

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

**LARGE AIRCRAFT
BIWEEKLY 2019-06**

3/4/2019 - 3/17/2019



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 2019-01			
2018-22-07		Engine Alliance	GP7270, GP7272, and GP7277 model turbofan engines
2018-23-12	COR	Zodiac Aero Evacuation Systems	Fusible plugs installed on emergency evacuation equipment
2018-25-08	R 2017-22-07	Airbus SAS	A319, A320, A321 airplanes
2018-26-01	R 2018-18-01	CFM International S.A.	CFM56-7B turbofan engines
2018-26-03		The Boeing Company	757-200 series airplanes
2018-26-04		Airbus SAS	A350-941 and -1041 airplanes
2018-26-05	A 2015-19-01	The Boeing Company	777-200, 777-200LR, 777-300, 777-300ER, and 777F series airplanes
2018-26-06		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
Biweekly 2019-02			
2019-01-01		The Boeing Company	787-8 airplanes
Biweekly 2019-03			
2019-01-01	COR	The Boeing Company	787-8 airplanes
Biweekly 2019-04			
2018-23-04		Bombardier, Inc.	DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes
2018-24-01		International Aero Engines	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines
2019-01-03	R 2016-18-01	The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-01-04		The Boeing Company	787 series airplanes
2019-01-05	A 2017-05-10	Airbus SAS	A330-201, A330-202, A330-203, A330-223, A330-243, A330-223F, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, and A330-343 airplanes
2019-01-06		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2019-01-07		Airbus SAS	A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes
2019-01-08		The Boeing Company	777-200, -200LR, -300, and -300ER series airplanes
2019-02-01	R 2018-16-07	General Electric Company	GEnx-1B54, -1B58, -1B64, -1B67, -1B70, -1B54/P1, -1B58/P1, -1B64/P1, -1B67/P1, -1B70/P1, -1B54/P2, -1B58/P2, -1B64/P2, -1B67/P2, -1B70/P2, -1B70C/P1, -1B70/72/P1, -1B70/75/P1, -1B74/75/P1, -1B75/P1, -1B70C/P2, -1B70/72/P2, -1B70/75/P2, -1B74/75/P2, -1B75/P2, -1B76/P2, -1B76A/P2, -1B78/P2, -2B67, -2B67B, and -2B67/P turbofan engines
2019-02-03		The Boeing Company	787-8, 787-9, and 787-10 airplane
2019-02-04	R 2018-22-05	Engine Alliance	GP7270, GP7272, and GP7277 turbofan engines
2019-03-01		Pratt & Whitney Division	PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090-3 turbofan engines
Biweekly 2019-05			
2018-21-14		Zodiac Aerotechnics	MC10 series crew oxygen mask regulators
2018-26-07		Airbus SAS	A350-941 and -1041 airplanes
2018-26-08		Airbus SAS	Note: Was missing from BW2019-01 A320-214, A320-232, A320-233, A321-211, and A321-231 airplanes
2019-03-03	A 2016-17-03	Airbus SAS	Note: Was missing from BW2019-01 A318, A319, A320, A321 airplanes
2019-03-04	R 2018-11-16	Engine Alliance	GP7270 and GP7277 model turbofan engines
2019-03-06		The Boeing Company	737-300, -400, and -500 series airplanes
2019-03-07	R 2017-16-05	The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-03-08		Airbus SAS	A350-941 airplanes
2019-03-09		Airbus SAS	A310-304, -322, -324, and -325 airplanes

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects			
2019-03-10	R 2017-07-05	Airbus SAS	A300 airplanes
2019-03-11		Airbus SAS	A350-941 and -1041 airplanes
2019-03-15		Airbus SAS	A330-201, -202, and -203; A330-301, -302, and -303 airplanes
2019-03-17	A 2017-25-04	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-19		Saab AB, Saab Aeronautics	SAAB 2000 airplanes
2019-03-20	A 2014-16-23	Dassault Aviation	FALCON 7X airplanes
	A 2016-16-09		
2019-03-21		Embraer S.A.	ERJ 190-100 STD, -100 LR, and -100 IGW; ERJ 190-200 STD, -200 LR, and -200 IGW airplanes
2019-03-23		Airbus SAS	A330, A340 airplanes
Biweekly 2019-06			
2019-03-13		Gulfstream Aerospace LP	Gulfstream G150 airplanes
2019-03-14		Dassault Aviation	FAN JET FALCON and FAN JET FALCON SERIES C, D, E, F, and G airplanes
2019-03-16	A 2006-25-06	Fokker Services B.V.	F.27 Mark 100, 200, 300, 400, 500, 600, and 700 airplanes
	A 97-04-08		
2019-03-18		Airbus SAS	A318, A319, A320 airplanes
2019-03-22		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11 airplanes
2019-03-24		The Boeing Company	737-400 series airplanes
2019-03-25	A 2008-02-15	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-26		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-03-27		Dassault Aviation	Falcon 10 airplanes
2019-03-28	R 2016-07-23	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-30		Empresa Brasileira de Aeronautica S.A.	EMB-135, EMB-145 airplanes
2019-05-01	R 2017-11-06	Pratt & Whitney Division	PW2037, PW2037D, PW2037M, PW2040, PW2040D, PW2043, PW2143, PW2643, and F117-PW-100 turbofan engines
2019-05-02	R 2017-22-13	Rolls-Royce plc	RB211-Trent 970-84 and RB211-Trent 972-84 turbofan engines
2019-05-08	R 2015-12-08	Airbus SAS	A318, A319, A320, A321 airplanes



2019-03-13 Gulfstream Aerospace LP (Type Certificate Previously Held by Israel Aircraft Industries, Ltd.): Amendment 39-19565; Docket No. FAA-2018-1006; Product Identifier 2018-NM-142-AD.

(a) Effective Date

This AD is effective April 8, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Gulfstream Aerospace LP (Type Certificate previously held by Israel Aircraft Industries, Ltd.) Model Gulfstream G150 airplanes, certificated in any category, serial numbers 201 through 326 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 24, Electrical power.

(e) Reason

This AD was prompted by reports of corrosion in the solder joints of the upper and lower front relay box connectors to the printed circuit board. We are issuing this AD to address corrosion in the front relay box connector solder joints. If not addressed, this condition could cause false crew alerting system (CAS) messages, such as slats unbalance, auto slats fail, and Mach trim fail, which could interfere with continued safe operation of the airplane.

(f) Compliance

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

(g) Replacement

Within 36 months after the effective date of this AD, remove the upper front relay box, Israel Aerospace Industries (IAI) part number (P/N) 25G8130301-510/-512/-514/-516, and replace with IAI P/N 25G8130301-516, upgraded to MOD A, and remove the lower front relay box, IAI P/N 25G8130300-512/-516/-518/-520, and replace with an improved lower front relay box, IAI P/N 25G8130300-520, upgraded to MOD A, in accordance with the Accomplishment Instructions of Gulfstream Service Bulletin 150-24-193, dated March 30, 2018.

(h) Parts Installation Prohibition

As of the applicable compliance time specified in paragraph (h)(1) or (h)(2) of this AD, do not install relay box IAI P/N 25G8130301-510/-512/-514/-516 or IAI P/N 25G8130300-512/-516/-518/-520 on any airplane, except relay box IAI P/N 25G8130301-516 or IAI P/N 25G8130300-520 that has been upgraded to MOD A as specified in paragraph (g) of this AD may be installed.

(1) For airplanes that have IAI P/N 25G8130301-510/-512/-514/-516 or IAI P/N 25G8130300-512/-516/-518/-520 installed as of the effective date of this AD: After modification of the airplane as required by this AD.

(2) For airplanes that do not have IAI P/N 25G8130301-510/-512/-514/-516 or IAI P/N 25G8130300-512/-516/-518/-520 installed as of the effective date of this AD: As of the effective date of this AD.

(i) No Parts Return or Reporting Requirement

(1) Although Gulfstream Service Bulletin 150-24-193, dated March 30, 2018, specifies to return parts to the manufacturer, this AD does not include that requirement.

(2) Although Gulfstream Service Bulletin 150-24-193, dated March 30, 2018, 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)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the Civil Aviation Authority of Israel (CAAI); or the CAAI's authorized Designee. If approved by the CAAI Designee, the approval must include the Designee's authorized signature.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Israeli Airworthiness Directive ISR-I-24-2018-09-7, dated October 1, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1006.

(2) For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226.

(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) Gulfstream Service Bulletin 150-24-193, dated March 30, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Mail Station D-25, Savannah, GA 31402-2206; telephone 800-810-4853; fax 912-965-3520; email pubs@gulfstream.com; internet http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm.

(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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 14, 2019.

Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-03-14 Dassault Aviation: Amendment 39-19566; Docket No. FAA-2018-0963; Product Identifier 2018-NM-135-AD.

(a) Effective Date

This AD is effective April 8, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Dassault Aviation Model FAN JET FALCON and FAN JET FALCON SERIES C, D, E, F, and G airplanes, certificated in any category, all serial numbers, on which the Dassault Fan Jet Falcon Supplemental Structural Inspection Program (Dassault Service Bulletin (SB) 730), has been embodied into the airplane's maintenance program.

(d) Subject

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks.

