



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-9431; Directorate Identifier 2016-NM-104-AD; Amendment 39-18897; AD 2017-10-23]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Airbus Model A321 series airplanes. This AD was prompted by a determination that cracks could develop on holes at certain fuselage frame locations. This AD requires repetitive inspections for cracking on holes at certain fuselage frame locations, and repairs if necessary. We are 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 certain publications 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, Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex,

France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9431.

### **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-2016-9431; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, 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, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus Model A321 series airplanes. The

NPRM published in the Federal Register on December 2, 2016 (81 FR 86975). The NPRM was prompted by a determination from fatigue testing on the Model A321 airframe that cracks could develop on holes at certain fuselage frame locations. The NPRM proposed to require repetitive inspections for cracking on holes at certain fuselage frame locations, and repairs if necessary. We are issuing this AD to detect and correct cracking at certain hole locations in the fuselage frame, which could result in reduced structural integrity of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2016-0106, dated June 6, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition on certain Airbus Model A321 series airplanes. The MCAI states:

Following a new full scale fatigue test campaign on the A321 airframe, in the context of the A321 extended service goal, it was identified that cracks could develop on holes at frame (FR) 35.2A between stringers (STR) 22 and STR 23 on right hand (RH) and left hand (LH) sides, also on aeroplanes operated in the context of design service goal.

This condition, if not detected and corrected, could reduce the structural integrity of the fuselage.

Prompted by these findings, Airbus developed an inspection programme, published in Service Bulletin (SB) A320-53-1315 and SB A320-53-1316, each containing instructions for a different location.

For the reasons described above, this [EASA] AD requires repetitive special detailed (rototest) inspections (SDI) of the affected holes [for cracking] and, depending on findings, accomplishment of a repair.

This [EASA] AD is considered an interim action, pending development of a permanent solution.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9431.

### **Comments**

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the NPRM and the FAA's response.

#### **Request to Use Later Approved Service Information Revisions**

Delta Airlines (DAL) requested that we revise the NPRM to permit use of later approved revisions of service information as we have done in previous alternative methods of compliance (AMOCs). DAL stated that Airbus service bulletins are EASA approved, and through the bi-lateral agreement with the European Union, these subsequent service bulletin revisions should be allowed to be used by U.S. operators without seeking an AMOC. DAL also explained that having the ability to utilize future service bulletin revisions without seeking an AMOC is more efficient and preserves the required level of safety.

We do not agree with DAL's request. While we acknowledge that we allow the use of later approved revisions of service information in AMOCs, we may not allow use of "later FAA-approved revisions" in an AD when referring to the service document. Doing so violates Office of the Federal Register (OFR) regulations for approval of materials "incorporated by reference," as specified in 1 CFR 51.1(f).

In general terms, we are required by the OFR regulations to either publish the service document contents as part of the actual AD language; or submit the service

document to the OFR for approval as “referenced” material, in which case we may only refer to such material in the text of an AD. The AD may refer to the service document only if the OFR approved it for “incorporation by reference.” See 1 CFR part 51.

To allow operators to use later revisions of the referenced document (issued after publication of the AD), either we must revise the AD to reference specific later revisions, or operators must request approval to use later revisions as an AMOC under the provisions of paragraph (i)(1) of this AD. We have not changed this AD in this regard.

### **Conclusion**

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

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

### **Related Service Information under 1 CFR part 51**

Airbus has issued Service Bulletin A320-53-1315, dated January 13, 2016; and Service Bulletin A320-53-1316, dated January 13, 2016. This service information describes procedures for doing a special detailed inspection for cracking at the tooling holes on frame 35.2A between stringer 22 and stringer 23, and repairs. These documents are distinct since they apply to different sides of the airplane. 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 175 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

**Estimated costs**

| <b>Action</b> | <b>Labor cost</b>  | <b>Parts cost</b> | <b>Cost per product</b>      | <b>Cost on U.S. operators</b>  |
|---------------|--|-------------------|------------------------------|--------------------------------|
| Inspection    | 12 work-hours X \$85 per hour = \$1,020 per inspection cycle | \$0               | \$1,020 per inspection cycle | \$178,500 per inspection cycle |

We have received no definitive data that will enable us to provide cost estimates for the on-condition actions 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.

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 above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; 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.

### **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):

**2017-10-23 Airbus:** Amendment 39-18897; Docket No. FAA-2016-9431; Directorate Identifier 2016-NM-104-AD.

**(a) Effective Date**

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

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Airbus Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes, certificated in any category, all manufacturer serial numbers.

**(d) Subject**

Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Reason**

This AD was prompted by a determination from fatigue testing on the Model A321 airframe that cracks could develop on holes at certain fuselage frame locations. We are issuing this AD to detect and correct cracking at certain hole locations in the fuselage frame, which could result in reduced structural integrity of the airplane.

**(f) Compliance**

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

**(g) Repetitive Inspections**

At the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD: Do a special detailed (rototest) inspection for cracking of the affected holes at frame 35.2A on the left-hand side and right-hand side between stringer 22 and stringer 23, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-53-1315, dated January 13, 2016 (right-hand side); and Airbus Service Bulletin A320-53-1316, dated January 13, 2016 (left-hand side). Repeat the inspection of the affected holes thereafter at intervals not to exceed 21,500 flight cycles or 43,100 flight hours, whichever occurs first.

(1) Before exceeding 25,400 total flight cycles or 50,900 total flight hours since first flight of the airplane, whichever occurs first.

(2) Within 3,300 flight cycles after the effective date of this AD.

**(h) Repair**

If any crack is found during any inspection required by paragraph (g) of this AD: Before further flight, repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). Although the service information specified in paragraph (g) of this AD specifies to contact Airbus for repair instructions, and specifies that action as "RC" (Required for Compliance), this AD requires repair as specified in this paragraph. Repair of an airplane as required by this paragraph does not constitute terminating action for the repetitive actions required by paragraph (g) of this AD, unless specified otherwise in the

instructions provided by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA; or Airbus's EASA DOA.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. 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.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

**(3) Required for Compliance (RC):** Except as required by paragraph (h) 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.

**(j) Related Information**

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2016-0106, dated June 6, 2016, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9431.

**(k) 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.

(i) Airbus Service Bulletin A320-53-1315, dated January 13, 2016.

(ii) Airbus Service Bulletin A320-53-1316, dated January 13, 2016.

(3) For service information identified in this AD, contact Airbus, Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone

+33 5 61 93 36 96; fax +33 5 61 93 44 51; email [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com);

Internet <http://www.airbus.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on May 10, 2017.

Jeffrey E. Duven,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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