



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2025-3423; Project Identifier MCAI-2025-00811-T;

Amendment 39-23162; AD 2025-20-09]

RIN 2120-AA64

#### Airworthiness Directives; Airbus SAS Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2022-22-09, which applied to certain Airbus SAS Model A350-1041 airplanes. AD 2022-22-09 required replacing affected hydro-mechanical units (HMUs) with serviceable HMUs before reaching a reduced life limit and limited the installation of affected parts under certain conditions. Since the FAA issued AD 2022-22-09, an improved HMU was developed and embodied in production. This AD continues to require the actions in AD 2022-22-09. This AD also requires replacing affected HMUs with improved HMUs and prohibits the installation of affected parts under certain conditions and on certain airplanes. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 15 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 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this 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 [regulations.gov](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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

*AD Docket:* You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-3423; 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, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The street address for Docket Operations is listed above.

*Material Incorporated by Reference:*

- For European Union Aviation Safety Agency (EASA) material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu). You may find this material on the EASA website at [ad.easa.europa.eu](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. It is also available at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-3423.

**FOR FURTHER INFORMATION CONTACT:** Kathryn Hill, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3626; email: kathryn.a.hill@faa.gov.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments using a method listed under the ADDRESSES section. Include “Docket No. FAA-2025-3423; Project Identifier MCAI-2025-00811-T” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

**Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public

docket of this AD. Submissions containing CBI should be sent to Kathryn Hill, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3626; email: kathryn.a.hill@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Background**

The FAA issued AD 2022-22-09, Amendment 39-22224 (87 FR 72377, November 25, 2022) (AD 2022-22-09), for Airbus SAS Model A350-1041 airplanes equipped with Rolls-Royce Trent XWB-97 engines. AD 2022-22-09 was prompted by an MCAI originated by EASA, which is the Technical Agent for the Member States of the European Union. EASA issued AD 2022-0040, dated March 8, 2022 (EASA AD 2022-0040), to correct an unsafe condition. AD 2022-22-09 was prompted by reports of rejected takeoffs after transient engine N1 shaft speed exceedance, which was found to be the result of piston wear, causing the combining spill valve (CSV) piston of the engine HMU to close slowly. EASA AD 2022-0040 stated investigations revealed that the CSV of the engine HMU was slow to close due to piston wear. A worn CSV piston does not move fully and freely over its operating range, and, when it moves to fully closed position, an excess of fuel is sent to the fuel nozzles which eventually results in an N1 transient shaft overspeed.

AD 2022-22-09 required replacing certain HMUs with serviceable HMUs before reaching a reduced life limit. The FAA issued AD 2022-22-09 to address a stuck CSV piston of the engine HMUs, which could significantly reduce engine thrust, and if combined with a loss of the second engine, could possibly result in reduced control of the airplane.

### **Actions Since AD 2022-22-09 Was Issued**

The preamble to AD 2022-22-09 specifies that the FAA considers that AD “interim action” and that the FAA might consider further rulemaking if a final action is

identified. Since the FAA issued AD 2022-22-09, EASA superseded AD 2022-0040 with EASA AD 2025-0100, dated April 30, 2025 (EASA AD 2025-0100) (also referred to as the MCAI), to correct an unsafe condition for Airbus SAS Model A350-1041 airplanes equipped with Rolls-Royce Trent XWB-97 engines. The MCAI states, since issuance of EASA AD 2022-0040, an improved HMU has been developed and embodied in production through Airbus modification 120423. In addition, Rolls-Royce published Rolls-Royce Modification Service Bulletin TRENT XWB 73-L044 to provide instructions for replacement of an affected HMU with an improved HMU, as a terminating action for replacement of the life-limited affected parts. The FAA has now determined that further rulemaking is necessary, and this AD follows from that determination.

The FAA is issuing this AD to address the unsafe condition on these products. You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2025-3423.

### **Explanation of Retained Requirements**

Although this AD does not explicitly restate the requirements of AD 2022-22-09, this AD retains all of the requirements of AD 2022-22-09. Those requirements are referenced in EASA AD 2025-0100, which, in turn, is referenced in paragraph (g) of this AD.

### **Material Incorporated by Reference Under 1 CFR Part 51**

The FAA reviewed EASA AD 2025-0100, which specifies procedures for replacing an HMU having part number (P/N) G5020HMU02 with either a serviceable HMU, or an improved HMU having P/N G5020HMU03, or any later approved part number. EASA AD 2025-0100 also prohibits the installation of an affected HMU after it is replaced with an improved HMU.

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**

These products have been approved by the civil aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, that authority has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA is issuing this AD after determining that the unsafe condition described previously is likely to exist or develop on other products of the same type design.

