

# Rules and Regulations

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This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2021-1072; Project Identifier MCAI-2021-01248-E; Amendment 39-21870; AD 2021-26-11]

RIN 2120-AA64

#### Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co KG (Type Certificate Previously Held by Rolls-Royce plc) Turbofan Engines

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

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

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Rolls-Royce Deutschland Ltd. & Co KG (RRD) RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 model turbofan engines. This AD was prompted by reports of single engine events caused by water contamination, which led to corrosion on the fuel pump that resulted in loss of engine thrust. This AD requires replacing the fuel pump as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective January 3, 2022.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of January 3, 2022.

The FAA must receive comments on this AD by January 31, 2022.

**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:* Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For material incorporated by reference in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website: <https://www.easa.europa.eu>. You may find this material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1072. For the material identified in this AD that is not incorporated by reference, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; phone: +44 (0)1332 242424; fax: +44 (0)1332 249936; website: <https://www.rolls-royce.com/contact-us.aspx>.

#### Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-1072; 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 EASA AD, any comments received, and other information. The street address for Docket Operations is listed above.

#### FOR FURTHER INFORMATION CONTACT:

Nicholas Paine, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7116; fax: (781) 238-7199; email: [nicholas.j.paine@faa.gov](mailto:nicholas.j.paine@faa.gov).

#### SUPPLEMENTARY INFORMATION:

##### Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0245, dated November 10, 2021 (EASA AD

2021-0245) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition on RRD RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 model turbofan engines.

This AD was prompted by a report of single engine events that resulted in loss of engine thrust. An investigation by the manufacturer determined that certain engines were exposed to unacceptable levels of water contamination, which caused corrosion on the fuel pump internal components. This corrosion led to debris release and filter blockages in variable stator vane actuator control units, which resulted in the variable stator vane system failing in the closed position. This condition, if not addressed, could result in loss of engine thrust control, in-flight engine shutdown, and reduced control of the airplane. The FAA is issuing this AD to address the unsafe condition on these products.

#### 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 the FAA's bilateral agreement with the European Community, the FAA has been notified of the unsafe condition described in the MCAI. The FAA is issuing this AD because the agency evaluated all the relevant information provided by EASA and determined the safe condition described previously is likely to exist or develop in other products of the same type design.

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

The FAA reviewed EASA AD 2021-0245. EASA AD 2021-0245 specifies instructions for replacing certain fuel pumps and identifies certain fuel pumps that are not to be installed on an affected engine. 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 **ADDRESSES**.

#### Other Related Service Information

The FAA reviewed Rolls-Royce Alert Non-Modification Service Bulletin (NMSB) RB.211-73-AK788, dated November 9, 2021. The NMSB describes procedures for removing and replacing

the fuel pump and identifies the population of affected fuel pumps.

#### AD Requirements

This AD requires accomplishing the actions specified in EASA AD 2021–0245, 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 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 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 since coordinated with other manufacturers and CAAs to use this process. As a result, EASA AD 2021–0245 will be incorporated by reference in this final rule. This AD, therefore, requires compliance with EASA AD 2021–0245 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 2021–0245 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 2021–0245. Service information required by EASA AD 2021–0245 for compliance will be available at <https://www.regulations.gov> by searching for and locating Docket No. FAA–2021–1072.

#### Differences Between This AD and the EASA AD

Where EASA AD 2021–0245 requires compliance from its effective date, this AD requires using the effective date of this AD. This AD does not mandate compliance with the “Remarks” section of EASA AD 2021–0245.

#### Interim Action

The FAA considers this AD to be an interim action. If further action is later identified, the FAA may consider additional rulemaking.

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

Section 553(b)(3)(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 seeking comment prior to the 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.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule. Following occurrences of single engine loss of engine thrust, the manufacturer determined that a subset of RRD RB211 Trent model turbofan engines have been exposed to unacceptable levels of water contamination. This water contamination may cause corrosion on the fuel pump internal components, leading to debris release and filter blockage in variable stator vane actuator control units. These fuel pumps have the highest risk of failure and require removal within 30 days of the effective date of this AD to prevent failure of the variable stator vane system and maintain an acceptable level of safety. The FAA considers failure of a variable stator vane system in the closed position to be an urgent safety issue that requires immediate action to avoid loss of engine thrust or in-flight engine shutdown. In addition, the compliance time for the required action is shorter than the time necessary for the public to comment and for publication of the final rule. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, 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, for the same reasons the FAA found good cause to forego notice and comment.

#### Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this final rule. Send your comments to an address listed under **ADDRESSES**. Include “Docket No. FAA–2021–1072; Project Identifier MCAI–2021–01248–E” 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 <https://www.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 Nicholas Paine, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives that is not specifically designated as CBI will be placed in the public docket for this rulemaking.

#### Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (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

The FAA estimates that this AD affects one engine installed on airplanes of U.S. registry.

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

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S operators
Remove and replace fuel pump .....	4.5 work-hours × \$85 per hour = \$382.50 .....	\$133,130	\$133,512.50	\$133,512.50

**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 adding the following new airworthiness directive:

**2021–26–11 Rolls-Royce Deutschland Ltd & Co KG (Type Certificate previously held by Rolls-Royce plc):** Amendment 39–21870; Docket No. FAA–2021–1072; Project Identifier MCAI–2021–01248–E.

**(a) Effective Date**

This airworthiness directive (AD) is effective January 3, 2022.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Rolls-Royce Deutschland Ltd. & Co KG (RRD) (Type Certificate previously held by Rolls-Royce plc) RB211 Trent 875–17, 877–17, 884–17, 884B–17, 892–17, 892B–17, and 895–17 model turbofan engines.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7314, Engine Fuel Pump.

**(e) Unsafe Condition**

This AD was prompted by reports of single engine events caused by water contamination, which led to corrosion on the fuel pump that resulted in loss of engine thrust. The FAA is issuing this AD to prevent failure of variable stator vane system. The unsafe condition, if not addressed, could result in loss of engine thrust control, in-flight engine shutdown, and reduced control of the airplane.

**(f) Compliance**

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

**(g) Required Actions**

Except as specified in paragraph (h) of this AD: Perform all required actions within the compliance times specified in, and in accordance with, European Union Aviation Safety Agency AD 2021–0245, dated November 10, 2021 (EASA AD 2021–0245).

**(h) Exceptions to EASA AD 2021–0245**

- (1) Where EASA AD 2021–0245 requires compliance from its effective date, this AD requires using the effective date of this AD.
- (2) This AD does not mandate compliance with the “Remarks” section of EASA AD 2021–0245.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, ECO 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 manager of the ECO Branch, send it to the attention of the person identified in paragraph (j)(1) of this AD. Information may be emailed to: [ANE-AD-AMOC@faa.gov](mailto:ANE-AD-AMOC@faa.gov).

(2) 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.

**(j) Related Information**

(1) For more information about this AD, contact Nicholas Paine, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238–7116; fax: (781) 238–7199; email: [nicholas.j.paine@faa.gov](mailto:nicholas.j.paine@faa.gov).

(2) For material identified in this AD that is not incorporated by reference, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; phone: +44 (0)1332 242424; fax: +44 (0)1332 249936; website: <https://www.rolls-royce.com/contact-us.aspx>.

**(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) European Union Aviation Safety Agency (EASA) AD 2021–0245, dated November 10, 2021.

(ii) [Reserved]

(3) For EASA AD 2021–0245, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +49 221 8999 000; email: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); website: <https://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 service information at FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (817) 222–5110.

(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 [fr.inspection@nara.gov](mailto:fr.inspection@nara.gov), or go to <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on December 9, 2021.

