

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2018-0705; Product Identifier 2018-NM-077-AD]

RIN 2120-AA64

**Airworthiness Directives; Airbus SAS Airplanes**

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Airbus SAS Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. This proposed AD was prompted by a report that during removal of left-hand (LH) gear rib 5, four failed fasteners were discovered. This proposed AD would require a one-time ultrasonic inspection of the LH and right-hand (RH) wing rib 5-to-rear spar attachments for cracked or failed fasteners, and if necessary, a detailed inspection of the gear rib 5 and spar web for cracks and damage, a rotating probe test of the gear rib and spar web bolt holes for cracks and damage, reaming the gear rib and the spar web bolt holes, and replacement of cracked or failed fasteners. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by September 24, 2018.

**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 <http://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.

For service information identified in this NPRM, contact Airbus SAS, Airworthiness Office—EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; phone: +33 5 61 93 36 96; fax: +33 5 61 93 45 80; email: [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); internet: <http://www.airbus.com>. You may view this service information at the

FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

**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-2018-0705; 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 (phone: 800-647-5527) is in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3223.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite 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-2018-0705; Product Identifier 2018-NM-077-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

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

**Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0102, dated April 27, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus SAS Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes. The MCAI states:

During removal of the left hand (LH) rib 5, two of the fasteners (bolts) attaching the rib to the wing inner rear spar were found to have failed and two more failed during their removal. Two of the bolts were found

separated from the bolt shanks when the overcoat sealant was being removed, and the other two bolt heads broke away during removal.

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

To address this possible unsafe condition, Airbus issued [Service Bulletin] SB A320-57-1167 to provide inspection instructions. After that SB was issued, a potential manufacturing issue was identified on early production A321 [airplanes] concerning reports of fasteners “jamming” during installation on spar assemblies. A process change was introduced in production line, and SB A320-57-1167 was revised, changing the affected population to include all A321 aeroplanes delivered before the introduction of that process change.

For the reasons described above, this [EASA] AD requires a one-time special detailed [ultrasonic] inspection (SDI) of the wing rib 5-to-rear spar attachments, both LH and right hand (RH) wings, [and if necessary, a detailed inspection of the gear rib 5 and spar web for cracks and damage (cracks along the length of the bolt or broken bolt), a rotating probe test of the gear rib and spar web bolt holes for cracks and damage (cracks in the bolt holes), reaming the gear rib and the spar web bolt holes] and, depending on findings, accomplishment of a repair [replacement of cracked or failed (broken) fasteners (bolts)]. This [EASA] AD also requires the reporting of findings.

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-2018-0705.

**Related Service Information Under 14 CFR Part 51**

Airbus SAS has issued Service Bulletin A320-57-1167, Revision 01, dated January 16, 2018. This service information describes procedures for a one-time special detailed (ultrasonic) inspection of the LH and RH wing rib 5-to-rear spar attachments for cracked or failed (broken) fasteners (bolts), and if necessary, a detailed inspection of the gear-rib-5 and spar web for cracks and damage (cracks along the length of the bolt or broken bolt), a rotating probe test of the gear rib and spar web bolt holes for cracks and damage (cracks in the bolt holes), reaming the gear rib and the spar web bolt holes, and replacement of the cracked or damaged (broken) fasteners (bolts). 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.

**FAA’s Determination**

This product has been approved by the aviation authority of another country, and is approved for operation

in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop on other products of the same type design.

**Proposed Requirements of This NPRM**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the MCAI or Service Information.”

This proposed AD also would require sending the inspection results to Airbus SAS.

**Differences Between This Proposed AD and the MCAI or Service Information**

The MCAI specifies credit for actions accomplished in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–57–1167, dated August 10, 2011. The MCAI also discusses a potential manufacturing issue that was identified on early production Model A321 airplanes concerning reports of fasteners “jamming” during installation on spar assemblies. The corrective action specified in Airbus Service Bulletin A320–57–1167, dated August 10, 2011, includes the same process that

produced “jamming” previously. Therefore, this proposed AD does not include credit for actions accomplished using the Accomplishment Instructions of Airbus Service Bulletin A320–57–1167, dated August 10, 2011.