### **Requirements of This AD**

This AD retains all requirements of AD 2022-22-09. This AD requires accomplishing the actions specified in EASA AD 2025-0100 described previously, except for any differences identified as exceptions in the regulatory text of this AD. This AD also prohibits the installation of affected parts under certain conditions.

### **Explanation of Required Compliance Information**

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, EASA AD 2025-0100 is incorporated by reference in this AD. This AD requires compliance with EASA AD 2025-0100 in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this AD. Using common terms that are the same as the heading of a particular section in EASA AD 2025-0100 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 EASA AD 2025-0100. Material required by EASA AD 2025-0100 for compliance will be available at regulations.gov under Docket No. FAA-2025-3423 after this AD is published.

### **Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

There are currently no domestic operators of these products. Accordingly, notice and opportunity for prior public comment are unnecessary, pursuant to 5 U.S.C. 553(b). In addition, for the foregoing reason(s), the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days.

### **Regulatory Flexibility Act (RFA)**

The requirements of the RFA do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

### **Costs of Compliance**

Currently, there are no affected U.S.-registered airplanes. If an affected airplane is imported and placed on the U.S. Register in the future, the FAA provides the following cost estimates to comply with this AD:

### Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product
Retained actions from AD 2022-22-09	Up to 7 work-hours X \$85 per hour = \$595	\$0*	\$595
New actions	Up to 2 work-hours X \$85 per hour = \$170	\$0*	\$170

\* The FAA has received no definitive data on which to base the cost estimates for the parts specified in this AD.

#### 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, and
- (2) Will not affect intrastate aviation in Alaska.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **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 (AD) 2022-22-09, Amendment 39-22224 (87 FR 72377, November 25, 2022); and

b. Adding the following new AD:

**2025-20-09 Airbus SAS:** Amendment 39-23162; Docket No. FAA-2025-3423; Project Identifier MCAI-2025-00811-T.

#### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

This AD replaces AD 2022-22-09, Amendment 39-22224 (87 FR 72377, November 25, 2022) (AD 2022-22-09).

#### **(c) Applicability**

This AD applies to Airbus SAS Model A350-1041 airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2025-0100, dated April 30, 2025 (EASA AD 2025-0100).

**(d) Subject**

Air Transport Association (ATA) of America Code 73, Engine Fuel and Control.

**(e) Unsafe Condition**

This AD was prompted by reports of rejected takeoffs after transient engine N1 shaft speed exceedance. The FAA is issuing this AD to address a stuck combining spill valve piston of the engine hydro-mechanical units, which could significantly reduce engine thrust, and if combined with a loss of the second engine, could possibly 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, EASA AD 2025-0100.

**(h) Exceptions to EASA AD 2025-0100**

(1) Where EASA AD 2025-0100 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where paragraph (3) of EASA AD 2025-0100 refers to March 15, 2022 (the effective date of EASA AD 2022-0040, dated March 8, 2022), this AD requires using December 30, 2022 (the effective date of FAA AD 2022-22-09).

(3) This AD does not adopt the “Remarks” section of EASA AD 2025-0100.

**(i) Additional AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, AIR-520, Continued Operational Safety 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 manager of Continued Operational Safety Branch, send it to the attention of the person identified in paragraph (j) of this AD and email to: AMOC@faa.gov.

(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, AIR-520, Continued Operational Safety, 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 (i)(2) of this AD, if any material referenced in EASA AD 2025-0100 that contains paragraphs that are labeled as RC, the instructions in RC paragraphs, including subparagraphs under an RC paragraph, must be done to comply with this AD; any paragraphs, including subparagraphs under those paragraphs, that are not identified as RC are recommended. The instructions in paragraphs, including subparagraphs under those paragraphs, 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 instructions identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to instructions identified as RC require approval of an AMOC.

**(j) Additional Information**

For more information about this AD, contact Kathryn Hill, Aviation Safety Engineer, FAA, 2200 South 216th St., Des Moines, WA 98198; phone: 206-231-3626; email: kathryn.a.hill@faa.gov.

**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following material was approved for IBR on [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) European Union Aviation Safety Agency (EASA) AD 2025-0100, dated April 30, 2025.

(ii) [Reserved]

(4) For EASA material identified in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu). You may find this material on the EASA website at [ad.easa.europa.eu](http://ad.easa.europa.eu).

(5) 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.

(6) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit [www.archives.gov/federal-register/cfr/ibr-locations](http://www.archives.gov/federal-register/cfr/ibr-locations) or email [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov).

Issued on September 26, 2025.

Peter A. White,  
Deputy Director, Integrated Certificate Management Division,  
Aircraft Certification Service.  
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