

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

LARGE AIRCRAFT

BIWEEKLY 2020-07

03/16/2020 - 03/29/2020



Federal Aviation Administration
Continued Operational Safety Policy Section, AIR-141
P.O. Box 25082
Oklahoma City, OK 73125-0460

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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects			
Biweekly 2020-01			
2019-23-04		The Boeing Company	727, 727-100, 727C, 727-100C, 727-200, and 727-200F
2019-23-16		The Boeing Company	737-100, -200, -200C, -300, -400, and -500
2019-24-12		De Havilland Aircraft of Canada Limited	DHC-8-401 and -402
2019-24-13		Airbus SAS	A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, and -133, A320-211, -212, -214, -216, -231, -232, and -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2019-24-14		328 Support Services GmbH	328-100
2019-24-15		The Boeing Company	737-900ER
2019-24-16	R 2017-16-08	Embraer S.A	ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW, ERJ 190-200 STD, -200 LR, and -200 IGW
2019-24-18		The Boeing Company	727, 727C, 727-100, 727-100C, 727-200, and 727-200F, 757-200, -200PF, -200CB, and -300, 767-200, -300, -300F, and -400ER
2019-25-13		Engine Alliance	GP7270 and GP7277
2019-25-17		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER
Biweekly 2020-02			
2019-22-07		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440), CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705), Model CL-600-2D24 (Regional Jet Series 900), Model CL-600-2E25 (Regional Jet Series 1000)
2019-23-14		The Boeing Company	37-100, -200, -200C, -300, -400, and -500
2019-24-01		Airbus SAS	A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, and -133, A320-211, -212, -214, -231, -232, and -233, A321-111, -112, -131, -211, -231, -212, -213, and -232, A330-201, -202, -203, -223, -223F, -243, and -243F, A340-211, -212, -213, -311, -312, -313, -541, and -642
2019-25-10		Fokker Services B.V	F28 Mark 0070 and 0100
2019-25-11		Viking Air Limited	CL-215-1A10, CL-215-6B11 (CL-215T Variant)
2019-25-12	R 2016-18-02	The Boeing Company	777-200 and -300ER
2019-25-14		The Boeing Company	777-300ER and 777F
2019-25-15		Fokker Services B.V	F28 Mark 0100
2019-25-16	R 2017-06-08	Embraer S.A	ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; and Model ERJ 170-200 LR, -200 SU, -200 STD, and -200 LL
2019-25-18		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2019-25-19		Airbus SAS	A350-941
2020-01-11	R 2017-12-07	The Boeing Company	737-800, -900, and -900ER
2020-01-55	E	General Electric Company	GE90-110B1 and GE90-115B
Biweekly 2020-03			
2019-25-20		Lockheed Martin Corporation/Lockheed Martin Aeronautics Company	382, 382B, 382E, 382F, and 382G; C-130A, C-130B, C-130BL, C-130E, C-130H, C-130H-30, C-130J, C-130J-30, EC-130Q, HC-130H, KC-130H, NC-130B, NC-130, and WC-130H airplanes
2019-25-55		The Boeing Company	737-300, -400, and -700 series airplanes
2019-26-01		Airbus SAS	A350-941 and -1041 airplanes
2020-01-12	A 2017-16-12	Airbus SAS	A318, A319, A320, A321 airplanes
2020-01-13	R 2018-19-26	Dassault Aviation	MYSTERE-FALCON 200 airplanes
2020-01-14	A 2010-26-05	Airbus SAS	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes
2020-01-17		Airbus SAS	A318, A319, A320, A321 airplanes
2020-01-18	R 2006-11-11	The Boeing Company	757-200, -200PF, -200CB, and -300 series airplanes

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AD No.	Information	Manufacturer	Applicability
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Biweekly 2020-04

2019-26-10		Bombardier, Inc.	CL-600-2C10, -2D15, -2D25, -2E25 airplanes
2019-26-11		Airbus SAS	A319, A320, A321 airplanes
2020-01-10		Airbus SAS	A350-941 airplanes
2020-01-15		Airbus SAS	A300, A310 airplanes
2020-01-16	A 2014-25-52	Airbus SAS	A330, A340 airplanes
2020-01-55		General Electric Company	GE90-110B1 and GE90-115B model turbofan engines
2020-02-10		De Havilland Aircraft of Canada Limited	DHC-8-400, -401, and -402 airplanes
2020-02-12	R 2017-15-04	The Boeing Company	787 series airplanes
2020-02-13	R 2019-03-14 A 2010-26-05	Dassault Aviation	FAN JET FALCON, FAN JET FALCON SERIES C, D, E, F, and G airplanes
2020-02-14		Airbus SAS	A350-941 and -1041 airplanes
2020-02-15		Bombardier, Inc.	BD-700-1A10, BD-700-1A11 airplanes
2020-02-16		The Boeing Company	737-200, -200C, -300, -400, and -500 series airplanes
2020-02-18		Gulfstream Aerospace Corporation	GVI, GVII-G500, and GVII-G600 airplanes
2020-02-19	R 2003-09-04 R1	Bombardier, Inc.	CL-600-2B19 airplanes
2020-02-20	R 2014-24-07	Airbus SAS	A318, A319, A320, A321 airplanes
2020-02-21	R 2014-03-12 R 2018-19-25 A 2010-26-05	Dassault Aviation	FALCON 2000 airplanes
2020-02-22		Airbus SAS	A300, A310 airplanes
2020-03-11		The Boeing Company	707-100 long body, -200, -100B long body, -100B short body, -300, -300B, -300C, and -400 series; and 720 and 720B series airplanes
2020-03-12		Airbus SAS	A350-941 and -1041 airplanes

