

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

LARGE AIRCRAFT

BIWEEKLY 2019-05

2/18/2019 - 3/3/2019



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 A 2016-16-09	Dassault Aviation	FALCON 7X airplanes
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



2018-21-14 Zodiac Aerotechnics (formerly Intertechnique): Amendment 39-19472; Docket No. FAA-2017-0505; Product Identifier 2017-NE-15-AD.

(a) Effective Date

This AD is effective March 27, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Zodiac Aerotechnics (Zodiac) MC10 series crew oxygen mask regulators fitted with an inflatable harness assembly, part number (P/N) MXH20-1 or MXH21-1.

(d) Subject

Joint Aircraft System Component (JASC) Code 3510, Crew Oxygen System.

(e) Unsafe Condition

This AD was prompted by reports that certain silicon harness inflation hoses installed on certain flight crew quick donning mask harnesses (also known as 'comfort' harness) have shown an unusually high premature rupture rate. We are issuing this AD to prevent a harness rupture during a sudden depressurization event. The unsafe condition, if not addressed, could result in hypoxia and subsequent unconsciousness of the affected flight crew member, and consequent reduced control of the aircraft.

(f) Compliance

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

(g) Required Actions

(1) Within 36 months after the effective date of this AD, determine the date of manufacturing (DMF) code of each inflatable harness assembly, P/N MXH20-1 and P/N MXH21-1, fitted to a flight crew oxygen mask regulator, having a P/N listed in Planning Information, paragraph 1.A.(1), of Zodiac Aerospace Service Bulletin (SB) MC10-35-274, Revision 02, dated June 25, 2014. A review of airplane delivery or maintenance records is acceptable to make the determination as specified in this paragraph, provided those records can be relied upon for that purpose, and the DMF of the inflatable harness assembly, P/N MXH20-1 or P/N MXH21-1, as applicable, can be conclusively identified from that review.

(2) If during the review required by paragraph (g)(1) of this AD, the DMF code of the inflatable harness assembly, P/N MXH20-1 or P/N MXH21-1, is found to be between 0850-S and 1051-S

(inclusive): Within 36 months after the effective date of this AD, replace the harness inflation hose, P/N 445186 or P/N 445952, as applicable, with a part eligible for installation, or remove the inflatable harness assembly from the mask regulator and replace it with an inflatable harness assembly eligible for installation.

(3) An oxygen mask regulator equipped with an inflatable harness assembly, P/N MXH20-1 or P/N MXH21-1, having a DMF code of November 2008 (0845-S or 08/45-S) or earlier, and those with a DMF code of January 2011 (1101-S or 11/01-S) or later, are excluded from the requirements of this AD, provided it can be demonstrated that neither the inflatable harness assembly, nor the harness inflation hose, P/N 445186 or P/N 445952, as applicable, was replaced on that mask. An oxygen mask regulator with an inflatable harness assembly, P/N MXH20-1 or P/N MXH21-1, and with an inflatable harness assembly with a metal bushing that has been marked with an "I" is also excluded from the requirements of this AD. A review of airplane delivery or maintenance records is acceptable to make the determination, provided those records can be relied upon for that purpose.

(h) Installation Prohibition

After the effective date of this AD, do not install on any airplane a flight crew oxygen mask regulator with a P/N listed in Planning Information, paragraph 1.A.(1), of Zodiac SB MC10-35-274, Revision 02, dated June 25, 2014, unless it meets the definition of a part eligible for installation in paragraph (i) of this AD.

(i) Definition

(1) After the effective date of this AD, a part eligible for installation is a crew oxygen mask regulator with:

(i) A P/N identified in Planning Information, paragraph 1.A.(1), of Zodiac Aerospace SB MC10-35-274, Revision 02, dated June 25, 2014, provided it has been determined that a P/N MXH20-1 or P/N MXH21-1 inflatable harness installed on that crew oxygen mask regulator has been inspected, and re-marked with an "I" as required by Material Information, paragraph 2.E. of Zodiac Aerospace SB MC10-35-274, Revision 02, dated June 25, 2014; or

(ii) a P/N identified in Planning Information, paragraph 1.A.(1), of Zodiac Aerospace SB MC10-35-274, Revision 02, dated June 25, 2014, provided it has been determined that an inflatable harness, P/N MXH21-31, is installed.

(2) [Reserved]

(j) Credit for Previous Actions

You may take credit for the inspection and replacement of the oxygen mask regulator harness inflation hose required by paragraphs (g)(1) and (2) of this AD, if you performed the inspection and replacement using the Accomplishment Instructions, paragraph 3, of Zodiac Aerospace SB MC10-35-274, Initial Issue, dated March 19, 2014, or Revision 01, dated April 18, 2014.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, FAA, Boston ACO Branch, Compliance and Airworthiness Division, 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 ACO Branch, send it to the attention of the person identified in paragraph (l)(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.