**Lance T. Gant,**

*Director, Compliance & Airworthiness  
Division, Aircraft Certification Service.*

[FR Doc. 2021-27385 Filed 12-14-21; 4:15 pm]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2021-0692; Project Identifier MCAI-2020-01585-T; Amendment 39-21845; AD 2021-25-02]

RIN 2120-AA64

#### **Airworthiness Directives; Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.) Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2014-16-16, which applied to all Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes; and AD 2018-19-28, which applied to certain Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes. AD 2014-16-16 required, for certain airplanes, retorquing and replacing the pylon lower link fittings, and for all airplanes, repetitive retorquing of those fittings. AD 2018-19-28 required modification of the attaching parts of the pylon lower link fittings. This AD continues to require those actions, and also requires application of a lower torque value, inspection of certain shear pins and replacement if necessary, and revised compliance times for the modification; as specified in an Agência Nacional de Aviação Civil (ANAC) AD, which is incorporated by reference. This AD also prohibits the installation of affected parts. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective January 20, 2022.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of January 20, 2022.

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of September 2, 2014 (79 FR 48018, August 15, 2014).

**ADDRESSES:** For ANAC material incorporated by reference (IBR) in this AD, contact ANAC, Aeronautical Products Certification Branch (GGCP), Rua Dr. Orlando Feirabend Filho, 230—Centro Empresarial Aquarius—Torre B—Andares 14 a 18, Parque Residencial Aquarius, CEP 12.246-190—São José dos Campos—SP, Brazil; telephone 55 (12) 3203-6600; email [pac@anac.gov.br](mailto:pac@anac.gov.br); internet [www.anac.gov.br/en/](http://www.anac.gov.br/en/). You may find this IBR material on the ANAC website at <https://sistemas.anac.gov.br/certificacao/DA/DAE.asp>. For Embraer service information identified in this final rule, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170—Putim—12227-901 São José dos Campos—SP—Brazil; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email [distrib@embraer.com.br](mailto:distrib@embraer.com.br); internet <http://www.flyembraer.com>. For Embraer service information identified in this final rule that is applicable to Yaborã Indústria Aeronáutica S.A. Model ERJ 190-100 ECJ airplanes, contact Embraer S.A., Technical Publications Section (PC 560), Rodovia Presidente Dutra, km 134, 12247-004 Distrito Eugênio de Melo—São José dos Campos—SP—Brazil; telephone +55 12 3927-0386; email [distrib@embraer.com.br](mailto:distrib@embraer.com.br); internet <https://www.mytechcare.embraer.com>. 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 in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0692.

#### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0692; 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 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:** Krista Greer, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198;

telephone and fax 206-231-3221; email [krista.greer@faa.gov](mailto:krista.greer@faa.gov).

#### **SUPPLEMENTARY INFORMATION:**

##### **Background**

ANAC, which is the aviation authority for Brazil, has issued ANAC AD 2020-06-02R02, effective November 30, 2020 (ANAC AD 2020-06-02R02) (also referred to as the MCAI), to correct an unsafe condition for certain Yaborã Indústria Aeronáutica S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes. Model 190-100 SR 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 2014-16-16, Amendment 39-17940 (79 FR 48018, August 15, 2014) (AD 2014-16-16); and AD 2018-19-28, Amendment 39-19429 (83 FR 48935, September 28, 2018) (AD 2018-19-28). AD 2014-16-16 applied to all Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes. AD 2018-19-28 applied to certain Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes. The NPRM published in the **Federal Register** on August 24, 2021 (86 FR 47252). The NPRM was prompted by reports of bushing migration, loss of nut torque on the engine pylon lower inboard and outboard link fittings, a loose lower link assembly, and damaged nuts. The existing torque values could cause damage to the nuts, which could lead to loss of the shear pins of the pylon outboard and inboard lower link fittings. In addition, the existing compliance time for the modification of the pylon lower link fitting attaching parts has been found to be inadequate to address the unsafe condition. The NPRM proposed to continue to require the requirements of ADs 2014-16-16 and 2018-19-28, as specified in ANAC AD 2020-06-02R02. The NPRM also proposed to require application of a lower torque value, inspection of certain shear pins and replacement if necessary, and revised compliance times for the modification, as specified in ANAC AD 2020-06-02R02. The NPRM also proposed to prohibit the installation of affected parts.

The FAA is issuing this AD to address loss of integrity of the engine pylon lower link fittings, which could lead to separation of the engine from the wing. See the MCAI for additional background information.