Biweekly 2020-05

2020-01-18	COR R 2006-11-11	The Boeing Company	757-200, -200PF, -200CB, and -300 series airplanes
2020-02-19	COR R 2003-09-04 R1	Bombardier, Inc.	CL-600-2B19 (Regional Jet series 100 & 440) airplanes
2020-03-10		The Boeing Company	737 series, except for 737-100, -200, -200C, -300, -400, and -500 series airplanes
2020-03-14		Airbus SAS	A350-941 and -1041 airplanes
2020-03-15		Airbus SAS	A321-211, -212, -213, -231, and -232 airplanes
2020-03-17	R 2015-24-04	Bombardier, Inc.	CL-600-2B19, -2C10, -2D15, -2D25, -2E25 airplanes
2020-03-18	R 2017-19-08	Airbus Defense and Space S.A.	C-212-CB, C-212-CC, C-212-CD, C-212-CE, and C-212-DF airplanes
2020-03-19	A 2010-26-05	Dassault Aviation	MYSTERE-FALCON 20-C5, 20-D5, 20-E5, and 20-F5 airplanes
2020-03-20		The Boeing Company	MD-11, MD-11F, 717-200, 737-8, 737-9, 737-600, -700, -700C, -800, -900, and -900ER; 747-400 and 747-400F; 757-200, -200PF, -200CB, and -300; 767-200, -300, -300F, -400ER, and -2C; 777-200, -200LR, -300, and -300ER; 777F series airplanes
2020-03-21		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11 airplanes
2020-03-22		The Boeing Company	787-8 airplanes
2020-03-23		Bombardier, Inc.	CL-600-2B19
2020-03-24	A 2010-26-05	Dassault Aviation	MYSTERE-FALCON 20-C5, 20-D5, 20-E5, and 20-F5 airplanes
2020-04-01		Pratt & Whitney	PW1519G, PW1521G, PW1521GA, PW1524G, PW1525G, PW1521G-3, PW1524G-3, PW1525G-3, PW1919G, PW1921G, PW1922G, PW1923G, and PW1923G-A model turbofan engines

Biweekly 2020-06

2020-04-10	A 2011-03-10	Airbus SAS	A330 airplanes
2020-04-11		The Boeing Company	747-400 series airplanes
2020-04-12	R 2012-22-05 R 2018-19-03	Fokker Services B.V.	F28 Mark 0070 and 0100 airplanes
2020-04-18		Airbus SAS	A330-941 airplanes

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2020-05-01		Rolls-Royce Deutschland Ltd & Co KG	Trent 1000-AE3, Trent 1000-CE3, Trent 1000-D3, Trent 1000-G3, Trent 1000-H3, Trent 1000-J3, Trent 1000-K3, Trent 1000-L3, Trent 1000-M3, Trent 1000-N3, Trent 1000-P3, Trent 1000-Q3, and Trent 1000-R3 model turbofan engines
2020-05-10		Dassault Aviation	FALCON 7X airplanes
2020-05-12		Gulfstream Aerospace Corporation	GVII-G500 and GVII-G600 airplanes
2020-05-13		Airbus Canada Limited Partnership	BD-500-1A11 airplanes
2020-05-14		Airbus SAS	A320-214, -232, -271N; A321-231 airplanes
2020-05-18		Airbus SAS	A350-941 and -1041 airplanes
2020-06-01	R 2018-25-09 R 2019-12-01	CFM International, S.A.	LEAP-1B21, -1B23, -1B25, -1B27, -1B28, -1B28B1, -1B28B2, -1B28B3, -1B28B2C, -1B28BBJ1, and -1B28BBJ2 model turbofan engines
Biweekly 2020-07			
2020-04-19	R 2017-15-01	The Boeing Company	777-200, -200LR, -300, -300ER, and 777F series airplanes
2020-05-13		Airbus Canada Limited Partnership	BD-500-1A11 airplanes
2020-05-14		Airbus SAS	A320-214, -232, -271N; A321-231 airplanes
2020-05-15		Airbus SAS	A319-131, -132, -133; A320-231, -232, -233; and A321-131, -231, -232 airplanes
2020-05-16		Airbus SAS	A319-115; A320-214, -216, -232, -251N, -271N; and A321-211, -231, -251N, -251NX, -253N, -271N, -271NX, -272N airplanes
2020-05-17		Airbus SAS	A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-216, A320-231, A320-232, A320-233, A320-251N, and A320-271N airplanes
2020-05-18		Airbus SAS	A350-941 and -1041 airplanes
2020-05-19		Airbus SAS	A319-112, -115, -132; and A320-214, -216, -232 -233 airplanes
2020-05-21		Yaborã Indústria Aeronáutica S.A.	ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes
2020-05-22		Yaborã Indústria Aeronáutica S.A.	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU; and ERJ 170-200 LR, -200 SU, -200 STD, -200 LL airplanes
2020-05-24	R 2010-26-01	The Boeing Company	777-200 series airplanes
2020-05-28	R 2019-11-08	International Aero Engines LLC	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1129G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines
2020-06-02		International Aero Engines LLC	PW1122G-JM, PW1124G1-JM, PW1124G-JM, PW1127GA-JM, PW1127G1-JM, PW1127G-JM, PW1133G-JM, PW1133GA-JM, PW1130G-JM, and PW1129G-JM turbofan engines
2020-06-14		The Boeing Company	787-8, 787-9, and 787-10 airplanes
2020-07-51	E	International Aero Engines AG	V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5 turbofan engines



2020-04-19 The Boeing Company: Amendment 39-19856 ; Docket No. FAA-2019-0974; Product Identifier 2019-NM-155-AD.

(a) Effective Date

This AD is effective April 21, 2020.

(b) Affected ADs

This AD replaces AD 2017-15-01, Amendment 39-18961 (82 FR 33782, July 21, 2017) (“AD 2017-15-01”).

(c) Applicability

This AD applies to all The Boeing Company Model 777-200, -200LR, -300, -300ER, and 777F series airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 22, Auto flight.

(e) Unsafe Condition

This AD was prompted by reports of uncommanded altitude display changes in the mode control panel (MCP) altitude window. The FAA is issuing this AD to address uncommanded changes to the MCP selected altitude; such uncommanded changes could result in incorrect spatial separation between airplanes, midair collision, or controlled flight into terrain.

(f) Compliance

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

(g) New Definitions

(1) For the purposes of this AD, an affected part is an MCP having part number S241W001-201, S241W001-202, S241W001-251, S241W001-252, or S241W001-261.

(2) For the purposes of this AD, later-approved parts are only those parts that are approved as a replacement for the applicable part identified in Boeing Special Attention Service Bulletin 777-22-0034, dated March 3, 2016; and are approved as part of the type design by the FAA or The Boeing Company Organization Designation Authorization (ODA) after March 3, 2016 (the publication date of Boeing Special Attention Service Bulletin 777-22-0034, dated March 3, 2016).