(e) Reason

This AD was prompted by a determination that new and more restrictive airworthiness limitations and maintenance requirements are necessary. We are issuing this AD to address, among other things, fatigue cracking and damage in principal structural elements; such fatigue cracking and damage could result in reduced structural integrity of the airplane.

(f) Compliance

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

(g) Maintenance or Inspection Program Revision

Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate the airworthiness limitations specified in Chapter 5-40-01, Airworthiness Limitations, DMD 44729, Revision 9, dated November 29, 2017, of the Dassault Aviation Falcon 20 Maintenance Manual. The initial compliance time for accomplishing the actions is at the applicable time specified in Chapter 5-40-01, Airworthiness Limitations, DMD 44729, Revision 9, dated November 29, 2017, of the Dassault Aviation Falcon 20 Maintenance Manual; or within 90 days after the effective date of this AD; whichever occurs later. Where the threshold column in the table in paragraph B, Mandatory Maintenance Operations, of Chapter 5-40-01, Airworthiness Limitations, DMD 44729, Revision 9, dated November 29, 2017, of the Dassault Aviation Falcon 20 Maintenance Manual specifies a compliance time in years, those compliance

times start from the date of issuance of the original airworthiness certificate or date of issuance of the original export certificate of airworthiness.

(h) No Alternative Actions or Intervals

After accomplishing the revision required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals may be used unless the actions and intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (i)(1) 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)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or European Aviation Safety Agency (EASA); or Dassault Aviation's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0193, dated September 3, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0963.

(2) For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226.

(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) Chapter 5-40-01, Airworthiness Limitations, DMD 44729, Revision 9, dated November 29, 2017, of the Dassault Aviation Falcon 20 Maintenance Manual.

(ii) [Reserved]

(3) For service information identified in this AD, contact Dassault Falcon Jet Corporation, Teterboro Airport, P.O. Box 2000, South Hackensack, NJ 07606; telephone 201-440-6700; internet <http://www.dassaultfalcon.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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 21, 2019.
Dionne Palermo,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-03-16 Fokker Services B.V. Airplanes: Docket No. FAA-2018-0956; Product Identifier 2018-NM-041-AD.

(a) Effective Date

This AD is effective April 8, 2019.

(b) Affected ADs

This AD affects AD 2006-25-06, Amendment 39-14847 (71 FR 71475, December 11, 2006) (“AD 2006-25-06”) and AD 97-04-08, Amendment 39-9932 (62 FR 7924, February 21, 1997) (“AD 97-04-08”).

(c) Applicability

This AD applies to all Fokker Services B.V. Model F.27 Mark 100, 200, 300, 400, 500, 600, and 700 airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 32, Main landing gear.

(e) Reason

This AD was prompted by a report of a main landing gear (MLG) collapse due to a broken drag stay; an investigation revealed that the drag stay failure was due to fatigue cracks, introduced by incorrect machining of the affected drag stay tube during production. We are issuing this AD to address fatigue cracking, which could lead to MLG collapse and result in damage to the airplane during landing and consequent injury to passengers.

(f) Compliance

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

(g) Definitions

(1) For purposes of this AD, an affected drag stay unit is SAFRAN Landing Systems (previously Messier-Dowty, Dowty Aerospace) MLG drag stay unit, part number (P/N) 200261001, P/N 200261002, P/N 200261003, P/N 200261004, P/N 200485001, P/N 200485002, P/N 200485003, P/N 200485004, P/N 200684001, P/N 200684002, P/N 200684003, or P/N 200684004.

(2) For purposes of this AD, an affected drag stay tube is a SAFRAN Landing Systems (previously Messier-Dowty, Dowty Aerospace) MLG drag stay tube, P/N 200259300, which has a change in section (stepped bore).

(h) Configuration Verification of the Drag Stay Units

Within 12 months after the effective date of this AD, do an ultrasonic inspection of each affected drag stay unit to determine the configuration of the drag stay tube, in accordance with step F. of the Accomplishment Instructions of Fokker Service Bulletin SBF27-32-173, dated November 30, 2017.

(i) Re-Identification of an Affected Drag Stay Unit

(1) If, during the inspection required by paragraph (h) of this AD, an affected drag stay unit is found to have a straight bore drag stay tube, P/N 200485300, installed: Before further flight, re-identify that affected drag stay unit in accordance with step I.(2), I.(3), or I.(4), as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF27-32-173, dated November 30, 2017.

(2) If, during the inspection required by paragraph (h) of this AD, an affected drag stay unit is found to have an affected drag stay tube, P/N 200259300, installed with a correct radius: Before further flight, re-identify the affected drag stay unit in accordance with step J.(1), J.(2), or J.(3), as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF27-32-173, dated November 30, 2017.

(3) If, during the inspection required by paragraph (h) of this AD, an affected drag stay unit is found to have an affected drag stay tube, P/N 200259300, installed with an incorrect radius: Before further flight, re-identify the affected drag stay unit in accordance with step K.(1), K.(2), or K.(3), as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF27-32-173, dated November 30, 2017.

(j) Inspection and Corrective Action for Certain Drag Stay Unit Part Numbers

For affected drag stay units having P/N 200261002, P/N 200261003, P/N 200485002, P/N 200485003, P/N 200684002, or P/N 200684003: Within 12 months after the effective date of this AD, do an ultrasonic inspection of the affected drag stay tube for any cracking, in accordance with step G. of the Accomplishment Instructions of Fokker Service Bulletin SBF27-32-173, dated November 30, 2017.

(1) If, during the ultrasonic inspection, a crack indication is found, before further flight, replace the affected drag stay tube with a serviceable part, in accordance with step H. of the Accomplishment Instructions of Fokker Service Bulletin SBF27-32-173, dated November 30, 2017.

(2) For affected drag stay units having P/N 200261002, P/N 200485002, or P/N 200684002 (drag stay units with incorrect bore radius drag stay tubes): If, during the ultrasonic inspection, no indication of cracking is found, within 1,500 flight cycles after that inspection, and, thereafter, at intervals not to exceed 1,500 flight cycles until the next scheduled MLG overhaul, repeat the ultrasonic inspection of the affected drag stay tube in accordance with step G. of the Accomplishment Instructions of Fokker Service Bulletin SBF27-32-173, dated November 30, 2017.

(k) Parts Installation Limitation

As of the effective date of this AD, no person may install, on any airplane, a drag stay unit (which includes installation of a replacement MLG), unless it has been determined that no affected drag stay tube is installed; or the installed affected drag stay tube has been reworked during the MLG overhaul in accordance with the instructions of Appendix B of Dowty Aerospace Landing Gear Service Bulletin 32-82W, Revision 2, dated July 29, 1994 (for Model F.27 Mark 500 airplanes), or Dowty Aerospace Landing Gear Service Bulletin 32-169B, Revision 2, dated July 29, 1994 (for Model F.27 Mark 100, 200, 300, 400, 600, and 700 airplanes), as applicable; or has passed an inspection (confirmed correct bore radius) in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF27-32-173, dated November 30, 2017. For the purpose of this AD,

removal of an MLG or an affected drag stay unit from an airplane and re-installing that MLG or drag stay unit on the same airplane is not “installation.”

(l) Terminating Action for Other ADs

Accomplishing the actions required by this AD terminates all requirements of AD 2006-25-06 and AD 97-04-08.

(m) Credit for Previous Actions

This paragraph provides credit for the applicable actions specified in paragraph (k) of this AD, if those actions were performed before the effective date of this AD using Dowty Aerospace Landing Gear Service Bulletin 32-82W, Revision 1, dated September 10, 1993, or Dowty Aerospace Landing Gear Service Bulletin 32-169B, Revision 1, dated September 10, 1993.

(n) 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 (o)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Fokker Services B.V.'s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0015, dated January 25, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0956.

(2) For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226.

(3) Dowty Aerospace Landing Gear service information identified in this AD, and not incorporated by reference, is available from Safran Landing Systems, One Carbon Way, Walton, KY 41094; telephone (859) 525-8583; fax (859) 485-8827.

(p) 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) Fokker Service Bulletin SBF27-32-173, dated November 30, 2017.

(ii) [Reserved]

(3) For Fokker service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL Hoofddorp, the Netherlands; telephone +31 (0)88-6280-350; fax +31 (0)88-6280-111; email technicalservices@fokker.com; internet <http://www.myfokkerfleet.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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 14, 2019.

Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-03-18 Airbus SAS: Amendment 39-19570; Docket No. FAA-2018-0957; Product Identifier 2018-NM-102-AD.

(a) Effective Date

This AD is effective April 9, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A318-111, -112, -121, and -122 airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; and Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes, certificated in any category, all manufacturer serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing Gear.

(e) Reason

This AD was prompted by reports of cracks that were found after improperly performed magnetic particle inspections of the main landing gear (MLG) sliding tubes were done. We are issuing this AD to address this condition, which could result in fracture of the MLG sliding tube, possibly resulting in MLG collapse, damage to the airplane, and injury to occupants.

(f) Compliance

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

(g) Definitions

For the purposes of this AD, the definitions specified in paragraphs (g)(1) and (g)(2) of this AD apply.

(1) An affected part is any MLG sliding tube, having a part number (P/N) and serial number (S/N) listed in Figure 1 to paragraph (g)(1) of this AD, that has been last overhauled between October 27, 2003, and September 21, 2009, inclusive.

