-02, which applied to all Airbus SAS Model A318-111 and -112 airplanes; Model A319-111, -112, -113, -114, and -115 airplanes; Model A320-211, -212, -214, and -216 airplanes; and Model A321-111, -112, -211, -212, and -213 airplanes. AD 2018-16-02 required modifying and re-identifying the 3-lug aft engine mount assemblies. This AD continues to require modifying and re-identifying the 3-lug aft engine mount assemblies, and also requires modifying and re-identifying the 4-lug aft engine mount assemblies; as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. This AD was prompted by a report of a production quality deficiency on the inner retainer installed on link assemblies of the aft engine mount, which could result in failure of the retainer. 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:** For material incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; Internet: www.easa.europa.eu. You may find this IBR material on the EASA website at https://ad.easa.europa.eu. You may view this IBR material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0914.

**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-2020-0914; 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.

**FOR FURTHER INFORMATION CONTACT:** Sanjay Ralhan, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3223; email: sanjay.ralhan@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2020-0085, dated April 6, 2020 (EASA AD 2020-0085)
(also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI),
to correct an unsafe condition for all Airbus SAS Model A318-111 and -112 airplanes;
Model A319-111, -112, -113, -114, and -115 airplanes; Model A320-211, -212, -214,
-215, and -216 airplanes; and Model A321-111, -112, -211, -212, and -213 airplanes.
Model A320-215 airplanes are not certificated by the FAA and are not included on the
U.S. type certificate data sheet; this AD therefore does not include those airplanes in the
applicability.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR
part 39 to supersede AD 2018-16-02, Amendment 39-19342 (83 FR 39326, August 9,
2018) (AD 2018-16-02). AD 2018-16-02 applied to all Airbus SAS Model A318-111 and
-112 airplanes, Model A319-111, -112, -113, -114, and -115 airplanes, Model A320-211,
-212, -214, and -216 airplanes, and Model A321-111, -112, -211, -212, and -213
airplanes. The NPRM published in the Federal Register on October 14, 2020
(85 FR 64984). The NPRM was prompted by a report of a production quality deficiency
on the inner retainer installed on link assemblies of the aft engine mount, which could
result in failure of the retainer. The NPRM proposed to continue to require modifying and
re-identifying the 3-lug aft engine mount assemblies, as specified in an EASA AD. The
NPRM also proposed to require modifying and re-identifying the 4-lug aft engine mount
assemblies, as specified in an EASA AD.

The FAA is issuing this AD to address non-conforming retainers of the aft engine
mount. This condition could result in loss of the locking feature of the nuts of the inner
and outer pins; loss of the pins will result in the aft mount engine link no longer being
secured to the aft engine mount, possibly resulting in damage to the airplane. See the
MCAI for additional background information.
Comments

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA’s response to each comment.

Support for the NPRM

The Air Line Pilots Association, International (ALPA) expressed support for the NPRM.

Request for Consistency in Used Terms

Delta Air Lines (DAL) requested that, for consistency, the FAA remove the parenthesis around the terms 3-lug and 4-lug under the Actions Since AD 2018-16-02 Was Issued heading in the NPRM. No further justification was provided.

The FAA agrees that the change would have provided consistency in terminology. However, that portion of the NPRM is not restated in this final rule; therefore, no change has been made to this final rule in this regard.

Request to Remove Duplicate Wording

DAL requested that the FAA revise the NPRM to remove duplicate wording “procedures for” under the Related IBR Material Under 1 CFR Part 51 heading. DAL pointed out that the duplicate wording is a typographical error.

The FAA agrees for the reasons provided and has updated this final rule accordingly.

Request to Clarify Whether Model CFM56-5B and -5C Engines are Affected

United Airlines (UAL) requested that the FAA clarify whether the NPRM affects airplanes equipped with CFM International, S.A. Model CFM56-5B and -5C engines that are fitted with a turbine rear frame (TRF) with a 4-lug configuration.

The FAA agrees to clarify. EASA AD 2020-0085 defines a 4-lug engine as a “CFM56-5A1, CFM56-5A3, CFM56-5A4, CFM56-5A4/F, CFM56-5A5 or
CFM56-5A5/F engines, fitted with a turbine rear frame (TRF) having a P/N [part number] as identified in Appendix 1 of [EASA AD 2020-0085].” The FAA has not received any information regarding Model CFM56-5B and -5C engines that would cause the FAA to determine that those engine models are subject to the identified unsafe condition; therefore, those engines are not included in the applicability of this AD. However, should the FAA receive information that the Model CFM56-5B and -5C engines are subject to the identified unsafe condition, the FAA may consider additional rulemaking at that time. This final rule has not been changed in this regard.

