



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0343; Product Identifier 2019-NM-206-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive

(AD) 2018-17-05, which applies to all Airbus SAS Model A350-941 and -1041 airplanes.

AD 2018-17-05 requires a check of the insulation resistance of the direct drive solenoid

valve (DDSOV) of each affected electro-hydrostatic actuator (EHA) and applicable

corrective actions. Since the FAA issued AD 2018-17-05, it has been determined that

certain EHA part numbers can be modified and re-identified as specified in European

Union Aviation Safety Agency (EASA) AD 2019-0301, dated December 12, 2019, which

would inadvertently remove certain part numbers from the applicability in other EHA-

related ADs. This proposed AD would require a check of the insulation resistance of the

DDSOV of each affected EHA and applicable corrective actions, and modifying or

replacing certain EHAs, as specified in two EASA ADs, which will be incorporated by

reference. The FAA is proposing this AD to address the unsafe condition on these

products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For the material identified in this proposed AD that will be incorporated by reference (IBR), contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 1000; 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-2020-0343.

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-2020-0343; 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 NPRM, the regulatory evaluation, any comments received, and other information. The street address for Docket Operations is listed above.

Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Kathleen Arrigotti, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218; Kathleen.Arrigotti@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2020-0343; Product Identifier 2019-NM-206-AD” at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM based on those comments.

The FAA will post all comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact we receive about this NPRM.

Discussion

The FAA issued AD 2018-17-05, Amendment 39-19359 (83 FR 40438, August 15, 2018) (“AD 2018-17-05”), which applied to all Airbus SAS Model A350-941 and -1041 airplanes. AD 2018-17-05 requires a check of the insulation resistance of the DDSOV of each affected EHA and applicable corrective actions. The FAA issued AD 2018-17-05 to address degraded insulation resistance in the DDSOV, due to incorrect sealing application, which could lead to the DDSOV being unable to command or maintain the EHA in active mode, possibly resulting in reduced control of the airplane.

Actions Since AD 2018-17-05 Was Issued

Since AD 2018-17-05 was issued, it has been determined that certain EHA part numbers can be modified and re-identified as described in EASA AD 2019-0301, dated December 12, 2019 (“EASA 2019-0301”), which would inadvertently remove certain part numbers from the applicability in other EHA-related ADs. Therefore, EASA issued AD 2020-0027R1, dated February 21, 2020 (“EASA AD 2020-0027R1”), to revise the definition of an affected EHA.

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2019-0301 and EASA AD 2020-0027R1 (these ADs are also referred to as the Mandatory Continuing Airworthiness Information, or “the

MCAI”), to correct an unsafe condition for all Airbus SAS Model A350-941 and -1041 airplanes. EASA AD 2020-0027R1 supersedes EASA AD 2018-0141, dated July 3, 2018 (which corresponds to FAA AD 2018-17-05).

In addition to the determination that certain EHA part numbers might have been inadvertently removed from the actions required by AD 2018-17-05, this proposed AD was prompted by reports of EHA units that were returned to the manufacturer with degraded insulation resistance in the DDSOV; investigation results revealed that moisture ingress, due to incorrect sealing application, had caused this degradation. This AD was also prompted by a report of a technical issue detected on EHAs installed on inboard ailerons and elevators, causing potential erroneous monitoring of those actuators. The FAA is proposing this AD to address degraded insulation resistance, which could lead to the DDSOV being unable to command or maintain the EHA in active mode, and possibly result in reduced control of the airplane. The FAA is also proposing this AD to address the possibility of an in-flight loss of inboard aileron or elevator control, which, due to the resulting drag, would lead to increased fuel consumption, and when combined with one engine inoperative, could result in reduced control of the airplane. See the MCAI for additional background information.

Related IBR Material under 1 CFR Part 51

EASA AD 2019-0301 describes, among other actions, procedures for modifying or replacing affected EHAs. In addition, EASA AD 2020-0027R1 describes procedures for a check of the insulation resistance of the DDSOV of each affected EHA (installed on inboard ailerons, elevators, and rudder) and applicable corrective actions (replacing or

reidentifying the affected EHA). 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.

FAA’s Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to a bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI referenced above. The FAA is proposing this AD because the agency evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Proposed AD Requirements

This proposed AD would require accomplishing certain actions specified in EASA AD 2019-0301 and the actions specified in EASA AD 2020-0027R1, described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD and except as discussed under “Differences Between this Proposed AD and the MCAI.”

Explanation of Required Compliance Information

In the FAA’s ongoing efforts to improve the efficiency of the AD process, the FAA initially worked with Airbus and EASA to develop a process to use certain EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has since coordinated with other manufacturers and civil aviation authorities (CAAs) to use this process. As a result, EASA AD 2019-0301

and EASA AD 2020-0027R1 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2019-0301 and EASA AD 2020-0027R1 in their entirety, through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in the EASA AD does not mean that operators need comply only with that section. For example, where the AD requirement refers to “all required actions and compliance times,” compliance with this AD requirement is not limited to the section titled “Required Action(s) and Compliance Time(s)” in the EASA AD. Service information specified in EASA AD 2019-0301 and EASA AD 2020-0027R1 that is required for compliance with EASA AD 2019-0301 and EASA AD 2020-0027R1 will be available on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0343 after the FAA final rule is published.