(h) Retained Replacement of MCP With Revised Compliance Language

This paragraph restates the requirements of AD 2017-15-01, with revised compliance language. For airplanes identified in Boeing Special Attention Service Bulletin 777-22-0034, dated March 3, 2016, within 60 months after August 25, 2017, (the effective date of AD 2017-15-01): Do the actions specified in paragraph (h)(1) or (2) of this AD.

(1) Replace the existing MCP part with an MCP having part number S241W001-262, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-22-0034, dated March 3, 2016.

(2) Install a later-approved part as defined in paragraph (g)(2) of this AD.

(i) New MCP Identification and Replacement

For airplanes not identified in paragraph (h) of this AD with an original airworthiness certificate or original export certificate of airworthiness issued on or before the effective date of this AD, do the actions specified in paragraphs (i)(1) and (2) of this AD.

(1) Within 60 months after the effective date of this AD, perform a general visual inspection of the MCP to determine the MCP part number. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the MCP can be conclusively determined from that review.

(2) If the MCP is an affected part, within 60 months after the effective date of this AD: Do the actions specified in paragraph (i)(2)(i) or (ii) of this AD.

(i) Replace the existing MCP with an MCP having part number S241W001-262, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-22-0034, dated March 3, 2016.

(ii) Install a later-approved part as defined in paragraph (g)(2) of this AD.

(j) Parts Installation Prohibition

As of the effective date of this AD, no person may install an MCP having part number S241W001-201, S241W001-202, S241W001-251, S241W001-252, or S241W001-261, on any airplane.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO 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 certification office, send it to the attention of the person identified in paragraph (1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@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.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company ODA that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2017-15-01 are approved as AMOCs for the corresponding provisions of this AD.

(5) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(5)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled 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 RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(l) Related Information

For more information about this AD, contact Frank Carreras, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3539; email: frank.carreras@faa.gov.

(m) 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.

(3) The following service information was approved for IBR on August 25, 2017 (82 FR 33782, July 21, 2017).

(i) Boeing Special Attention Service Bulletin 777-22-0034, dated March 3, 2016.

(ii) [Reserved]

(4) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; internet <https://www.myboeingfleet.com>.

(5) 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.

(6) 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, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on February 25, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



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2020-05-13 Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.): Amendment 39-19861; Docket No. FAA-2019-0988; Product Identifier 2019-NM-175-AD.

(a) Effective Date

This AD is effective April 20, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.) Model BD-500-1A11 airplanes, certificated in any category, serial numbers 55018, 55019, 55022, 55024, 55026, 55028, 55031, and 55035.

(d) Subject

Air Transport Association (ATA) of America Code 30, Ice and rain protection.

(e) Reason

This AD was prompted by reports that, under certain combinations of airplane configuration and flight conditions, higher than anticipated temperatures could lead to an engine fire warning nuisance message. The FAA is issuing this AD to address this condition, which could lead to an unnecessary shutdown of the engine by the flightcrew, which could lead to reduced controllability of the airplane.

(f) Compliance

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

(g) Software Update

Within 850 flight hours or 6 months, whichever occurs first after the effective date of this AD: Install Integrated Air Systems Controller (IASC) software version 5.0, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin BD500-219001, Issue 002, dated September 11, 2018.

(h) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin BD500-219001, Issue 001, dated August 3, 2018.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO 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 certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Airbus Canada Limited Partnership's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) CF-2019-31, dated September 6, 2019, for related information. This MCAI may be found in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0988.

(2) For more information about this AD, contact Thomas Niczky, Aerospace Engineer, Avionics and Electrical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7347; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (k)(3) and (k)(4) of this AD.

(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) Bombardier Service Bulletin BD500-219001, Issue 002, dated September 11, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com; internet <http://www.bombardier.com>.

(4) 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.

(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, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 4, 2020.

Gaetano A. Sciortino,

Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



2020-05-14 Airbus SAS: Amendment 39-19864; Docket No. FAA-2019-0861; Product Identifier 2019-NM-129-AD.

(a) Effective Date

This AD is effective April 20, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A320-214, -232, -271N airplanes, and Model A321-231 airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2019-0167, dated July 15, 2019 (“EASA AD 2019-0167”).

(d) Subject

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

(e) Reason

This AD was prompted by a report of a production line inspection finding of damage on a main landing gear (MLG) side stay attachment outboard lug. The FAA is issuing this AD to address damaged MLG side stay attachment outboard lugs, which could reduce the structural integrity of the attachment of the MLG to the wing.

(f) Compliance

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

(g) Requirements

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2019-0167.

(h) Exception to EASA AD 2019-0167

The “Remarks” section of EASA AD 2019-0167 does not apply to this AD.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2019-0167 specifies to submit certain information to the manufacturer, and specifies that action as “RC” (required for compliance), this AD does not include that requirement.

(j) 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 (k) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards 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 2019-0167 that contains RC procedures and tests: Except as required by paragraph (2) of EASA AD 2019-0167 and paragraphs (i) and (j)(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.

(k) Related Information

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; telephone and fax 206-231-3223; email sanjay.ralhan@faa.gov.

(l) 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 2019-0167, dated July 15, 2019.

(ii) [Reserved]

(3) For information about EASA AD 2019-0167, 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>.

(4) You may view this material 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. 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-2019-0861.

(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 fedreg.legal@nara.gov, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 4, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft
Certification Service.



2020-05-15 Airbus SAS: Amendment 39-19865; Docket No. FAA-2019-0977; Product Identifier 2019-NM-166-AD.

(a) Effective Date

This AD is effective April 24, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus SAS airplanes specified in paragraphs (c)(1) through (3) of this AD, certificated in any category.

- (1) Model A319-131, -132, and -133 airplanes.
- (2) Model A320-231, -232, and -233 airplanes.
- (3) Model A321-131, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 29, Hydraulic power.

(e) Reason

This AD was prompted by a report of rupture of a hydraulic reservoir air pressurization hose on an in-service airplane, leading to air leakage that was undetectable during normal operation, and found during subsequent zonal inspection. The FAA is issuing this AD to address this condition, which, if not detected and corrected, could lead to exposure of the wing structure to high temperatures (possibly above 200 degrees Celsius (392 degrees Fahrenheit)), possibly resulting in reduced structural integrity 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 2019-0232, dated September 16, 2019 (“EASA AD 2019-0232”).