**Request to Extend Compliance Time for Parked Airplanes**

DAL requested that the FAA extend the compliance time specified in the NPRM for airplanes that are parked due to the ongoing COVID-19 pandemic. DAL pointed out that many operators have had to park airplanes, and that there is uncertainty regarding any return to service schedule. DAL mentioned that parked aircraft/engines are not operating and, therefore, do not accrue time/cycles. DAL then specified the belief that any deadline for modification and re-identification should be extended by adding the duration of parking.

The FAA disagrees with the request. DAL indicated concern related to the retained requirements of the AD 2018-16-02. The unsafe condition is the result of a production deficiency that can cause pitting corrosion, which is not directly related to the accumulation of flight cycles or flight hours. Corrosion growth is normally related to calendar time and it is unknown if pitting corrosion is arrested while the airplane is in long term storage/parking and therefore the FAA does not agree with the request to provide a compliance time extension for parked airplanes. However, under the provisions of paragraph (k)(1) of this AD, the FAA may approve requests for adjustments to the compliance time if data are submitted to substantiate that such an adjustment would provide an acceptable level of safety. This AD has not been changed in this regard.


Request to Clarify Use of “Production Quality Deficiency”

DAL requested that the FAA revise paragraph (h)(5) of the NPRM to better define the production quality deficiency that prompted the NPRM. DAL pointed out that the NPRM does not define the production quality deficiency, and does not refer to any other document for a definition.

The FAA partially agrees. During in-service inspections, several aft engine mount inner retainers, fitted on airplanes equipped with Model CFM56-5A/5B engines, were found broken. Investigation identified that the main cause of crack initiation was the vibration dynamic effect that affects the retainers, and that the “dull” surface finish pitting is an aggravating factor when compared with the “bright” surface finishing. The “dull” surface finish pitting is the production quality deficiency. The FAA has not revised paragraph (h)(5) of this AD, but has instead added paragraph (g) of this AD to include the definition of the production quality deficiency. Subsequent paragraphs have been redesignated have accordingly.

Request to Correct Reference to AD 2018-16-02

DAL requested that the FAA revise paragraph (h)(7) of the proposed AD to correct the reference to AD 2018-16-02.

The FAA agrees for the reasons provided and has updated paragraph (i)(7) of this AD (paragraph (h)(7) of the proposed AD) accordingly.

Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

**Related Service Information under 1 CFR Part 51**

EASA AD 2020-0085 describes procedures for modifying and re-identifying the aft engine mount retainer assembly. This material 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**

The FAA estimates that this AD affects 119 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

**Estimated costs for required actions**

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained actions from AD 2018-16-02</td>
<td>20 work-hours X $85 per hour = $1,700</td>
<td>$3,152</td>
<td>$4,852</td>
<td>$577,388</td>
</tr>
<tr>
<td>New actions</td>
<td>16 work-hours X $85 per hour = $1,360</td>
<td>$4,362</td>
<td>$5,722</td>
<td>$680,918</td>
</tr>
</tbody>
</table>

**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 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:

   a. Removing Airworthiness Directive 2018-16-02, Amendment 39-19342 (83 FR 39326, August 9, 2018), and
b. Adding the following new airworthiness directive:

2021-05-20 Airbus SAS: Amendment 39-21463; Docket No. FAA-2020-0914; Product Identifier 2020-NM-058-AD.

(a) Effective Date

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

(b) Affected ADs

(1) This AD replaces AD 2018-16-02, Amendment 39-19342 (83 FR 39326, August 9, 2018) (AD 2018-16-02).

(2) This AD affects AD 2016-14-09, Amendment 39-18590 (81 FR 44989, July 12, 2016) (AD 2016-14-09).

(3) This AD affects AD 2017-04-10, Amendment 39-18805 (82 FR 11791, February 27, 2017) (AD 2017-04-10).

(c) Applicability

This AD applies to all the Airbus SAS airplanes identified in paragraphs (c)(1) through (4) of this AD, certificated in any category.

(1) Model A318-111 and -112 airplanes.