Figure 1 to paragraph (g)(1) of this AD – Affected parts: P/N and

S/N

Part number	Serial number	Part number	Serial number	Part number	Serial number
201160302	1071	201371302	B198-4649	201371304	B0544888
201160302	1116B	201371302	B274-4849	201371304	B0751922
201160302	73B	201371302	B225-4715	201371304	B1392028
201160302	1309B	201371302	B228-4755	201371304	B1655066
201160302	1024B	201371302	1801B	201371304	B1025007
201160302	64B	201371302	4441B	201371304	B994937
201160324	B2414670	201371302	B197-4656	201371304	B019-05
201160324	B013-4846	201371302	B210-4687	201371304	B1261991
201160324	B235-4749	201371302	B227-4697	201371304	B123-4994
201160324	1321B	201371302	SS4353B	201371304	B0334860
201160324	MAL1161	201371302	SS4375	201371304	B0234843
201160324	1057	201371304	B168-1948	201371304	B0364875
201160324	MAL-1315	201371304	B951935	201371304	B042-1899
201160324	12088	201371304	B003-4830	201371304	B554896
201160324	1693B	201371304	B005-4815	201371304	B0474885
201371302	B2584800	201371304	B006-4819	201371304	B0494851
201371302	B210-4684	201371304	B0181916	201371304	B0924936
201371302	B196-1879	201371304	B0211889	201371304	B1064967
201371302	B241-4668	201371304	B0311902	201371304	B1054968
201371302	B264-4787	201371304	B026-1895	201371304	B1081962
201371302	B265-4808	201371304	B029-1904	201371304	B013-4845
201371302	B2564777	201371304	B006-4829	201371304	B0374865
201371302	B2704816	201371304	B0281900	201371304	B1194983
201371302	B196-1880	201371304	B0254853	201371304	B4675255
201371302	B2714811	201371304	B0271893	201371304	B1111974
201371302	B229-4729	201371304	B0321906		
201371302	B261-4810	201371304	B003-4821		
201371302	B2724797	201371304	B009-4818		

(2) Group 1 airplanes are those that have an affected part installed. Group 2 airplanes are those that do not have an affected part installed.

(h) Repetitive Inspections

For Group 1 airplanes: Within 500 flight cycles after the effective date of this AD, and, thereafter, at intervals not to exceed 500 flight cycles, accomplish a general visual inspection for cracks of each affected part, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1461, dated April 11, 2018.

(i) Corrective Action

If any crack is found during any inspection required by paragraph (h) of this AD: Before further flight, replace the affected part, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1461, dated April 11, 2018.

(j) Terminating Action for Certain Actions Required by Paragraph (h) of This AD

Accomplishment of an overhaul of an affected part after September 21, 2009, constitutes terminating action for the repetitive general visual inspections required by paragraph (h) of this AD for that affected part.

(k) Reporting

Submit a report of findings (both positive and negative) of the inspections specified in paragraph (h) of this AD to Airbus, in accordance with Airbus Service Bulletin A320-32-1461, dated April 11, 2018, at the applicable time specified in paragraph (k)(1) or (k)(2) of this AD. If operators have reported findings as part of obtaining any corrective actions approved by Airbus SAS's European Aviation Safety Agency (EASA) Design Organization Approval (DOA), operators are not required to report those findings as specified in this paragraph.

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

(2) 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.

(l) Exception to Paragraphs (h) and (i) of This AD

An airplane embodying Airbus Modification 161202 (Evolution (EV) MLG) is not affected by the requirements of paragraphs (h) and (i) of this AD, provided it is determined that no affected parts are installed on that airplane. A review of airplane delivery and/or maintenance records is acceptable to make this determination, provided those records can be relied upon for that purpose and the part number and serial number of the MLG sliding tube can be positively identified from that review.

(m) Parts Installation

(1) For Group 1 airplanes: From the effective date of this AD, it is allowed to install on any airplane an affected part, or an MLG equipped with an affected part, provided that, within the last 500 flight cycles before installation, the part passed an inspection specified in paragraph (h) of this AD, and that, following installation, the part is inspected as required by this AD.

(2) For Group 2 airplanes: From the effective date of this AD, do not install on any airplane an affected part.

(n) 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 (o)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by The Manager,

International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(4) Reporting Requirements: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(o) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0136, dated June 26, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0957.

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

(p) Material Incorporated by Reference

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

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

(i) Airbus Service Bulletin A320-32-1461, dated April 11, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Airbus, Airworthiness Office–EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; internet <http://www.airbus.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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 14, 2019.

Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-03-22 Bombardier, Inc.: Amendment 39-19574; Docket No. FAA-2018-0710; Product Identifier 2018-NM-079-AD.

(a) Effective Date

This AD is effective April 15, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes, certificated in any category, serial numbers 9002 through 9638 inclusive and 9998.

(d) Subject

Air Transport Association (ATA) of America Code 32, Landing gear.

(e) Reason

This AD was prompted by in-service findings that a cotter pin at the main fitting joint of the nose landing gear (NLG) retraction actuator to the NLG strut showed evidence of shearing after an NLG retraction-extension cycling. We are issuing this AD to address this condition, which could lead to a loss of hardware and result in an actuator disconnect and the NLG failing to retract or extend, or in an undamped freefall, which could adversely affect the airplane's continued safe flight and landing.

(f) Compliance

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

(g) Maintenance or Inspection Program Revision

Within 30 days after the effective date of this AD: Revise the existing maintenance or inspection program, as applicable, to incorporate the information specified in Airworthiness Limitation (AWL) Task 32-33-01-111, "Restoration of the Nose Landing Gear Shock-Strut Assembly to Retraction-Actuator Main-Fitting Joint," as specified in the applicable time limits/maintenance checks (TLMC) manual identified in figure 1 to paragraph (g) of this AD, as applicable. The initial compliance time for doing the task is at the time specified in the applicable TLMC manual listed in figure 1 to paragraph (g) of this AD, or within 30 days after the effective date of this AD, whichever occurs later.

Figure 1 to paragraph (g) of this AD – Acceptable Time Limits/Maintenance Checks Manuals

Airplane Models	Time Limits/Maintenance Checks (TLMC) Manual	Acceptable Revision Number	Date of Issue
BD-700-1A10	Bombardier Global Express TLMC, Publication No. BD-700 TLMC	Revision 29	May 3, 2018
	Bombardier Global Express XRS TLMC, Publication No. BD-700 XRS TLMC	Revision 16	May 3, 2018
	Bombardier Global 6000 TLMC, Publication No. GL 6000 TLMC	Revision 10	May 3, 2018
BD-700-1A11	Bombardier Global 5000 TLMC, Publication No. BD-700 TLMC	Revision 20	May 3, 2018
	Bombardier Global 5000 GL 5000 Featuring Global Vision Flight Deck, Publication No. GL 5000 GVFD TLMC	Revision 10	May 3, 2018

(h) Inspection and Modification

(1) Except for airplanes identified in paragraph (h)(2) of this AD: Within 6 months from the effective date of this AD, perform a general visual inspection for damage of the cotter pin retaining the bolt that secures the NLG retraction actuator to the NLG strut, and a general visual inspection of the modification number shown on the identification plate for the NLG strut, and, if applicable, mark the correct modification number on the identification plate of the NLG strut, in accordance with the applicable Bombardier service information as shown in figure 2 to paragraph (h) of this AD. If damage to the cotter pin is present: Before further flight, perform the modification of the NLG retraction actuator hardware in accordance with the Accomplishment Instructions of the applicable Bombardier service information as shown in figure 2 to paragraph (h) of this AD.

(2) The actions specified in paragraph (h)(1) of this AD are not required for airplanes that do not have the NLG configuration specified in Paragraph 1.A, “Effectivity” of the applicable Bombardier service information as shown in figure 2 to paragraph (h) of this AD.

Figure 2 to paragraph (h) of this AD – Service Bulletins for Inspection and Modification

Airplane Model	Bombardier Service Bulletin	Date
BD-700-1A10	700-32-035, Revision 2	November 6, 2017
	700-32-6011, Revision 2	November 6, 2017
BD-700-1A11	700-1A11-32-022, Revision 2	November 6, 2017
	700-32-5011, Revision 2	November 6, 2017

(i) No Alternative Actions or Intervals

After the maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) or intervals, may be used unless the actions or intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (l)(1) of this AD.

(j) Credit for Previous Actions

(1) 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 AWL Task 32-33-01-111, “Restoration of the Nose Landing Gear Shock-Strut Assembly to Retraction-Actuator Main-Fitting Joint,” of the applicable service information specified in figure 3 to paragraph (j)(1) of this AD.