(h) Exceptions to EASA AD 2019-0232

- (1) Where EASA AD 2019-0232 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Remarks” section of EASA AD 2019-0232 does not apply to this AD.

(i) 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 (j) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards 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 2019-0232 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.

(j) Related Information

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; telephone and fax 206-231-3223; email Sanjay.Ralhan@faa.gov.

(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 2019-0232, dated September 16, 2019.

(ii) [Reserved]

(3) For information about EASA AD 2019-0232, 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>.

(4) You may view this material 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.

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-2019-0977.

(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 fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 4, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



2020-05-16 Airbus SAS: Amendment 39-19866; Docket No. FAA-2019-0982; Product Identifier 2019-NM-170-AD.

(a) Effective Date

This AD is effective April 24, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus SAS airplanes specified in paragraphs (c)(1) through (3) of this AD, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2019-0233, dated September 18, 2019; corrected September 19, 2019 (“EASA AD 2019-0233”).

(1) Model A319-115 airplanes.

(2) Model A320-214, -216, -232, -251N, and -271N airplanes.

(3) Model A321-211, -231, -251N, -251NX, -253N, -271N, -271NX, and -272N airplanes.

(d) Subject

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

(e) Reason

This AD was prompted by reports of incomplete installations of the over wing panel lug attachments in the production assembly line. The FAA is issuing this AD to address this condition, which, if not detected and corrected, could reduce the structural integrity of the wing.

(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 2019-0233.

(h) Exceptions to EASA AD 2019-0233

(1) Where EASA AD 2019-0233 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2019-0233 does not apply to this AD.

(3) Where any service information referenced in EASA AD 2019-0233 specifies reporting, this AD requires reporting all inspection results at the applicable time specified in paragraph (h)(3)(i) or (ii) of this AD. If operators have reported findings as part of obtaining any corrective actions approved by Airbus SAS's EASA Design Organization Approval (DOA), operators are not required to report those findings as specified in this paragraph.

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

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

(i) 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 (j) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards 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 2019-0233 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

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; telephone and fax 206-231-3223; email Sanjay.Ralhan@faa.gov.

(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 2019-0233, dated September 18, 2019; corrected September 19, 2019.

(ii) [Reserved]

(3) For information about EASA AD 2019-0233, 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>.

(4) You may view this material 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. 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-2019-0982.

(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 fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 4, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



2020-05-17 Airbus SAS: Amendment 39-19867; Docket No. FAA-2019-0863; Product Identifier 2019-NM-157-AD.

(a) Effective Date

This AD is effective April 24, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-216, A320-231, A320-232, A320-233, A320-251N, and A320-271N airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2019-0197, dated August 14, 2019 (“EASA AD 2019-0197”).

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Reason

This AD was prompted by a report of marginal clearance between certain fuel sensor covers on rib 24 and the crown of stringer 15 on both left-hand (LH) and right-hand (RH) wings. A possible contact between the shield and the stringer, and/or possible motion between the stringer and the shield, can make the gap more susceptible to sparking in case of lightning strike. The FAA is issuing this AD to address this condition, which could create a source of ignition in a fuel tank vapor space, possibly resulting in a fire or explosion and consequent loss 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 2019-0197.

(h) Exceptions to EASA AD 2019-0197

- (1) Where EASA AD 2019-0197 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Remarks” section of EASA AD 2019-0197 does not apply to this AD.

(i) 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 (j) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards 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 2019-0197 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.

(j) Related Information

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; telephone and fax 206-231-3223; email Sanjay.Ralhan@faa.gov.

(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 2019-0197, dated August 14, 2019.

(ii) [Reserved]

(3) For information about EASA AD 2019-0197, 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>.

(4) You may view this material 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.

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-2019-0863.

(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 fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 7, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



FAA
Aviation Safety

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

2020-05-18 Airbus SAS: Amendment 39-19868; Docket No. FAA-2019-0979; Product Identifier 2019-NM-182-AD.

(a) Effective Date

This AD is effective April 20, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2019-0265, dated October 25, 2019 (“EASA AD 2019-0265”).

(d) Subject

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

(e) Reason

This AD was prompted by a report of incorrectly engaged lock washer tabs of the main landing gear (MLG) forward pintle bearing (FPB) at the forward face of the trunnion block. The FAA is issuing this AD to address absence of an engaged lock washer tab at the bearing nut, which could cause an unexpected rotation of the nut and loss of torque, progressively allowing an axial movement of the bearing housing. This condition, if not detected and corrected, could lead to collapse of a MLG, possibly resulting in damage to the airplane and/or injury to occupants.

(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 2019-0265.

(h) Exceptions to EASA AD 2019-0265

(1) Where EASA AD 2019-0265 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2019-0265 does not apply to this AD.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2019-0265 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) 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 (k) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards 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 2019-0265 that contains RC procedures and tests: Except as required by paragraph (j)(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.

(k) Related Information

For more information about this AD, contact Kathleen Arrigotti, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3218; email: kathleen.arrigotti@faa.gov.

(l) 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 2019-0265, dated October 25, 2019.

(ii) [Reserved]

(3) For information about EASA AD 2019-0265, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; phone: +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>.

(4) You may view this material 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.

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-2019-0979.

(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 fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 4, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



2020-05-19 Airbus SAS: Amendment 39-19869; Docket No. FAA-2019-0873; Product Identifier 2019-NM-164-AD.

(a) Effective Date

This AD is effective April 24, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A319-112, -115, and -132 airplanes; and Model A320-214, -216, -232 and -233 airplanes; certificated in any category; as identified in European Union Aviation Safety Agency (EASA) AD 2019-0227, dated September 11, 2019 (“EASA AD 2019-0227”).

(d) Subject

Air Transport Association (ATA) of America Code 92, Electric and Electronic Common Installation.

(e) Reason

This AD was prompted by a report that a possible interference was identified between 1M and 2M wiring harnesses and the tapping units, and that the interference could adversely affect the lavatory smoke detection system and/or the passenger oxygen system. The FAA is issuing this AD to address possible loss of lavatory smoke detection and/or passenger oxygen system commands, which could prevent the delivery of passenger oxygen during an emergency and possibly result in injury to airplane occupants.

(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 2019-0227.

(h) Exceptions to EASA AD 2019-0227

- (1) For purposes of determining compliance with the requirements of this AD: Where EASA AD 2019-0227 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Remarks” section of EASA AD 2019-0227 does not apply to this AD.