**Explanation of Change to Applicability**

We have revised the applicability of this AD to identify model designations as published in the most recent type certificate data sheet for the affected model.

**Costs of Compliance**

We estimate that this proposed AD affects 29 airplanes of U.S. registry. We estimate the following costs to comply with this proposed AD:

**ESTIMATED COSTS**

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
16 work-hours × \$85 per hour = \$1,360 .....	\$0	\$1,360	\$39,440

We estimate 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, we estimate the cost of reporting the inspection results on U.S. operators to be \$2,465, or \$85 per product.

We estimate the following costs to do any necessary on-condition actions that

would be required based on the results of any required actions. We have 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
20 work-hours × \$85 per hour = \$1,700 .....	\$0	\$1,700

**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 NPRM is 2120–0056. The paperwork cost associated with this NPRM 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 NPRM is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave. SW, Washington, DC 20591, ATTN: Information Collection Clearance Officer, AES–200.

**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.

This proposed AD is issued in accordance with authority delegated by

the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

**Regulatory Findings**

We 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. 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.

#### 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 adding the following new airworthiness directive (AD):

**Airbus SAS:** Docket No. FAA–2018–0705; Product Identifier 2018–NM–077–AD.

#### (a) Comments Due Date

We must receive comments by September 24, 2018.

#### (b) Affected ADs

None.

#### (c) Applicability

This AD applies to Airbus SAS Model A321–111, –112, –131, –211, –212, –213, –231, and –232 airplanes, certificated in any category, as identified in Airbus Service Bulletin A320–57–1167, Revision 01, dated January 16, 2018.

#### (d) Subject

Air Transport Association (ATA) of America Code 57, Wings.

#### (e) Reason

This AD was prompted by a report that during removal of left-hand (LH) gear rib 5, four failed fasteners (bolts attaching the gear rib to the wing inner rear spar) were discovered. We are issuing this AD to detect and correct cracked or failed (broken) fasteners (bolts) of the rib 5-to-rear spar attachment, which could lead to reduced structural integrity of the wing.

#### (f) Compliance

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

#### (g) Inspection of the Rib 5-to-Rear Spar Attachment Fasteners (Bolts)

Within 30 months after the effective date of this AD, do a special detailed (ultrasonic) inspection of the LH and right-hand (RH) wing rib 5-to-rear spar attachment fasteners (bolts) for cracked or failed (broken) fasteners (bolts), in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–57–1167, Revision 01, dated January 16, 2018.

#### (h) Replacement of Cracked or Failed Fasteners (Bolts)

If any cracked or failed (broken) fastener (bolt) is found during any inspection required by paragraph (g) of this AD, before further flight, do the actions specified in paragraph (h)(1), (h)(2), (h)(3) and (h)(4) of this AD, as applicable.

(1) Do a detailed inspection of the gear rib 5 and spar web for cracks and damage (cracks along the length of the bolt or broken bolt), in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–57–1167, Revision 01, dated January 16, 2018. If any crack or damage is found during any inspection required by this paragraph, before further flight, obtain corrective actions approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS’s EASA Design Organization Approval (DOA); and accomplish the corrective actions within the compliance time specified therein. If approved by the DOA, the approval must include the DOA-authorized signature.

(2) If no cracks or damage are found during any inspection required by paragraph (h)(1) of this AD: Do a rotating probe test of the gear rib and spar web bolt holes for cracks and damage (cracks in the bolt holes), in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–57–1167, Revision 01, dated January 16, 2018. If any crack or damage is found during any inspection required by this paragraph, before further flight, obtain corrective actions approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS’s EASA DOA; and accomplish the corrective actions within the compliance time specified therein. If approved by the DOA, the approval must include the DOA authorized signature.