Figure 3 to paragraph (j)(1) of this AD - Acceptable Temporary Revisions (TR) by Airplane Model

Airplane Models	TLMC Manual	Acceptable TR	Date of Issue
BD-700-1A10	Bombardier Global Express TLMC, Publication No. BD-700 TLMC	TR-5-2-46	May 19, 2015
	Bombardier Global Express XRS TLMC, Publication No. BD-700 XRS TLMC	TR-5-2-9	May 19, 2015
	Bombardier Global 6000 TLMC, Publication No. GL 6000 TLMC	TR-5-2-13 and TR-5-2-14	May 19, 2015
BD-700-1A11	Bombardier Global 5000 TLMC, Publication No. BD-700 TLMC	TR-5-2-15	May 19, 2015
	Bombardier Global 5000 Featuring Global Vision Flight Deck TLMC, Publication No. GL 5000 GVFD TLMC	TR-5-2-13 and TR-5-2-14	May 19, 2015

(2) This paragraph provides credit for actions required by paragraph (h)(1) of this AD, if those actions were performed before the effective date of this AD using the service information specified in paragraphs (j)(2)(i) through (j)(2)(xiii) of this AD, provided that it can be confirmed that at least 25 NLG extension-retraction cycles had been completed on the NLG at the time of completion of the Instructions of the applicable service information specified in paragraphs (j)(2)(i) through (j)(2)(xiii) of this AD; and provided neither the NLG nor the NLG retraction actuator has been replaced or modified since the completion of the Instructions of the applicable service information specified in paragraphs (j)(2)(i) through (j)(2)(xiii) of this AD.

(i) Task 32-33-01-111 of Bombardier Global 5000 Time Limits/Maintenance Checks, Revision 19, dated November 13, 2017.

(ii) Task 32-33-01-111 of Bombardier Global 5000 Featuring Global Vision Flight Deck–Time Limits/Maintenance Checks, Publication No. GL 5000 GVFD TLMC, Revision 9, dated November 13, 2017.

(iii) Task 32-33-01-111 of Bombardier Global 6000 Time Limits/Maintenance Checks, Publication No. GL 6000 TLMC, Revision 9, dated November 13, 2017.

(iv) Task 32-33-01-111 of Bombardier Global Express Time Limits/Maintenance Checks, Publication No. BD-700 TLMC, Revision 28, dated November 13, 2017.

(v) Task 32-33-01-111 of Bombardier Global Express XRS Time Limits/Maintenance Checks, Publication No. BD-XRS TLMC, Revision 15, dated November 13, 2017.

(vi) Bombardier Service Bulletin 700-1A11-32-022, dated May 13, 2015.

(vii) Bombardier Service Bulletin 700-1A11-32-022, Revision 1, dated August 26, 2015.

(viii) Bombardier Service Bulletin 700-32-035, dated May 13, 2015.

(ix) Bombardier Service Bulletin 700-32-035, Revision 1, dated August 26, 2015.

(x) Bombardier Service Bulletin 700-32-5011, dated May 13, 2015.

(xi) Bombardier Service Bulletin 700-32-5011, Revision 1, dated August 26, 2015.

(xii) Bombardier Service Bulletin 700-32-6011, dated May 13, 2015.

(xiii) Bombardier Service Bulletin 700-32-6011, Revision 1, dated August 26, 2015.

(k) Service Information Prohibition

As of the effective date of this AD, no person may incorporate Liebherr-Aerospace Service Bulletin 1285A-32-07 at any revision level on the NLG strut assemblies of any Bombardier, Inc., Model BD-700-1A10 or BD-700-1A11 airplane.

(l) 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 corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2018-05, dated January 23, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0710.

(2) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, Mechanical Systems and Admin Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; 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 (n)(3) and (n)(4) of this AD.

(n) 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 700-1A11-32-022, Revision 2, dated November 6, 2017.

(ii) Bombardier Service Bulletin 700-32-035, Revision 2, dated November 6, 2017.

(iii) Bombardier Service Bulletin 700-32-5011, Revision 2, dated November 6, 2017.

(iv) Bombardier Service Bulletin 700-32-6011, Revision 2, dated November 6, 2017.

(v) Task 32-33-01-111, "Restoration of the Nose Landing Gear Shock-Strut Assembly to Retraction-Actuator Main-Fitting Joint," of Bombardier Global 5000 Time Limits/Maintenance Checks, Publication No. BD-700 TLMC, Revision 20, dated May 3, 2018.

(vi) Task 32-33-01-111, "Restoration of the Nose Landing Gear Shock-Strut Assembly to Retraction-Actuator Main-Fitting Joint," of Bombardier Global 5000 Featuring Global Vision Flight Deck Time Limits/Maintenance Checks, Publication No. GL 5000 GVFD TLMC, Revision 10, dated May 3, 2018.

(vii) Task 32-33-01-111, "Restoration of the Nose Landing Gear Shock-Strut Assembly to Retraction-Actuator Main-Fitting Joint," of Bombardier Global 6000 Time Limits/Maintenance Checks, Publication No. GL 6000 TLMC, Revision 10, dated May 3, 2018.

(viii) Task 32-33-01-111, "Restoration of the Nose Landing Gear Shock-Strut Assembly to Retraction-Actuator Main-Fitting Joint," of Bombardier Global Express Time Limits/Maintenance Checks, Publication No. BD-700 TLMC, Revision 29, dated May 3, 2018.

(ix) Task 32-33-01-111, "Restoration of the Nose Landing Gear Shock-Strut Assembly to Retraction-Actuator Main-Fitting Joint," of Bombardier Global Express XRS Time Limits/Maintenance Checks, Publication No. BD-700 XRS TLMC, Revision 16, dated May 3, 2018.

(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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 14, 2019.

Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-03-24 The Boeing Company: Amendment 39-19576; Docket No. FAA-2018-0959; Product Identifier 2018-NM-123-AD.

(a) Effective Date

This AD is effective April 8, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 737-400 series airplanes, certificated in any category, line numbers 1487 through 3132 inclusive.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by reports of cracking in the splice plate on the lower sill of the overwing emergency exit doors. We are issuing this AD to address cracking in the splice plate, which, if not addressed, could result in the inability of a principal structural element to sustain limit loads and possible rapid decompression of the fuselage.

(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 the “Compliance” paragraph of Boeing Alert Requirements Bulletin 737-53A1380 RB, dated July 18, 2018, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Alert Requirements Bulletin 737-53A1380 RB, dated July 18, 2018.

Note 1 to paragraph (g) of this AD: Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 737-53A1380, dated July 18, 2018, which is referred to in Boeing Alert Requirements Bulletin 737-53A1380 RB, dated July 18, 2018.

(h) Exceptions to Service Information Specifications

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Requirements Bulletin 737-53A1380 RB, dated July 18, 2018, uses the phrase “the original issue date of Requirements Bulletin 737-53A1380 RB,” this AD requires using “the effective date of this AD.”

(2) Where Boeing Alert Requirements Bulletin 737-53A1380 RB, dated July 18, 2018, specifies contacting Boeing for repair instructions: This AD requires doing the repair and applicable on-condition actions before further flight using a method approved in accordance with the procedures specified in paragraph (i) of this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles 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 (j)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-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 Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles 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.

(j) Related Information

(1) For more information about this AD, contact James Guo, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5357; fax: 562-627-5210; email: james.guo@faa.gov.

(2) 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 the AD specifies otherwise.

(i) Boeing Alert Requirements Bulletin 737-53A1380 RB, dated July 18, 2018.

(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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 19, 2019.
Dionne Palermo,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-03-25 Airbus SAS: Amendment 39-19577; Docket No. FAA-2018-1007; Product Identifier 2018-NM-141-AD.

(a) Effective Date

This AD is effective April 16, 2019.

(b) Affected ADs

This AD affects AD 2008-02-15, Amendment 39-15345 (73 FR 4063, January 24, 2008) (“AD 2008-02-15”).

(c) Applicability

This AD applies to Airbus SAS Model A318-111, -112, -121, and -122 airplanes, Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes, Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes, and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes, certificated in any category, as identified in the European Aviation Safety Agency (EASA) AD 2018-0218, dated October 11, 2018; corrected October 26, 2018 (“EASA AD 2018-0218”).

(d) Subject

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

(e) Reason

This AD was prompted by a report that taperlocks used in the wing-to-fuselage junction at rib 1 were found to be non-compliant with the applicable specification, resulting in a loss of pre-tension in the fasteners. We are issuing this AD to address the loss of pre-tension in the fasteners, which could affect the 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, EASA AD 2018-0218.

(h) Exceptions to EASA AD 2018-0218

- (1) For purposes of determining compliance with the requirements of this AD: Where EASA AD 2018-0218 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Remarks” section of EASA AD 2018-0218 does not apply.

(3) Where EASA AD 2018-0218 refers to instructions provided by Airbus, for this AD, the instructions must be approved 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.

(i) Terminating Action for AD 2008-02-15

Accomplishing the actions required by this AD terminates all requirements of AD 2008-02-15.

(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 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 2018-0218 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 Sanjay Ralhan, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3223.

(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 Aviation Safety Agency (EASA) AD 2018-0218, dated October 11, 2018; corrected October 26, 2018.

(ii) [Reserved]

(3) For EASA AD 2018-0218, contact 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 EASA AD 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. EASA AD 2018-0218 may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1007.

(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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 21, 2019.

Dionne Palermo,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-03-26 The Boeing Company: Amendment 39-19578; Docket No. FAA-2016-9189; Product Identifier 2016-NM-114-AD.

(a) Effective Date

This AD is effective April 8, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, without a Boeing Sky Interior (BSI).

(d) Subject

Air Transport Association (ATA) of America Code 25, Equipment/furnishings.

(e) Unsafe Condition

This AD was prompted by reports of passenger service units (PSUs) becoming detached from the supporting airplane structure in several Model 737 series airplanes during survivable accidents. We are issuing this AD to address PSUs and life vest panels detaching from the supporting airplane structure, which could lead to passenger injuries and impede passenger and crew egress during evacuation.