Differences Between this Proposed AD and the MCAI

EASA AD 2019-0301 requires the accomplishment of paragraphs (1) through (6). However, this AD only requires the accomplishment of paragraphs (5) and (6) of EASA AD 2019-0301. Paragraphs (1) through (4) of EASA AD 2019-0301 are addressed in FAA AD 2019-16-08, Amendment 39-19711 (84 FR 51957, October 1, 2019), which requires revising the airplane flight manual (AFM) to provide the flightcrew with updated procedures related to inboard aileron fault operations, and also requires modification of the electronic centralized aircraft monitoring (ECAM) procedures by installing an Airbus temporary quick change (ATQC) and activating an ECAM temporary change.

Clarification of a Definition in EASA AD 2020-0027R1

For EASA AD 2020-0027R1, all serial numbers listed in the “applicable SB” are included in the definition of “affected EHA” regardless of the associated part numbers that are also listed in the “applicable SB.”

Costs of Compliance

The FAA estimates that this proposed AD affects 13 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

Estimated costs for required actions*

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
New proposed actions	Up to 28 work-hours X \$85 per hour = \$2,380	\$0**	Up to \$2,380	Up to \$30,940

*Table does not include estimated costs for reporting.

**The FAA has received no definitive date on the parts cost for the modification or replacement specified in this proposed AD.

The FAA estimates that it would take about 1 work-hour per product to comply with the proposed reporting requirement in this proposed AD. The average labor rate is \$85 per hour. Based on these figures, the FAA estimates the cost of reporting the inspection results on U.S. operators to be \$1,105, or \$85 per product.

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need these on-condition actions:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
Up to 28 work-hours X \$85 per hour = \$2,380	Up to \$518,314	Up to \$520,694

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 proposed AD is 2120-0056. The paperwork cost associated with this proposed 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 associated with this proposed AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

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

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

- (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.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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) 2018-17-05, Amendment 39-19359 (83 FR 40438, August 15, 2018), and adding the following new AD:

Airbus SAS: Docket No. FAA-2020-0343; Product Identifier 2019-NM-206-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2018-17-05, Amendment 39-19359 (83 FR 40438, August 15, 2018) (“AD 2018-17-05”).

(c) Applicability

This AD applies to all Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Reason

This AD was prompted by reports of electro-hydrostatic actuator (EHA) units that were returned to the manufacturer with degraded insulation resistance in the direct drive solenoid valve (DDSOV); investigation results revealed that moisture ingress, due to incorrect sealing application, had caused this degradation. This AD was also prompted by a report of a technical issue detected on EHAs installed on inboard ailerons and elevators, causing potential erroneous monitoring of those actuators. The FAA is issuing this AD to address degraded insulation resistance, which could lead to the DDSOV being unable to command or maintain the EHA in active mode, and possibly result in reduced control of the airplane. The FAA is also issuing this AD to address the possibility of an in-flight loss of inboard aileron or elevator control, which, due to the resulting drag, would lead to increased fuel consumption, and when combined with one engine inoperative, could result in reduced control of the airplane.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2020-0027R1, dated February 21, 2020 (“EASA AD 2020-0027R1”) and EASA AD 2019-0301, dated December 12, 2019 (“EASA AD 2019-0301”).

(h) Exceptions and Clarifications to EASA AD 2019-0301 and EASA AD 2020-0027R1

(1) Where EASA AD 2019-0301 and EASA AD 2020-0027R1 refer to their effective date, this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2019-0301 and EASA AD 2020-0027R1 do not apply to this AD.

(3) Where EASA AD 2019-0301 requires the accomplishment of paragraphs (1) through (6), this AD only requires the accomplishment of paragraphs (5) and (6).

(4) Paragraph (6) of EASA AD 2020-0027R1 specifies to report insulation check results (e.g., results of the detailed inspection of the insulation resistance) to Airbus within a certain compliance time. For this AD, report inspection results at the applicable time specified in paragraph (h)(4)(i) or (ii) of this AD.

(i) If the insulation check was done on or after the effective date of this AD: Submit the report within 30 days after the insulation check.

(ii) If the insulation check was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(5) EASA AD 2020-0027R1 includes a definition for “affected EHA” that specifies “as listed by serial number in the applicable SB.” All serial numbers listed in the “applicable SB” are included in the definition of “affected EHA” regardless of the associated part numbers that are also listed in the “applicable SB.”

(6) For any service information referenced in EASA AD EASA AD 2019-0301 that specifies to return parts to the manufacturer, that action is not required by this AD.

(i) 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 local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (j)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office

(ii) AMOCs approved previously for AD 2018-17-05, Amendment 39-19359 (83 FR 40438, August 15, 2018), are approved as AMOCs for the corresponding provisions of EASA AD 2020-0027 R1 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)*: For any service information referenced in EASA AD 2020-0027R1 and paragraphs (5) and (6) of EASA AD 2019-0301 that

contains RC procedures and tests: Except as required by paragraph (i)(2) of this AD, RC 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.

(4) *Paperwork Reduction Act Burden Statement:* A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a 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 OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. All responses to this collection of information are mandatory as required by this AD; the nature and extent of confidentiality to be provided, if any. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

(j) Related Information

(1) For information about EASA AD 2020-0027R1 and EASA AD 2019-0301, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 6017; 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>. 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-2020-0343.

(2) For more information about this AD, contact Kathleen Arrigotti, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218; Kathleen.Arrigotti@faa.gov.

Issued on April 23, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-09140 Filed: 4/30/2020 8:45 am; Publication Date: 5/1/2020]