(i) 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 (j) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards 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 2019-0227 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.

(j) Related Information

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; telephone and fax 206-231-3223; email Sanjay.Ralhan@faa.gov.

(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 2019-0227, dated September 11, 2019.

(ii) [Reserved]

(3) For information about EASA AD 2019-0227, 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>.

(4) You may view this material 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.

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-2019-0873.

(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 fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 4, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



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2020-05-21 Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.). Amendment 39-19871; Docket No. FAA-2019-0976; Product Identifier 2019-NM-177-AD.

(a) Effective Date

This AD is effective April 24, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.) Model ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes, as identified in Agência Nacional de Aviação Civil (ANAC) Brazilian AD 2019-10-01, effective October 21, 2019 (“Brazilian AD 2019-10-01”).

(d) Subject

Air Transport Association (ATA) of America Code 31, Indicating/recording systems.

(e) Reason

This AD was prompted by a case of erroneous indications of the engine parameters N1, N2, and ITT from both engines due to the design of data communication of the full authority digital engine control (FADEC) 1 and 2 with the engine indicating and crew alerting system (EICAS) display, which could result in interference with decisions that must be taken by the flight crew during takeoff. This AD was also prompted by reports of “pitch up” and “pitch down” uncommanded attitudes with autopilot engaged in cruise flight, which could occur in “Autoland” mode during landing. The FAA is proposing this AD to address these conditions, which could interfere with the decisions taken by the flight crew during takeoff and landing and possibly result in reduced controllability 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, Brazilian AD 2019-10-01.

(h) Exceptions to Brazilian AD 2019-10-01

(1) Where Brazilian AD 2019-10-01 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Alternative method of compliance (AMOC)” section of Brazilian AD 2019-10-01 does not apply to this AD.

(3) Where paragraph (d) of Brazilian AD 2019-10-01 specifies you must use certain service information for software installation, this AD specifies to use that service information as applicable, except as provided in paragraphs (a)(1) through (6) of Brazilian AD 2019-10-01.

(i) 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 (j) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or ANAC; or ANAC's authorized Designee. If approved by the ANAC Designee, the approval must include the Designee's authorized signature.

(j) Related Information

For more information about this AD, contact Krista Greer, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3221; email Krista.Greer@faa.gov.

(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) Agência Nacional de Aviação Civil (ANAC) Brazilian AD 2019-10-01, effective October 21, 2019.

(ii) [Reserved]

(3) For information about ANAC Brazilian AD 2019-10-01, contact National Civil Aviation Agency, Aeronautical Products Certification Branch (GGCP), Rua Laurent Martins, n[ordm] 209, Jardim Esplanada, CEP 12242-431–São José dos Campos–SP, Brazil; telephone 55 (12) 3203-6600; email pac@anac.gov.br; internet www.anac.gov.br/en/.

(4) You may view this material 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. 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-2019-0976.

(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 fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 4, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



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2020-05-22 Yaborã Indústria Aeronáutica S.A. (Type Certificate Previously Held by Embraer S.A.): Amendment 39-19872; Docket No. FAA-2019-0975; Product Identifier 2019-NM-176-AD.

(a) Effective Date

This AD is effective April 24, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Yaborã Indústria Aeronáutica S.A. (Type certificate previously held by Embraer S.A.) Model ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; and Model ERJ 170-200 LR, -200 SU, -200 STD, and -200 LL airplanes; certificated in any category, as identified in Agência Nacional de Aviação Civil (ANAC) Brazilian AD 2019-10-02, effective October 21, 2019 (“Brazilian AD 2019-10-02”).

(d) Subject

Air Transport Association (ATA) of America Code 31, Indicating/recording systems.

(e) Reason

This AD was prompted by a report of erroneous indications of the engine parameters N1, N2, and ITT from both engines due to the design of data communication of the full authority digital engine control (FADEC) 1 and 2 with the engine indicating and crew alerting system (EICAS) display, which could result in interference with decisions that must be taken by the flight crew during takeoff. This AD was also prompted by reports of “pitch up” and “pitch down” uncommanded attitudes with autopilot engaged in cruise flight, which could occur in “Autoland” mode during landing. The FAA is proposing this AD to address these conditions, which could interfere with the decisions taken by the flight crew during takeoff and landing and possibly result in reduced controllability 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, Brazilian AD 2019-10-02.

(h) Exceptions to Brazilian AD 2019-10-02

(1) Where Brazilian AD 2019-10-02 refers to its effective date, this AD requires using the effective date of this AD.

(2) The “Alternative method of compliance (AMOC)” section of Brazilian AD 2019-10-02 does not apply to this AD.

(3) Where paragraph (d) of Brazilian AD 2019-10-02 specifies you must use certain service information for software installation, this AD specifies to use that service information as applicable, except as provided in paragraphs (a)(1) through (3) of Brazilian AD 2019-10-02.

(i) 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 (j) 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 instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or ANAC; or ANAC's authorized Designee. If approved by the ANAC Designee, the approval must include the Designee's authorized signature.

(j) Related Information

For more information about this AD, contact Krista Greer, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3221; email Krista.Greer@faa.gov.

(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) Agência Nacional de Aviação Civil ANAC Brazilian AD 2019-10-02, effective October 21, 2019.

(ii) [Reserved]

(3) For information about ANAC Brazilian AD 2019-10-02, contact National Civil Aviation Agency, Aeronautical Products Certification Branch (GGCP), Rua Laurent Martins, n[ordm] 209, Jardim Esplanada, CEP 12242-431–São José dos Campos–SP, Brazil; telephone 55 (12) 3203-6600; email pac@anac.gov.br; internet www.anac.gov.br/en/.

(4) You may view this material 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. 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-2019-0975.

(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 fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 6, 2020.

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



2020-05-24 The Boeing Company: Amendment 39-19874; Docket No. FAA-2019-0602; Product Identifier 2019-NM-016-AD.

(a) Effective Date

This AD is effective April 24, 2020.

(b) Affected ADs

This AD replaces AD 2010-26-01, Amendment 39-16540 (75 FR 78594, December 16, 2010) (“AD 2010-26-01”).

(c) Applicability

This AD applies to The Boeing Company Model 777-200 series airplanes, certificated in any category, equipped with General Electric Company (GE) GE90-76B, -85B, -90B, or -94B engines.