(f) Compliance

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

(g) Required Actions

Within 60 months after the effective date of this AD, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018.

(h) Parts Installation Prohibition

As of the applicable time specified in paragraph (h)(1) or (h)(2) of this AD, no person may install on any airplane a PSU or life vest panel, unless the lanyard assembly has been updated as required by paragraph (g) of this AD.

(1) For airplanes that have PSUs or life vest panels without the updated lanyard assemblies installed: After modification of the airplane as required by this AD.

(2) For airplanes that have PSUs or life vest panels with the updated lanyard assemblies installed: As of the effective date of this AD.

(i) 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 (j) 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 Commercial Airplanes 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 Required for Compliance (RC), the provisions of paragraphs (i)(4)(i) and (i)(4)(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.

(j) Related Information

For more information about this AD, contact Scott Craig, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3566; email: michael.s.craig@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 the AD specifies otherwise.

(i) Boeing Service Bulletin 737-25-1707, Revision 1, dated May 18, 2018.

(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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 14, 2019.
Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-03-27 Dassault Aviation: Amendment 39-19579; Docket No. FAA-2019-0115; Product Identifier 2019-NM-024-AD.

(a) Effective Date

This AD becomes effective March 8, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Dassault Aviation Model Falcon 10 airplanes, certificated in any category.

(d) Subject

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

(e) Reason

This AD was prompted by a report indicating that certain wing anti-ice outboard flexible hoses were found damaged, likely resulting from the installation process. We are issuing this AD to address damaged wing anti-ice outboard flexible hoses, which could lead to a loss of performance of the wing anti-ice protection system that is not annunciated to the pilot, and could result in reduced control of the airplane.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Aviation Safety Agency (EASA) Emergency AD 2019-0040-E, dated February 21, 2019 (“EASA Emergency AD 2019-0040-E”).

(h) Exceptions to EASA Emergency AD 2019-0040-E

- (1) For purposes of determining compliance with the requirements of this AD: Where EASA Emergency AD 2019-0040-E refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Remarks” section of EASA Emergency AD 2019-0040-E does not apply to this AD.

(3) Where EASA Emergency AD 2019-0040-E refers to paragraph (4) of EASA AD 2017-0108 for applicable life limits, for this AD refer to FAA AD 2016-19-07, Amendment 39-18656 (81 FR 63688, September 16, 2016).

(i) No Reporting Requirement

Although the service information referenced in EASA Emergency AD 2019-0040-E 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 Dassault Aviation'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 Emergency AD 2019-0040-E 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 Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226.

(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 Aviation Safety Agency (EASA) Emergency AD 2019-0040-E, dated February 21, 2019.

(ii) [Reserved]

(3) For EASA Emergency AD 2019-0040-E, contact 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 Emergency AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this EASA Emergency AD 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. EASA Emergency AD 2019-0040-E may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0115.

(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, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 25, 2019.

Dionne Palermo,
Acting Director, System Oversight Division,
Aircraft Certification Service.



FAA
Aviation Safety

AIRWORTHINESS DIRECTIVE

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

2019-03-28 Airbus SAS: Amendment 39-19580; Docket No. FAA-2018-0762; Product Identifier 2018-NM-033-AD.

(a) Effective Date

This AD is effective April 15, 2019.

(b) Affected ADs

This AD replaces AD 2016-07-23, Amendment 39-18468 (81 FR 26115, May 2, 2016) (“AD 2016-07-23”).

(c) Applicability

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category, all manufacturer serial numbers.

(1) Model A318-111, A318-112, A318-121, and A318-122 airplanes.

(2) Model A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, and A319-133 airplanes.

(3) Model A320-211, A320-212, A320-214, A320-216, A320-231, A320-232, and A320-233 airplanes.

(4) Model A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231, and A321-232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 52, Doors.

(e) Reason

This AD was prompted by reports of in-flight loss of fixed and hinged main landing gear (MLG) fairings, and reports of post-modification MLG fixed fairing assemblies that have wear and corrosion. This AD was also prompted by a determination that for some airplane configurations, associated fixed fairing assembly part numbers susceptible to fatigue cracking were not listed in certain service information required by AD 2016-07-23. In addition, we have determined that additional work is necessary to re-identify the fixed fairing assembly part number on certain airplanes. We are issuing this AD to prevent in-flight detachment of an MLG fixed fairing and consequent damage to the airplane.

(f) Compliance

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

(g) Retained Repetitive Replacements, With No Changes

This paragraph restates the requirements of paragraph (g) of AD 2016-07-23, with no changes. For airplanes in pre-Airbus Modification 27716 and pre-Airbus Service Bulletin A320-52-1100 configuration, with any of the components installed that are identified in paragraphs (g)(1) through (g)(5) of this AD: At the applicable compliance time specified in paragraph (h) of this AD, replace fixed fairing upper and lower attachment studs of both left-hand (LH) and right-hand (RH) MLG, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015. Repeat the replacements thereafter at intervals not to exceed 6,500 flight cycles.

- (1) Plate–support having part number (P/N) D5284024820000.
- (2) Plate–support having P/N D5284024820200.
- (3) Stud–adjustment having P/N D5284024420000.
- (4) Rod end assembly (lower) having P/N D5284000500000.
- (5) Rod end assembly (upper) having P/N D5284000600000.

(h) Retained Compliance Times for the Requirements of Paragraph (g) of This AD, With No Changes

This paragraph restates the requirements of paragraph (h) of AD 2016-07-23, with no changes. For airplanes identified in paragraph (g) of this AD, except as provided by paragraph (o) of this AD: Do the initial replacement required by paragraph (g) of this AD at the latest of the times specified in paragraphs (h)(1) through (h)(4) of this AD.

- (1) Before the accumulation of 6,500 total flight cycles since the airplane's first flight.
- (2) Within 6,500 flight cycles since the last installation of a pre-Airbus Modification 27716 stud on the airplane.
- (3) Within 1,500 flight cycles after June 6, 2016 (the effective date of AD 2016-07-23).
- (4) Within 8 months after June 6, 2016 (the effective date of AD 2016-07-23).

(i) Retained Repetitive Inspections, With No Changes

This paragraph restates the requirements of paragraph (i) of AD 2016-07-23, with no changes. For airplanes in post-Airbus Modification 27716 or post-Airbus Service Bulletin A320-52-1100 configuration, with any of the components installed that are identified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD: At the applicable compliance time specified in paragraph (j) of this AD, do a detailed inspection of the LH and RH MLG forward stud assemblies of the fixed fairing door upper and lower forward attachments of both LH and RH MLG for indications of corrosion, wear, fatigue cracking, and loose studs, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015. Repeat the detailed inspection thereafter at intervals not to exceed 12 months. Replacement of both LH and RH MLG forward stud assemblies on an airplane, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015, extends the interval for the next detailed inspection to 72 months; and the inspection must be repeated thereafter at intervals not to exceed 12 months.

- (1) Stud–adjustment having P/N D5285600720000.
- (2) Rod end assembly (lower) having P/N D5285600400000.
- (3) Rod end assembly (upper) having P/N D5285600500000.

(j) Retained Compliance Times for the Requirements of Paragraph (i) of This AD, With No Changes

This paragraph restates the requirements of paragraph (j) of AD 2016-07-23, with no changes. For airplanes identified in paragraph (i) of this AD, except as provided by paragraph (o) of this AD: Do the initial inspection required by paragraph (i) of this AD at the latest of the times specified in paragraphs (j)(1) through (j)(4) of this AD.

- (1) Before the accumulation of 72 months since the airplane's first flight.
- (2) Within 72 months since the last installation of a post-Airbus Modification 27716 assembly or since accomplishment of the actions specified in Airbus Service Bulletin A320-52-1100.
- (3) Within 1,500 flight cycles after June 6, 2016 (the effective date of AD 2016-07-23).
- (4) Within 8 months after June 6, 2016 (the effective date of AD 2016-07-23).

(k) Retained Corrective Action, With Revised Service Information

This paragraph restates the requirements of paragraph (k) of AD 2016-07-23, with revised service information. If any discrepancy (including any indication of corrosion, wear, fatigue cracking, or loose studs) of any MLG forward stud assembly is found during any inspection required by paragraph (i) of this AD, except as specified in paragraph (l) of this AD: Before further flight, replace the discrepant upper and lower fixed fairing forward stud assemblies of the LH and RH MLG, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015; or Airbus Service Bulletin A320-52-1165, Revision 01, dated October 23, 2015, excluding Appendix 01, dated November 3, 2014, and including Appendix 02, dated October 23, 2015; or Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017. As of the effective date of this AD only Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015; or Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, may be used.

(l) Retained Corrective Action or Repetitive Inspections for Certain Corrosion Findings, With Revised Service Information

This paragraph restates the requirements of paragraph (l) of AD 2016-07-23, with revised service information. If any corrosion is found during any inspection required by paragraph (i) of this AD on any MLG fixed fairing forward stud assembly (upper, lower, LH or RH), but the corroded stud is not loose: Do the action specified in paragraph (l)(1) or (l)(2) of this AD.

(1) Before further flight, replace the affected assembly, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015; or Airbus Service Bulletin A320-52-1165, Revision 01, dated October 23, 2015, excluding Appendix 01, dated November 3, 2014, and including Appendix 02, dated October 23, 2015; or Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017. As of the effective date of this AD only Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015; or Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, may be used.