(l) Related Information

(1) For more information about this AD, contact Erin King, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone 781-238-7655; fax: 781-238-7199; email: erin.king@faa.gov.

(2) Refer to European Union Aviation Safety Agency AD 2014-0142, Revision 01, dated June 11, 2014, for more information. You may examine the EASA AD in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2017-0505.

(m) Material Incorporated by Reference

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

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

(i) Zodiac Aerospace Service Bulletin MC10-35-274, Revision 02, dated June 25, 2014.

(ii) [Reserved]

(3) For service information identified in this AD, contact Zodiac Aerotechnics, 61 rue Pierre Curie BP 1, 78373 Plaisir, CEDEX, France; phone: +33 1 6486 6964; email: Christophe.besset@zodiacaeospace.com or Yann.laine@zodiacaeospace.com.

(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 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 February 13, 2019.

Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2018-26-07 Airbus SAS: Amendment 39-19538; Docket No. FAA-2018-1064; Product Identifier 2018-NM-155-AD.

(a) Effective Date

This AD becomes effective January 15, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category.

(d) Subject

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

(e) Reason

This AD was prompted by reports of thrust reverser actuators (TRAs) jamming. We are issuing this AD to address jamming of the TRAs, which could lead to an inadvertent thrust reverser sleeve deployment, possibly resulting in reduced control or performance 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) AD 2018-0234R1, dated November 13, 2018 (“EASA AD 2018-0234R1”).

(h) Exceptions to EASA AD 2018-0234R1

(1) For purposes of determining compliance with the requirements of this AD: Where EASA AD 2018-0234R1 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where EASA AD 2018-0234R1 refers to the master minimum equipment list (MMEL), this AD refers to the operator's minimum equipment list (MEL).

(3) Where EASA AD 2018-0234R1 refers to the flight operations transmission (FOT) for certain changes, for this AD, do not incorporate the information specified in EASA MMEL item 78-09-01B,

“ENG 1(2) REVERSER MINOR FAULT message–Associated reverser considered inoperative,” and instead, incorporate the information specified in Figure 1 to paragraph (h)(3) of this AD into the operator’s MEL.

Figure 1 to paragraph (h)(3) of this AD – Item 78-09-01B, “ENG 1(2) REVERSER MINOR FAULT message

78-09-01B Associated reverser considered inoperative			
Repair interval	Nbr installed	Nbr required	Placard
C	N/A	N/A	No

One may be displayed on the DISPATCH page provided that the associated thrust reverser is considered inoperative.

Refer to Item 78-30-01 Engine 1 Reverser, or Refer to Item 78-30-02 Engine 2 Reverser.

(4) The replacement specified in paragraph (4) of EASA AD 2018-0234R1 is not required by this AD.

(5) The “Remarks” section of EASA AD 2018-0234R1 does not apply.

(6) Where EASA AD 2018-0234R1 refers to the “the MER,” that document is not required by this AD, and it is not applicable to U.S. operators.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2018-0234R1, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): For any service information referenced in EASA AD 2018-0234R1 that contain RC procedures and tests: Except as required by paragraph (j)(2) of this AD, RC

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

(k) Related Information

For more information about this AD, contact Kathleen Arrigotti, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218.

(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 2018-0234R1, dated November 13, 2018.

(ii) [Reserved]

(3) For information about EASA AD 2018-0234R1, 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 2018-0234R1 may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1064.

(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 December 21, 2018.

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



2018-26-08 Airbus SAS: Amendment 39-19539; Docket No. FAA-2018-1065; Product Identifier 2018-NM-170-AD.

(a) Effective Date

This AD becomes effective January 15, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A320-214, A320-232, A320-233, A321-211, and A321-231 airplanes; certificated in any category; as identified in the European Aviation Safety Agency (EASA) AD 2018-0256, dated November 28, 2018 (“EASA AD 2018-0256”).

(d) Subject

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

(e) Reason

This AD was prompted by an investigation that revealed that the outer cylinder of a certain ram air turbine (RAT) actuator was not properly deburred in accordance with manufacturing specifications. We are issuing this AD to address the improperly deburred outer cylinder of the RAT actuator, which could block the hydraulic circuit with metallic parts and result in failure of the RAT actuator to extend during certain emergency conditions for generation of hydraulic or electrical power, which may lead to 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, EASA AD 2018-0256.

(h) Exceptions to EASA AD 2018-0256

- (1) For purposes of determining compliance with the requirements of this AD: Where EASA AD 2018-0256 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Remarks” section of EASA AD 2018-0256 does not apply to this AD.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS's EASA 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 2018-0256 that contain RC procedures and tests: Except as required by paragraph (i)(2) of this AD, RC procedures and tests identified in the service information referenced in EASA AD 2018-0256 must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(4) Paperwork Reduction Act Burden Statement: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, 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.