(d) Subject

Air Transport Association (ATA) of America Code 78, Engine exhaust.

(e) Unsafe Condition

This AD was prompted by a report of an in-flight shutdown due to an engine fire indication; an under-cowl engine fire was extinguished after landing. This AD was also prompted by a determination that additional airplanes are affected. The FAA is issuing this AD to address the potential for a fire from entering the cowl or strut area, which could weaken thrust reverser (T/R) parts and result in reduced structural integrity of the T/R, possible separation of T/R parts during flight, and consequent damage to the airplane, injury to people, and damage to property on the ground.

(f) Compliance

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

(g) Retained Installation of Insulation Blanket, with Revised Service Information

This paragraph restates the requirements of paragraph (g) of AD 2010-26-01, with revised service information. For airplanes identified in Boeing Alert Service Bulletin 777-78A0066, Revision 2, dated April 8, 2010: Within 60 months or 4,500 flight cycles after January 20, 2011 (the effective date of AD 2010-26-01), whichever is first, install a new insulation blanket on the latch beam firewall of each T/R half by doing all the applicable actions specified in the Accomplishment Instructions of Boeing Service Bulletin 777-78A0066, Revision 3, dated April 28, 2011.

(h) New Requirement: Installation of Insulation Blanket for Additional Airplanes

For airplanes not identified in paragraph (g) of this AD: Within 60 months or 4,500 flight cycles after the effective date of this AD, whichever is first, inspect to determine if the installed T/R has any affected part number as identified in paragraphs (h)(1) through (5) of this AD. If an affected T/R is found or if it cannot be determined which T/R is installed, within 60 months or 4,500 flight cycles after the effective date of this AD, whichever is first, install a new insulation blanket on the latch beam firewall of each T/R half by doing all the applicable actions specified in the Accomplishment Instructions of Boeing Service Bulletin 777-78A0066, Revision 3, dated April 28, 2011, except as specified in paragraph (i) of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if it can be conclusively determined from that review that the installed T/R is not an affected T/R. A review of airplane maintenance records is also acceptable in lieu of this inspection if it can be conclusively determined from that review that an affected T/R is installed and the actions specified in Boeing Service Bulletin 777-78A0066, Revision 3, dated April 28, 2011, have already been done on that T/R.

(1) 315W1001-XX (all—where “XX” is any combination of numbers and letters that follow the dash).

(2) 315W1295-1 through 315W1295-222 inclusive.

(3) 315W1295-5001 through 315W1295-5222 inclusive.

(4) 315W1295-5501 through 315W1295-5722 inclusive.

(5) 315W1295-6101 through 315W1295-6322 inclusive.

(i) Exceptions to Service Information Specification

(1) Boeing Service Bulletin 777-78A0066, Revision 3, dated April 28, 2011, defines Group 1 as “all 777-200 airplanes with GE90 engines through line number 413 with a forward insulation blanket”; however, for paragraph (h) of this AD, Group 1 is defined as “all 777-200 airplanes with GE90 engines with a forward insulation blanket.”

(2) Boeing Service Bulletin 777-78A0066, Revision 3, dated April 28, 2011, defines Group 2 as “all 777-200 airplanes with GE90 engines through line number 413 without a forward insulation blanket”; however, for paragraph (h) of this AD, Group 2 is defined as “all 777-200 airplanes with GE90 engines without a forward insulation blanket.”

(3) Boeing Service Bulletin 777-78A0066, Revision 3, dated April 28, 2011, defines Group 2 Configuration 1 as “all 777-200 airplanes with GE90 engines through line number 413 without a forward insulation blanket and without the fitting assembly at the aft insulation blanket location”; however, for paragraph (h) of this AD, Group 2 Configuration 1 is defined as “all 777-200 airplanes with GE90 engines without a forward insulation blanket and without the fitting assembly at the aft insulation blanket location.”

(4) Boeing Service Bulletin 777-78A0066, Revision 3, dated April 28, 2011, defines Group 2 Configuration 2 as “all 777-200 airplanes with GE90 engines through line number 413 without a forward insulation blanket and with the fitting assembly at the aft insulation blanket location”; however, for paragraph (h) of this AD, Group 2 Configuration 2 is defined as “all 777-200 airplanes with GE90 engines without a forward insulation blanket and with the fitting assembly at the aft insulation blanket location.”

(j) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraphs (g) and (h) of this AD, if those actions were performed before the effective date of this AD using one of the service bulletins specified in paragraphs (j)(1) through (3) of this AD.

(1) Boeing Alert Service Bulletin 777-78A0066, dated June 5, 2008.

(2) Boeing Service Bulletin 777-78A0066, Revision 1, dated March 12, 2009.

(3) Boeing Alert Service Bulletin 777-78A0066, Revision 2, dated April 8, 2010.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO 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 certification office, send it to the attention of the person identified in paragraph (l)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@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.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2010-26-01 are approved as AMOCs for the corresponding provisions of paragraph (g) of this AD.

(l) Related Information

(1) For more information about this AD, contact James Laubaugh, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3622; email: james.laubaugh@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (m)(5) and (6) of this AD.

(m) 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.

(3) The following service information was approved for IBR on April 24, 2020.

(i) Boeing Service Bulletin 777-78A0066, Revision 3, dated April 28, 2011.

(ii) [Reserved]

(4) The following service information was approved for IBR on January 20, 2011 (75 FR 78594, December 16, 2010).

(i) Boeing Alert Service Bulletin 777-78A0066, Revision 2, dated April 8, 2010.

(ii) [Reserved]

(5) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717.

(6) 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.

(7) 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

2020-05-24 4

NARA, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 9, 2020.

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



2020-05-28 International Aero Engines LLC: Amendment 39-19878; Docket No. FAA-2019-0614; Product Identifier 2019-NE-14-AD.

(a) Effective Date

This AD is effective April 21, 2020.

(b) Affected ADs

This AD replaces AD 2019-11-08, Amendment 39-19654 (84 FR 27511, June 13, 2019).

(c) Applicability

This AD applies to all International Aero Engines, LLC (IAE) PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1129G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM model turbofan engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7260, Turbine Engine Accessory Drive.