(2) Within 4 months after finding corrosion, and thereafter at intervals not to exceed 4 months, do a detailed inspection for indications of corrosion, wear, fatigue cracking, and loose studs of the forward stud assembly of the affected (LH or RH) MLG, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015.

(m) Retained Corrective Action for Inspections Specified in Paragraph (l)(2) of This AD, With Revised Service Information

This paragraph restates the requirements of paragraph (m) of AD 2016-07-23, with revised service information. If any indication of wear, fatigue cracking, or loose studs of any forward stud assembly is found during any inspection required by paragraph (l)(2) of this AD: Before further flight, replace the affected (LH or RH) MLG fixed fairing forward stud assembly, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015; or Airbus Service Bulletin A320-52-1165, Revision 01, dated October 23, 2015, excluding Appendix 01, dated November 3, 2014, and including Appendix 02, dated October 23, 2015; or Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017. As of the effective date of this AD only Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015; or Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, may be used.

(n) Retained Terminating Action, With Revised Service Information

This paragraph restates the requirements of paragraph (n) of AD 2016-07-23, with revised service information.

(1) Replacement of parts on an airplane, as required by paragraph (g), (k), (l)(1), or (m) of this AD, does not constitute terminating action for the repetitive inspections required by paragraph (i) of this AD, except as specified in paragraph (n)(3) of this AD.

(2) The repetitive replacements required by paragraph (g) of this AD may be terminated by modification of the airplane to post-Airbus Modification 27716 configuration, including a resonance frequency inspection for debonding of the composite insert and delamination of the honeycomb area around the insert, and all applicable corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1100, Revision 01, dated March 12, 1999, provided all applicable corrective actions are done before further flight. Thereafter, refer to paragraph (i) of this AD to determine the compliance time for the next detailed inspection required by this AD.

(3) Modification of an airplane, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1165, Revision 01, dated October 23, 2015, excluding Appendix 01, dated November 3, 2014, and including Appendix 02, dated October 23, 2015; or Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, constitutes terminating action for actions required by paragraphs (g) through (m) of this AD for the airplane on which the modification is done. As of the effective date of this AD only Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, may be used.

(o) Retained Exceptions to Certain AD Actions, With No Changes

This paragraph restates the requirements of paragraph (o) of AD 2016-07-23, with no changes. An airplane on which Airbus Modification 155648 has been embodied in production is not affected by the requirements of paragraphs (g) and (i) of this AD, provided that no affected component, identified by part number as specified in paragraphs (g)(1) through (g)(5) and (i)(1) through (i)(3) of this AD, has been installed on that airplane since first flight of the airplane.

(p) Retained Parts Installation Prohibition, With a Change to Compliance Requirements

This paragraph restates the requirements of paragraph (p) of AD 2016-07-23, with a change to compliance requirements. Comply with this parts installation prohibition paragraph until the effective date of this AD. As of the effective date of this AD, comply with paragraph (t) of this AD.

(1) For airplanes in pre-Airbus Modification 27716 or pre-Airbus Service Bulletin A320-52-1100 configuration: No person may install a component identified in paragraphs (g)(1) through (g)(5) of this AD on any airplane after doing the actions provided in paragraph (n)(2) of this AD.

(2) For airplanes in post-Airbus Modification 27716 or post Airbus Service Bulletin A320-52-1100 configuration: As of June 6, 2016 (the effective date of AD 2016-07-23), no person may install a component identified in paragraphs (g)(1) through (g)(5) of this AD on any airplane.

(3) For airplanes in pre-Airbus Modification 155648 or pre-Airbus Service Bulletin A320-52-1165 configuration: No person may install a component identified in paragraphs (g)(1) through (g)(5) and (i)(1) through (i)(3) of this AD on any airplane after doing the actions provided in paragraph (n)(3) of this AD.

(4) For airplanes in post-Airbus Modification 155648 or post-Airbus Service Bulletin A320-52-1165 configuration: As of June 6, 2016 (the effective date of AD 2016-07-23), no person may install a component identified in (g)(1) through (g)(5) and (i)(1) through (i)(3) of this AD on any airplane.

(q) Retained No Reporting Requirement, With No Changes

This paragraph restates the requirements of paragraph (q) of AD 2016-07-23, with no changes. Although Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015, specifies to submit certain information to the manufacturer, and specifies that action as “RC” (Required for Compliance), this AD does not include that requirement.

(r) New Requirement of This AD: Additional Work

For any airplane on which, before the effective date of this AD, any part was installed or replaced, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1165, dated November 3, 2014; Revision 01, dated October 13, 2015; or Revision 02, dated February 12, 2016: Within 12 months after the effective date of this AD, accomplish the instructions identified as “additional work” in the Accomplishment Instructions of Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, as applicable to the airplane configuration.

(s) New Terminating Action

Modification of an airplane in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, or as specified in paragraph (r) of this AD constitutes terminating action for the requirements of paragraphs (g) through (m) of this AD for that airplane.

(t) New Parts Installation Prohibition

(1) Do not install on any airplane a component specified in paragraphs (g)(1) through (g)(5) of this AD, as required by paragraph (t)(1)(i) or (t)(1)(ii) of this AD, as applicable.

(i) For airplanes in pre-Airbus Modification 27716 or pre-Airbus Service Bulletin A320-52-1100 configuration: After completing the optional modification specified in paragraph (n)(2) of this AD.

(ii) For airplanes in post-Airbus Modification 27716 or post Airbus Service Bulletin A320-52-1100 configuration: As of the effective date of this AD.

(2) Do not install on any airplane a component specified in paragraphs (g)(1) through (g)(5) of this AD or paragraphs (i)(1) through (i)(3) of this AD, as required by paragraph (t)(2)(i) or (t)(2)(ii) of this AD, as applicable.

(i) For airplanes in pre-Airbus Modification 155648 or pre-Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, configuration: After completion of the additional work required by paragraph (r) of this AD.

(ii) For airplanes in post-Airbus Modification 155648 or post-Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017, configuration: As of the effective date of this AD.

(u) Credit for Previous Actions

(1) This paragraph provides credit for optional actions provided by paragraph (n)(2) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-52-1100, dated December 7, 1998, which was not previously incorporated by reference.

(2) This paragraph provides credit for the actions required by paragraphs (g), (i), (k), (l), and (m) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-52-1163, dated February 4, 2014, which was not previously incorporated by reference.

(3) This paragraph provides credit for the actions required by paragraphs (k), (l)(1), (m), and (n)(3) of this AD if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-52-1165, Revision 01, dated October 23, 2015, excluding Appendix 01, dated November 3, 2014, and including Appendix 02, dated October 23, 2015, which was previously incorporated by reference in AD 2016-07-23.

(v) Other FAA AD Provisions

(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 (w)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) 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.

(ii) AMOCs approved previously for AD 2016-07-23 are approved as AMOCs for the corresponding provisions of this AD.

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): Except as specified by paragraph (q) of this AD: If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(w) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0023, dated January 26, 2018; corrected February 5, 2018; for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0762.

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

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

(x) 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 15, 2019.

(i) Airbus Service Bulletin A320-52-1165, Revision 03, excluding Appendix 01 and including Appendix 02, dated November 9, 2017.

(ii) [Reserved]

(4) The following service information was approved for IBR on June 6, 2016 (81 FR 26115, May 2, 2016).

(i) Airbus Service Bulletin A320-52-1100, Revision 01, dated March 12, 1999.

(ii) Airbus Service Bulletin A320-52-1163, Revision 01, including Appendix 01, dated June 22, 2015.

(5) For service information identified in this AD, contact Airbus SAS, Airworthiness Office—EIAS, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; internet <http://www.airbus.com>.

(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 NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 22, 2019.

Jeffrey E. Duven,
Director, System Oversight Division,
Aircraft Certification Service.



FAA
Aviation Safety

AIRWORTHINESS DIRECTIVE

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

2019-03-30 Empresa Brasileira de Aeronautica S.A. (Embraer): Amendment 39-19582; Docket No. FAA-2019-0118; Product Identifier 2018-NM-143-AD.

(a) Effective Date

This AD becomes effective March 26, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Empresa Brasileira de Aeronautica S.A. (Embraer) Model EMB-135ER, -135KE, -135KL, and -135LR airplanes; and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes identified in Embraer Service Bulletin 145-78-0035, Revision 03, dated November 26, 2004; certificated in any category; except airplanes identified in Embraer Service Bulletin 145-78-0035, Revision 02, dated January 31, 2003.

(d) Subject

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

(e) Reason

This AD was prompted by reports of internal corrosion of the stow/transit switches installed in the engine thrust reversers. We are issuing this AD to address corrosion of the stow/transit switches, which could result in uncommanded loss of engine power in-flight or erroneous signals in the Engine Indicating and Crew Alerting System (EICAS), which could induce aborted takeoffs.

(f) Compliance

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

(g) Installation of Stow/Transit Switches

Before the accumulation of 2,000 total flight hours, or within 400 flight hours after the effective date of this AD, whichever occurs later, install new stow/transit switches having part number (P/N) 83-990-168, on the #1 and #2 engine thrust reversers, in accordance with the Accomplishment Instructions of Embraer Service Bulletin 145-78-0035, Revision 03, dated November 26, 2004.