(3) If no cracks or damage are found during any inspection required by paragraph (h)(2) of this AD: Ream the gear rib and the spar web bolt holes, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–57–1167, Revision 01, dated January 16, 2018. If an oversize larger than 0.794 millimeter (0.0313 inch) is required, before further flight, obtain corrective actions approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS’s EASA DOA; and accomplish the corrective actions within the compliance time specified therein. If approved by the DOA, the approval must include the DOA authorized signature.

(4) Replace any cracked or failed fasteners (bolts) in accordance with the Accomplishment Instructions of Airbus

Service Bulletin A320–57–1167, Revision 01, dated January 16, 2018.

#### (i) Reporting

Within 90 days after the special detailed inspection required by paragraph (g) of this AD, or within 30 days after the effective date of this AD, whichever occurs later, report the inspection results (both positive and negative) to Airbus SAS in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320–57–1167, Revision 01, dated January 16, 2018. If operators have reported findings as part of obtaining any corrective actions approved by the EASA DOA, operators are not required to report those findings as specified in this paragraph.

#### (j) 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, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES–200.

#### (k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, International Section, Transport Standards 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 (l)(2) of this AD. 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 Section, Transport Standards Branch, FAA; or the EASA; or Airbus SAS’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 (i) 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.

#### (I) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0102, dated April 27, 2018, 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-2018-0705.

(2) For more information about this AD, contact Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3223.

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office—EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; phone: +33 5 61 93 36 96; fax: +33 5 61 93 45 80; email: [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); internet: <http://www.airbus.com>. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

Issued in Des Moines, Washington, on July 27, 2018.

**James Cashdollar,**

*Acting Director, System Oversight Division, Aircraft Certification Service.*

[FR Doc. 2018-16733 Filed 8-8-18; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2018-0611; Product Identifier 2018-NE-21-AD]

RIN 2120-AA64

#### Airworthiness Directives; Rolls-Royce plc Turbofan Engines

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all Rolls-Royce plc (RR) Trent 1000-A2, Trent 1000-C2, Trent 1000-D2, Trent 1000-E2, Trent 1000-G2, Trent 1000-

H2, Trent 1000-J2, Trent 1000-K2, and Trent 1000-L2 turbofan engine models. This proposed AD was prompted by reports of intermediate-pressure compressor (IPC) rotor seal failures. This proposed AD would require initial and repetitive on-wing borescope inspections (BSI) of affected IPC rotor seals, and removing any cracked parts from service. We are proposing this AD to address the unsafe condition on these products.

**DATES:** We must receive comments on this proposed AD by September 24, 2018.

**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 <http://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.

For service information identified in this NPRM, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE24 8BJ; phone: 011-44-1332-242424; fax: 011-44-1332-249936; email: [corporate.care@rolls-royce.com](mailto:corporate.care@rolls-royce.com); internet: <https://customers.rolls-royce.com/public/rollsroycecare>. You may view this service information at the FAA, Engine & Propeller Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7759.

#### 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-2018-0611; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this NPRM, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Kevin M. Clark, Aerospace Engineer,

ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7088; fax: 781-238-7199; email: [kevin.m.clark@faa.gov](mailto:kevin.m.clark@faa.gov).

#### SUPPLEMENTARY INFORMATION:

#### Comments Invited

We invite 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-2018-0611; Product Identifier 2018-NE-21-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM because of those comments.

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

#### Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2018-0095, dated April 24, 2018 (referred to hereinafter as "the MCAI"), to address the unsafe condition on these products. The MCAI states:

During an engine shop visit, an affected seal was found with cracking at the seal head. Propagation of such cracking may lead to failure, causing secondary impact damage to the IPC module.

This condition, if not detected and corrected, could lead to engine power loss, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, RR published the NMSB, providing instructions for on-wing borescope inspections. RR previously issued NMSB TRENT 1000 72-J353, which contains instructions for in-shop inspections.

For the reasons described above, this [EASA] AD requires repetitive borescope inspections of the front face of the affected seals and, depending on the findings, accomplishment of applicable corrections action(s).

You may obtain further information by examining the MCAI in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0611.

#### Related Service Information Under 14 CFR Part 51

We reviewed RR Non-Modification Service Bulletin (NMSB) Trent 1000 72-