(e) Unsafe Condition

This AD was prompted by multiple reports of in-flight engine shutdowns as the result of high-cycle fatigue causing fracture of certain parts of the main gearbox (MGB) assembly. The FAA is issuing this AD to prevent failure of the MGB assembly. The unsafe condition, if not addressed, could result in failure of one or more engines, loss of thrust control, and loss of the airplane.

(f) Compliance

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

(g) Required Actions

(1) Remove the MGB assembly, part number (P/N) 5322505, and install a part eligible for installation as follows:

(i) For engines that operate on 180-minute extended operations (ETOPS) flights, before further flight after the effective date of this AD.

(ii) For engines that operate on 120-minute ETOPS flights, within 120 days from June 28, 2019 (the effective date of AD 2019-11-08), or before further flight after the effective date of this AD, whichever occurs later.

(iii) For engines that do not operate on ETOPS flights, at the next engine shop visit after the effective date of this AD.

(2) For engines with MGB assembly P/N 5322505, within 120 days from June 28, 2019 (the effective date of AD 2019-11-08), or before further flight after the effective date of this AD, whichever occurs later, remove electronic engine control (EEC) software earlier than FCS5.0 from the engine and install EEC software that is eligible for installation.

(h) Installation Prohibition

(1) After the effective date of this AD, do not install integrated drive generator (IDG) oil pump drive gearshaft assembly, P/N 5322630-01, into an MGB assembly.

(2) After the effective date of this AD, do not load EEC software earlier than FCS5.0 on any engine identified in paragraph (c) of this AD with an MGB assembly, P/N 5322505.

(i) Definitions

(1) For the purpose of this AD, a “part eligible for installation” is an MGB assembly with an IDG oil pump drive gearshaft assembly other than P/N 5322630-01.

(2) For the purpose of this AD, an “engine shop visit” is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges, except that the separation of engine flanges solely for the purposes of transportation of the engine without subsequent engine maintenance does not constitute an engine shop visit.

(3) For the purpose of this AD, “EEC software that is eligible for installation” is EEC software FCS5.0 and later.

(j) 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 certification office, send it to the attention of the person identified in paragraph (k) of this AD. You may email your request to: 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.

(k) Related Information

For more information about this AD, 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.

(l) Material Incorporated by Reference

None.

Issued on March 11, 2020.

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



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2020-06-02 International Aero Engines LLC: Amendment 39-21104; Docket No. FAA-2020-0184; Project Identifier AD-2020-00187-E.

(a) Effective Date

This AD is effective April 6, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to International Aero Engines, LLC (IAE) PW1122G-JM, PW1124G1-JM, PW1124G-JM, PW1127GA-JM, PW1127G1-JM, PW1127G-JM, PW1133G-JM, PW1133GA-JM, PW1130G-JM, and PW1129G-JM model turbofan engines with low-pressure turbine (LPT) 3rd-stage blade, part number (P/N) 5387343, 5387493, 5387473 or 5387503, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by reports of failure of turbine stator intermediate outer rear air seals (turbine piston seals) leading to fracture of the LPT 3rd-stage blades. The FAA is issuing this AD to prevent failure of the turbine piston seals and fracture of LPT 3rd-stage blades. The unsafe condition, if not addressed, could result in failure of one or more engines, loss of thrust control, and loss of the airplane.

(f) Compliance

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

(g) Required Actions

(1) Perform a borescope inspection (BSI) of the turbine piston seal shiplap in accordance with the Accomplishment Instructions, For Engines Installed On Aircraft, paragraph B of Pratt & Whitney (P&W) Service Bulletin (SB) PW1000G-C-72-00-0154-00A-930A-D, Issue No. 004, dated February 14, 2020 ("P&W SB PW1000G-C-72-00-0154-00A-930A-D"), or the Accomplishment Instructions, For Engines Not Installed on Aircraft, paragraph A of P&W SB PW1000G-C-72-00-0154-00A-930A-D, as applicable, as follows:

(i) For engines operating on extended operations (ETOPS) flights, perform the BSI of the turbine piston seal shiplap within 15 days after the effective date of this AD.

(ii) For engines that do not operate on ETOPS flights, perform the BSI of the turbine piston seal shiplap within 45 days after the effective date of this AD.

(iii) Before further flight, remove from service any turbine piston seal found to exceed serviceable limits, as described in the Accomplishment Instructions, For Engines Installed On Aircraft, paragraph C.(1) and C.(2), of P&W SB PW1000G-C-72-00-0154-00A-930A-D.

(iv) If any turbine piston seal shiplap is found fractured and missing, before further flight, BSI the LPT 3rd-stage blades, and remove any LPT 3rd-stage blade found to exceed serviceable limits.

Note 1 to paragraph (g)(1)(iv): Guidance on determining LPT 3rd-stage blade serviceable limits can be found in Airbus Aircraft Maintenance Manual (AMM) TASK 72-53-00-200-801-A.

(2) Thereafter, repeat the BSI required by paragraph (g)(1) of the turbine piston seal as follows:

(i) For any turbine piston seal found intact (not fractured) during the last BSI, repeat the BSI within the intervals in Table 2, of P&W SB PW1000G-C-72-00-0154-00A-930A-D.

(ii) For any turbine piston seal found fractured during the last BSI, repeat the BSI every 200 flight cycles from the previous BSI to ensure proper engagement per the Accomplishment Instructions, For Engines Installed On Aircraft, paragraph C.(1) of P&W SB PW1000G-C-72-00-0154-00A-930A-D.

(h) Terminating Action

Removal of the LPT 3rd-stage blades, P/N 5387343, 5387493, 5387473, and 5387503, is a terminating action to the initial and repetitive BSI requirements of this AD.

(i) Credit for Previous Actions

You may take credit for the initial BSI of the turbine piston seal required by paragraph (g)(1) of this AD if done in accordance with the Accomplishment Instructions, For Engines Installed On Aircraft, paragraph B, of P&W SB PW1000G-C-72-00-0154-00A-930A-D, Issue 003, dated February 5, 2020, or earlier versions.

(j) 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 certification office, send it to the attention of the person identified in paragraph (k) of this AD. You may email your request to: 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.

(k) Related Information

For more information about this AD, 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.

(l) 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 the AD specifies otherwise.

(i) Pratt & Whitney Service Bulletin PW1000G-C-72-00-0154-00A-930A-D, Issue No. 004, dated February 14, 2020.