(h) Parts Installation Limitation

As of the effective date of this AD, no person may install, on any airplane, a stow/transit switch having P/N 83-990-137 or P/N 83-990-152.

(i) 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 the applicable document specified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD.

(1) Embraer Service Bulletin 145-78-0035, dated October 4, 2002. This document is not incorporated by reference in this AD.

(2) Embraer Service Bulletin 145-78-0035, Revision 01, dated December 11, 2002. This document is not incorporated by reference in this AD.

(3) Embraer Service Bulletin 145-78-0035, Revision 02, dated January 31, 2003. This document is incorporated by reference in AD 2004-13-16, Amendment 39-13698 (69 FR 38819, June 29, 2004).

(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)(2) of this AD. Information may be emailed to 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the Agência Nacional de Aviação Civil (ANAC); or ANAC's authorized Designee. If approved by the ANAC Designee, the approval must include the Designee's authorized signature.

(3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Brazilian AD 2001-05-03R3, dated April 22, 2003, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0118.

(2) 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; telephone and fax 206-231-3218.

(3) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (l)(5) and (l)(6) 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 this AD specifies otherwise.

(3) The following service information was approved for IBR on April 15, 2019.

(i) Embraer Service Bulletin 145-78-0035, Revision 03, dated November 26, 2004.

(ii) [Reserved]

(4) The following service information was approved for IBR on August 3, 2004 (69 FR 38819, June 29, 2004).

(i) Embraer Service Bulletin 145-78-0035, Revision 02, dated January 31, 2003. Pages 1 and 2 of this document are identified as Revision 02, dated January 31, 2003; pages 3 through 13 are identified as the original version, dated October 4, 2002.

(ii) [Reserved]

(5) For service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (Embraer), Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170–Putim–12227-901 São Jose dos Campos–SP–Brasil; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email distrib@embraer.com.br; internet <http://www.flyembraer.com>.

(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 NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on February 28, 2019.

Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-05-01 Pratt & Whitney Division: Amendment 39-19583; Docket No. FAA-2018-0624; Product Identifier 2013-NE-24-AD.

(a) Effective Date

This AD is effective April 16, 2019.

(b) Affected ADs

This AD replaces AD 2017-11-06, Amendment 39-18905 (82 FR 26979, June 13, 2017).

(c) Applicability

This AD applies to all Pratt & Whitney (PW) PW2037, PW2037D, PW2037M, PW2040, PW2040D, PW2043, PW2143, PW2643, and F117-PW-100 turbofan engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7200, Turbine/Turboprop Engine.

(e) Unsafe Condition

This AD was prompted by a rupture of the diffuser-to-high-pressure turbine (HPT) case flange. We are issuing this AD to prevent failure of the diffuser-to-HPT case flange. The unsafe condition, if not addressed, could result in uncontained diffuser-to-HPT case flange release, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) For diffuser case, part number (P/N) 1B7461, serial numbers (S/Ns) DGGUAK1306 and DGGUAK1308, and HPT case, P/N 1B2440, S/N DKLBCS1032:

(i) Within 100 flight cycles after the effective date of this AD, perform an eddy current inspection (ECI) of the diffuser case and the HPT case M-flange in accordance with PW Service Bulletin (SB) No. PW2000 72-763, Revision No. 1, dated August 30, 2013.

(ii) [Reserved]

(2) For all diffuser and HPT cases, at the next piece-part opportunity after the effective date of this AD and every piece-part opportunity thereafter, perform a high sensitivity fluorescent-penetrant inspection (FPI) of the entire diffuser case rear flange (M-flange) and bolt holes, and the entire HPT case forward flange (M-flange) and bolt holes.

(3) For all diffuser cases installed on any affected engine model except for F117-PW-100 turbofan engines, that have not incorporated PW SB PW2000-72-364, have incorporated PW SB

PW2000-72-700, or have had an M-flange replacement, perform initial and repetitive ECIs of the diffuser case M-flange as follows:

(i) Perform an initial ECI in accordance with the “Last Shop Visit Activity” column and before exceeding the maximum cycles since the last shop visit activity in the “Initial Inspection” column of Table 1 of PW Alert Service Bulletin (ASB) No. PW2000 A72-765, Revision No. 4, dated January 25, 2018, or within 1,000 cycles from the effective date of this AD, whichever occurs later.

(ii) Evaluate the inspection results and perform re-inspections as necessary in accordance with Accomplishment Instructions, “For Engines Installed on the Aircraft,” paragraph 5, or the Accomplishment Instructions, “For Engines Removed from the Aircraft,” paragraph 4, of PW ASB No. PW2000 A72-765, Revision No. 4, dated January 25, 2018, as applicable. If given a cycle range, perform the subsequent inspections before exceeding the maximum number of cycles.

(iii) Inspect the diffuser case M-flange using, as applicable, either the Accomplishment Instructions, “For Engines Installed on the Aircraft,” paragraphs 3.I. through 3.J., or the Accomplishment Instructions, “For Engines Removed from the Aircraft,” paragraphs 3.D. through 3.E., of PW ASB No. PW2000 A72-765, Revision No. 4, dated January 25, 2018.

(h) Definition

For the purpose of this AD, a “piece-part opportunity” is defined as when the part is completely disassembled.

(i) Credit for Previous Actions

(1) You may take credit for the diffuser case and HPT case inspections required by paragraphs (g)(1) and (3) of this AD if you performed:

(i) An ECI of the diffuser case and the HPT case M-flange using the Accomplishment Instructions of PW SB No. PW2000 72-763, Original Issue, dated March 22, 2013, or

(ii) a high sensitivity FPI of the diffuser case and the HPT case at a piece-part opportunity after January 1, 2010.

(2) You may take credit for only the diffuser case inspections required by paragraphs (g)(1) and (3) of this AD if you performed an ECI of the diffuser case M-flange using the Accomplishment Instructions of PW ASB No. PW2000 A72-765, Revision No. 3, dated December 19, 2017, or an earlier version.

(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.

(3) AMOCs approved for AD 2017-11-06 (82 FR 26979, June 13, 2017) are approved as AMOCs for the corresponding provisions of this AD.

(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.

(I) 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.

(3) The following service information was approved for IBR on April 16, 2019.

(i) Pratt & Whitney (PW) Alert Service Bulletin No. PW2000 A72-765, Revision No. 4, dated January 25, 2018.

(ii) [Reserved]

(4) The following service information was approved for IBR on July 18, 2017.

(i) PW Service Bulletin No. PW2000 72-763, Revision No. 1, dated August 30, 2013.

(ii) [Reserved]

(5) For PW service information identified in this AD, contact Pratt & Whitney, 400 Main St., East Hartford, CT 06118; phone: 860-565-0140; fax: 860-565-5442; email: help24@pw.utc.com; internet: <http://fleetcare.pw.utc.com>.

(6) You may view this service information at 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.

(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 NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on March 6, 2019.

Karen M. Grant,
Acting Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2019-05-02 Rolls-Royce plc: Amendment 39-19584; Docket No. FAA-2019-0056; Product Identifier 2017-NE-29-AD.

(a) Effective Date

This AD is effective March 27, 2019.

(b) Affected ADs

This AD replaces AD 2017-22-13, Amendment 39-19093 (82 FR 51550, November 7, 2017).

(c) Applicability

This AD applies to all Rolls-Royce plc (RR) RB211-Trent 970-84 and RB211-Trent 972-84 turbofan engines with a drains mast, part number (P/N) KH31996 or FW29847, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7170, Powerplant/Engine Drains.

(e) Unsafe Condition

This AD was prompted by RR in-service findings that indicated a need to include part number (P/N) FW29847 drains mast and additional RR RB211-Trent 900 turbofan engines to the affected population. We are issuing this AD to prevent failure of the drains mast. The unsafe condition, if not addressed, could result in engine fire and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) For Group 1 engines, within 24 months after November 22, 2017 (the effective date of AD 2017-22-13), or within 24 months time since new, whichever occurs later, and thereafter, at intervals not to exceed 24 months since previous inspection, visually inspect the external areas of the transition duct area of the drains mast for a crack using Accomplishment Instructions, paragraph 3.A.(1), of RR Alert Non-Modification Service Bulletin (NMSB) RB.211-71-AJ576, Revision 1, dated July 11, 2018.

If a crack is found, do one of the following before further flight:

- (i) Remove and replace the drains mast with a part eligible for installation, or
- (ii) Seal the crack using the Accomplishment Instructions, paragraph 3.A.(1).(c).(ii).(2), of RR Alert NMSB RB.211-71-AJ576, Revision 1, dated July 11, 2018, and within 100 flight cycles after sealing the crack, remove and replace the drains mast with a part eligible for installation.

(2) For Group 2 engines, within 24 months after the effective date of this AD, and thereafter, at intervals not to exceed 24 months since previous inspection, visually inspect the external areas of the transition duct area of the drains mast for a crack using Accomplishment Instructions, paragraph 3.A.(1), of RR Alert NMSB RB.211-71-AJ576, Revision 1, dated July 11, 2018.