(2) Model A319-111, -112, -113, -114, and -115 airplanes.

(3) Model A320-211, -212, -214, and -216 airplanes.


(d) Subject

Air Transport Association (ATA) of America Code 71, Powerplant.

(e) Reason

This AD was prompted by a report of a production quality deficiency on the inner retainer installed on link assemblies of the aft engine mount, which could result in failure of the retainer. The FAA is issuing this AD to address non-conforming retainers of the aft
engine mount. This condition could result in loss of the locking feature of the nuts of the inner and outer pins; loss of the pins will result in the aft mount engine link no longer being secured to the aft engine mount, possibly resulting in damage to the airplane.

(f) Compliance

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

(g) Definition

For the purposes of this AD, the production quality deficiency is defined as a “dull” finish, which is caused by surface finish pitting, and is an aggravating factor to crack initiation from vibration dynamic effect when compared with the “bright” surface finish.

(h) Requirements

Except as specified in paragraph (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, paragraphs (3) through (6), (8), (9), (11), and (12) of European Union Aviation Safety Agency (EASA) AD 2020-0085, dated April 6, 2020 (EASA AD 2020-0085).

(i) Exceptions to EASA AD 2020-0085

(1) Where EASA AD 2020-0085 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2020-0085 refers to August 16, 2017 (the effective date of EASA AD 2017-0138, dated August 2, 2017), this AD requires using September 13, 2018 (the effective date of AD 2018-16-02).

(3) Where EASA AD 2020-0085 refers to December 15, 2017 (the issue date of EASA AD 2017-0251), this AD requires using September 13, 2018 (the effective date of AD 2018-16-02).

(4) The “Remarks” section of EASA AD 2020-0085 does not apply to this AD.
(5) Where paragraph (8) of EASA AD 2020-0085 specifies “do not operate any airplane having installed a, and do not install on any airplane a ‘dull’ finish aft engine mount inner retainer,” for this AD, do not operate any airplane having installed any inner retainers affected by the production quality deficiency (as defined in paragraph (g) of this AD), and do not install on any airplane a ‘dull’ finish aft engine mount inner retainer.

(6) Where paragraph (9.3) of EASA AD 2020-0085 refers to January 27, 2016 (the effective date of EASA AD 2016-0010, dated January 13, 2016), this AD requires using April 3, 2017 (the effective date of AD 2017-04-10).

(7) Where paragraph (12) of EASA AD 2020-0085 specifies a compliance time of “before next flight after December 15, 2017,” for this AD, that compliance time is “within 30 days after September 13, 2018” (the effective date of AD 2018-16-02.)

(j) Terminating Action for AD 2016-14-09 and AD 2017-04-10

(1) Modification of an airplane as required by paragraph (h) of this AD (i.e., accomplishing the modification required by paragraph (3) of EASA AD 2020-0085, the replacement specified in paragraph (4) of EASA AD 2020-0085, or the modification specified in paragraph (5) of EASA AD 2020-0085), constitutes terminating action for the repetitive detailed inspections required by paragraph (l) of AD 2016-14-09 for that airplane.

(2) Modification of an airplane as required by paragraph (h) of this AD (i.e., accomplishing the modification required by paragraph (3) of EASA AD 2020-0085, the replacement specified in paragraph (4) of EASA AD 2020-0085, or the modification specified in paragraph (5) of EASA AD 2020-0085), is a method of compliance with the requirements of paragraph (g) of AD 2017-04-10 for that airplane.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:
(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Large Aircraft Section, International Validation 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 responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (l) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

   (i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

   (ii) AMOCs approved previously for AD 2018-16-02 are approved as AMOCs for the corresponding provisions of EASA AD 2020-0085 that are required by paragraph (g) of this AD.

(2) **Contacting the Manufacturer:** For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) **Required for Compliance (RC):** Except as required by paragraph (k)(2) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be
put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**Related Information**

For more information about this AD, contact Sanjay Ralhan, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3223; email: sanjay.ralhan@faa.gov.

**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 this AD specifies otherwise.


   ii. [Reserved]

3. For EASA AD 2020-0085, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at https://ad.easa.europa.eu.

4. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. This material may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0914.
(5) You may view this material 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:

Issued on March 1, 2021.

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

[FR Doc. 2021-05534 Filed: 3/16/2021 8:45 am; Publication Date: 3/17/2021]