(ii) [Reserved]

(3) For Pratt & Whitney service information identified in this AD, contact International Aero Engines, LLC, 400 Main Street, East Hartford, CT 06118, United States; phone: 800-565-0140; email: help24@pw.utc.com; website: <https://fleetcare.pw.utc.com>.

(4) You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7759.

(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, email: fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 6, 2020.

Gaetano A. Sciortino,

Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



2020-06-14 The Boeing Company: Amendment 39-19883; Docket No. FAA-2020-0205; Product Identifier 2020-NM-024-AD.

(a) Effective Date

This AD is effective April 7, 2020.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 787-8, 787-9, and 787-10 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 42, Integrated Modular Avionics.

(e) Unsafe Condition

This AD was prompted by a report that the stale-data monitoring function of the common core system (CCS) may be lost when continuously powered on for 51 days. This could lead to undetected or unannounced loss of common data network (CDN) message age validation, combined with a CDN switch failure. The FAA is issuing this AD to address this condition, which could result in erroneous flight-critical data being routed and displayed as valid data, and could reduce the ability of the flightcrew to maintain the safe flight and landing of the airplane.

(f) Compliance

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

(g) Required Actions

Except as specified by paragraph (h) of this AD: At the applicable times specified in paragraph 5., "Compliance," of Boeing Alert Service Bulletin B787-81205-SB420045-00, Issue 002, dated February 14, 2020, do all applicable actions identified as "RC" (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin B787-81205-SB420045-00, Issue 002, dated February 14, 2020.

(h) Exception to Service Information Specifications

Where Boeing Alert Service Bulletin B787-81205-SB420045-00, Issue 002, dated February 14, 2020, uses the phrase “the Issue 2 date of this service bulletin,” this AD requires using “the effective date of this AD.”

(i) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin B787-81205-SB420045-00, Issue 001, dated January 28, 2020.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO 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 certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@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.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by The Boeing Company Organization Designation Authorization (ODA) that has been authorized by the Manager, Seattle ACO Branch, FAA, to make those findings. To be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) For service information that contains steps that are labeled as RC, the provisions of paragraphs (j)(4)(i) and (ii) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. If a step or substep is labeled “RC Exempt,” then the RC requirement is removed from that step or substep. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled 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 RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(k) Related Information

(1) For more information about this AD, contact Joe Saleme, Aerospace Engineer, Systems and Equipment Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3536; email: joe.salameh@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(3) and (4) of this AD.

(l) 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 the AD specifies otherwise.

(i) Boeing Alert Service Bulletin B787-81205-SB420045-00, Issue 002, dated February 14, 2020.

(ii) [Reserved]

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; internet <https://www.myboeingfleet.com>.

(4) 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.

(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, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on March 17, 2020.

Gaetano A. Sciortino,
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division,
Aircraft Certification Service.



DATE: March 21, 2020
AD #: 2020-07-51

Emergency Airworthiness Directive (AD) 2020-07-51 is sent to owners and operators of International Aero Engines AG (IAE) V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5 model turbofan engines.

Background

This emergency AD was prompted by investigative findings from an event that occurred on March 18, 2020, in which an Airbus Model A321-231 airplane, powered by IAE V2533-A5 model turbofan engines, experienced an uncontained high-pressure turbine (HPT) 1st-stage disk failure that resulted in an aborted takeoff. This condition, if not addressed, could result in release of high-energy debris, damage to the engine, damage to the airplane, and loss of the airplane.

FAA's Determination

The FAA is issuing this AD because the Agency evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. Due to the need to correct an urgent safety of flight situation, good cause exists to make this AD effective in less than 30 days.

AD Requirements

This AD requires the removal from service of affected HPT 1st-stage disks installed on IAE V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5 model turbofan engines.

Interim Action

The FAA considers this AD interim action. The root cause of this event is still under investigation.

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.

Presentation of the Actual AD

The FAA is issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

2020-07-51 International Aero Engines AG: Project Identifier AD-2020-00369-E.

(a) Effective Date

This Emergency AD is effective upon receipt.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all International Aero Engines AG (IAE) V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5 model turbofan engines with a high-pressure turbine (HPT) 1st-stage disk, part number (P/N) 2A5001 and serial number PKLBR37442, PKLBR38359, PKLBR73862, PKLBR73289, PKLBR73270, PKLBR38981, PKLBR38661, PKLBR40207, PKLBR37445, PKLBR73861, PKLBR73268, PKLBR38629, PKLBSC8047, or PKLBR38979, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, TURBINE SECTION.

(e) Unsafe Condition

This AD was prompted by investigative findings from an event involving an uncontained failure of a HPT 1st-stage disk that resulted in high-energy debris penetrating the engine cowling. The FAA is issuing this AD to prevent failure of the HPT. The unsafe condition, if not addressed, could result in uncontained HPT failure, release of high-energy debris, damage to the engine, damage to the airplane, and loss of the airplane.

(f) Compliance

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

(g) Required Actions

(1) For affected IAE model turbofan engines with an engine serial number and HPT 1st-stage disk serial number listed in Table 1 to paragraph (g) of this AD, within 5 flight cycles after the effective date of this AD, remove the HPT 1st-stage disk from service.

Table 1 to Paragraph (g) of this AD – HPT 1st-Stage Disk with Known Engine Installations

Engine Serial Number	HPT 1st-Stage Disk Serial Number
V10443	PKLBR73268
V10976	PKLBR73270
V11303	PKLBR38359

V11490	PKLBR38979
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V12265	PKLBR73289
V15638	PKLBR37445
V15686	PKLBSC8047
V16372	PKLBR73861
V16570	PKLBR38629
V16468	PKLBR38981
V16622	PKLBR73862

(2) For all other affected IAE model turbofan engines, review the engine records within 3 calendar days after the effective date of this AD to determine if an HPT 1st-stage disk with serial number PKLBR37442, PKLBR38661, or PKLBR40207 is installed in the engine. If an affected HPT 1st-stage disk is installed, within 5 flight cycles after this determination remove the affected HPT 1st-stage disk from service.

(h) 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 certification office, send it to the attention of the person identified in paragraph (i) of this AD. You may email your request to 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.

(i) Related Information

For further information about this AD, contact: contact Nicholas J. Paine, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7116; fax: 781-238-7199; E-mail: nicholas.j.paine@faa.gov.

Issued on March 21, 2020.

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