If a crack is found, do one of the following before further flight:

- (i) Remove and replace the drains mast with a part eligible for installation, or
- (ii) Seal the crack using the Accomplishment Instructions, paragraph 3.A.(1).(c).(ii).(2), of RR Alert NMSB RB.211-71-AJ576, Revision 1, dated July 11, 2018, and within 100 flight cycles after sealing the crack, remove and replace the drains mast with a part eligible for installation.

(h) Definition

(1) For the purposes of this AD, “Group 1” engines are those with a drains mast, P/N KH31996, installed that have installed the sub-idle ejector system introduced in RR SB RB.211-80-H632, Revision 2, dated August 11, 2015. “Group 2” engines are those engines with a drains mast, P/N FW29847, installed or have a drains mast, P/N KH31996, that have not installed the sub-idle ejector system introduced in RR SB RB.211-80-H632, Revision 2, dated August 11, 2015.

(2) For the purposes of this AD, a part eligible for installation is a drains mast with a part number not listed in this AD or a part that has passed the inspection required by this AD.

(3) For the purposes of this AD, a flight cycle is a take-off and landing.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j)(1) 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.

(j) Related Information

(1) For more information about this AD, contact Besian Luga, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7750; fax: 781-238-7199; email: besian.luga@faa.gov.

(2) Refer to MCAI European Union Aviation Safety Agency (EASA) AD 2018-0185, dated August 29, 2018, for more information. You may examine the MCAI in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2019-0056.

(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 the AD specifies otherwise.

(i) Rolls-Royce Alert Non-Modification Service Bulletin No. RB.211-71-AJ576, Revision 1, dated July 11, 2018.

(ii) [Reserved]

(3) For Rolls-Royce plc service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; phone: +44 (0)1332 242424; fax: 011-44-1332-249936; email: http://www.rolls-royce.com/contact/civil_team.jsp; internet: <https://customers.rolls-royce.com/public/rollsroycecare>.

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

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on March 6, 2019.

Karen M. Grant,
Acting Manager, Engine & Propeller Standards Branch,
Aircraft Certification Service.



2019-05-08 Airbus SAS: Amendment 39-19590; Docket No. FAA-2018-0806; Product Identifier 2018-NM-056-AD.

(a) Effective Date

This AD is effective April 16, 2019.

(b) Affected ADs

This AD replaces AD 2015-12-08, Amendment 39-18182 (80 FR 34262, June 16, 2015) (“AD 2015-12-08”).

(c) Applicability

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1) through (c)(5) of this AD, certificated in any category.

(1) Model A318-111, -112, -121, and -122 airplanes, all manufacturer serial numbers.

(2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes, all manufacturer serial numbers.

(3) Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes, all manufacturer serial numbers.

(4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes, all manufacturer serial numbers.

(5) Model A320-251N, A320-271N, and A321-271N airplanes, manufacturer serial numbers 6101, 6286, 6419, 6642, and 6673.

(d) Subject

Air Transport Association (ATA) of America Code 35, Oxygen.

(e) Reason

This AD was prompted by a report of corrosion found during the manufacturing process for some oxygen pipe assemblies that are used to supply oxygen to the flight crew. This AD was also prompted by further investigation that determined affected oxygen pipes may have been installed on more airplanes than initially identified. We are issuing this AD to address corrosion of the oxygen pipe assemblies, which could lead to blocked or reduced oxygen supply to a flight crew member in case of decompression or smoke/fire in the flight deck. In addition, the presence of particles in oxygen lines, under certain conditions, increases the risk of fire in the flight deck.

(f) Compliance

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

(g) Retained Inspection for Batch Numbers and Replacement, With New Service Information

This paragraph restates the requirements of paragraph (g) of AD 2015-12-08, with new service information. For airplanes identified in paragraph 1.A. of Airbus Service Bulletin A320-35-1069, dated April 26, 2013: Within 7,500 flight hours or 26 months, whichever occurs first after July 21, 2015 (the effective date of AD 2015-12-08), inspect the crew oxygen pipe, having part number (P/N) D3511032000640, to determine the batch number of that pipe, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-35-1069, dated April 26, 2013; or Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017. A review of airplane maintenance records is acceptable in lieu of this inspection if the batch number of the pipe can be conclusively determined from that review. If the batch number of the oxygen pipe is 19356252, 40008586, 40076689, 40187414, 40292749, 40405164, 40649383, 40724994, 40820410, or 40911832: Within 7,500 flight hours or 26 months, whichever occurs first after July 21, 2015, replace the oxygen pipe with a serviceable part, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-35-1069, dated April 26, 2013; or Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017. After the effective date of this AD, only Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017, may be used to do the actions required by this paragraph.

(h) Retained Inspection for Part Number and Installation Date of Crew Oxygen Pipe, With No Changes

This paragraph restates the requirements of paragraph (h) of AD 2015-12-08, with no changes. For airplanes identified in paragraphs (c)(1) through (c)(4) of this AD that are not identified in paragraph 1.A. of Airbus Service Bulletin A320-35-1069, dated April 26, 2013: Within 7,500 flight hours or 26 months, whichever occurs first after July 21, 2015 (the effective date of AD 2015-12-08), inspect the crew oxygen pipe to determine whether P/N D3511032000640 was installed after June 2011. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and installation date of the pipe can be conclusively determined from that review. If the pipe was installed after June 2011, or the date cannot be conclusively determined, before further flight, do the actions required in paragraph (g) of this AD.

(i) Retained Parts Installation Prohibition, With No Changes

This paragraph restates the prohibition specified in paragraph (i) of AD 2015-12-08, with no changes. For airplanes identified in paragraphs (c)(1) through (c)(4) of this AD: As of July 21, 2015 (the effective date of AD 2015-12-08), do not install, on any airplane, a crew oxygen pipe P/N D3511032000640, that is identified as belonging to batch number 19356252, 40008586, 40076689, 40187414, 40292749, 40405164, 40649383, 40724994, 40820410, or 40911832.

(j) New Requirement of This AD: Inspection for Batch Numbers and Replacement for Certain Airplanes

For airplanes identified in paragraph (c)(5) of this AD: Within 7,500 flight hours or 26 months, whichever occurs first after the effective date of this AD, inspect the crew oxygen pipe, having P/N D3511032000640, to determine the batch number of that pipe, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017. A review of airplane maintenance records is acceptable in lieu of this inspection if the batch number of the pipe can be conclusively determined from that review. If the batch number of the oxygen pipe is 19356252, 40008586, 40076689, 40187414, 40292749, 40405164, 40649383, 40724994, 40820410, or 40911832: Within 7,500 flight hours or 26 months, whichever occurs first after the effective date of this AD, replace the oxygen pipe with a serviceable part, in accordance with

the Accomplishment Instructions of Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017.

(k) New Parts Installation Prohibition for Certain Airplanes

For airplanes identified in paragraph (c)(5) of this AD: As of the effective date of this AD, do not install, on any airplane, a crew oxygen pipe P/N D3511032000640, that is identified as belonging to batch number 19356252, 40008586, 40076689, 40187414, 40292749, 40405164, 40649383, 40724994, 40820410, or 40911832.

(l) New No Reporting Requirement

Although Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017, specifies to submit certain information to the manufacturer, and specifies that action as Required for Compliance (RC), this AD does not include that requirement.

(m) Service Information Exceptions

(1) Where Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017, specifies the location to flush certain parts with nitrogen as “in the shop,” and specifies that location as RC, this AD does not require that location to be used when flushing the parts.

(2) Where Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017, specifies to use part number (P/N) AN960C816, and specifies that part number as RC, this AD allows the use of P/N NAS1149C0863R in lieu of P/N AN960C816.

(n) Credit for Previous Actions

(1) For the airplanes identified in paragraph (g) of this AD: This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before July 21, 2015 (the effective date of AD 2015-12-08) using a service bulletin identified in paragraph (n)(1)(i) or (n)(1)(ii) of this AD. This service information is not incorporated by reference in this AD.

(i) Airbus Service Bulletin A320-35-1069, Revision 01, dated March 24, 2014.

(ii) Airbus Service Bulletin A320-35-1069, Revision 02, dated October 26, 2016.

(2) For airplanes identified in paragraph (j) of this AD: This paragraph provides credit for actions required by paragraph (j) of this AD, if those actions were performed before the effective date of this AD using a service bulletin identified in paragraph (n)(2)(i), (n)(2)(ii), or (n)(2)(iii) of this AD.

(i) Airbus Service Bulletin A320-35-1069, dated April 26, 2013. This service information was incorporated by reference in AD 2015-12-08 and continues to be incorporated by reference in this AD.

(ii) Airbus Service Bulletin A320-35-1069, Revision 01, dated March 24, 2014. This service information is not incorporated by reference in this AD.

(iii) Airbus Service Bulletin A320-35-1069, Revision 02, dated October 26, 2016. This service information is not incorporated by reference in this AD.

(o) Other FAA AD Provisions

(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 (p)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-

REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): Except as specified by paragraphs (l) and (m) of this AD: If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(p) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0060R1, dated July 19, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0806.

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

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

(q) 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 16, 2019.

(i) Airbus Service Bulletin A320-35-1069, Revision 03, dated December 8, 2017.

(ii) [Reserved]

(4) The following service information was approved for IBR on July 21, 2015 (80 FR 34262, June 16, 2015).

(i) Airbus Service Bulletin A320-35-1069, dated April 26, 2013.

(ii) [Reserved]

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

(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 NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on March 5, 2019.
Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.