(j) Related Information

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

(k) Material Incorporated by Reference

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

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

(i) European Aviation Safety Agency (EASA) AD 2018-0256, dated November 28, 2018.

(ii) [Reserved]

(3) For information about EASA AD 2018-0256, 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 2018-0256 may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1065.

(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 December 21, 2018.

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



2019-03-03 Airbus SAS: Amendment 39-19555; Docket No. FAA-2018-0556; Product Identifier 2018-NM-015-AD.

(a) Effective Date

This AD is effective March 26, 2019.

(b) Affected ADs

This AD affects AD 2016-17-03, Amendment 39-18616 (81 FR 55358, August 19, 2016) (“AD 2016-17-03”).

(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, -112, -121, and -122 airplanes.
- (2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Model A320-211, -212, -214, -216, -231, -232, -233, -251N, and -271N airplanes.
- (4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Reason

This AD was prompted by reports of multiple angle of attack (AoA) probe blockages. We are issuing this AD to address the blockage of AoA probes. This condition, if not corrected, could lead to undue activation of the AoA protection, reverting to manual control of the airplane, which, under specific circumstances, could result in reduced control of the airplane.

(f) Compliance

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

(g) Definition of Affected Elevator Aileron Computer (ELAC) Units

For the purposes of this AD, ELAC units having a part number (P/N) listed in table 1 to paragraphs (g), (h), and (i) of this AD are hereafter referred to as “affected ELAC units” in this AD.

Table 1 to paragraphs (g), (h), and (i) of this AD – Affected ELAC Unit Part Numbers

ELAC Unit P/N	Designation	FIN
3945122202	ELAC A320-111 Type Def.	2 CE 1 / 2
3945122203	ELAC L50C	2 CE 1 / 2
3945122303	ELAC L50C	2 CE 1 / 2
3945122304	ELAC L60	2 CE 1 / 2
3945122305	ELAC L61B	2 CE 1 / 2
3945122306	ELAC L61F	2 CE 1 / 2
3945122307	ELAC L62C	2 CE 1 / 2
C12370AA01	ELAC L68C	2 CE 1 / 2
3945122501	ELAC L69	2 CE 1 / 2
3945122502	ELAC L69J	2 CE 1 / 2
3945122503	ELAC L77	2 CE 1 / 2
3945122504	ELAC L78	2 CE 1 / 2
3945122505	ELAC A L80	2 CE 1 / 2
3945123505	ELAC A' L80	2 CE 1 / 2
3945128101	ELAC B L80	2 CE 1 / 2
3945122506	ELAC A L81	2 CE 1 / 2
3945123506	ELAC A' L81	2 CE 1 / 2
3945128102	ELAC B L81	2 CE 1 / 2
3945122507	ELAC A L82	2 CE 1 / 2
3945123507	ELAC A' L82	2 CE 1 / 2
3945128103	ELAC B L82	2 CE 1 / 2
3945122608	ELAC A L83	2 CE 1 / 2
3945123608	ELAC A' L83	2 CE 1 / 2
3945122609	ELAC A L84	2 CE 1 / 2
3945123609	ELAC A' L84	2 CE 1 / 2
3945128204	ELAC B L90L	2 CE 1 / 2
3945128205	ELAC B L90N	2 CE 1 / 2
3945128206	ELAC B L91	2 CE 1 / 2
3945129101	ELAC B L91 data loadable	2 CE 1 / 2 SW1
3945128207	ELAC B L92	2 CE 1 / 2
3945128208	ELAC B L92L	2 CE 1 / 2
3945128209	ELAC B L93	2 CE 1 / 2
3945129103	ELAC B L93 data loadable	2 CE 1 / 2 SW1
3945128210	ELAC B L94	2 CE 1 / 2
3945129104	ELAC B L94 data loadable	2 CE 1 / 2 SW1

ELAC Unit P/N	Designation	FIN
3945128212	ELAC B L96	2 CE 1 / 2
3945129106	ELAC B L96 data loadable	2 CE 1 / 2 SW1
3945129107	ELAC B L96 H-A data loadable	2 CE 1 / 2 SW1
3945128214	ELAC B L97	2 CE 1 / 2
3945129108	ELAC B L97 data loadable	2 CE 1 / 2 SW1
3945128215	ELAC B L97+	2 CE 1 / 2
3945129109	ELAC B L97+ data loadable	2 CE 1 / 2 SW1
3945128216	ELAC B L98	2 CE 1 / 2
3945129110	ELAC B L98 data loadable	2 CE 1 / 2 SW1

(h) Required Actions

For airplanes with ELAC unit part numbers listed in table 1 to paragraphs (g), (h), and (i) of this AD: Within the applicable compliance times defined in figure 1 to paragraph (h) of this AD, upgrade each ELAC unit by uploading L99 software part number (P/N) 3945129111 or by replacing the existing ELAC unit with an ELAC L99 P/N 3945128217 unit in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-27-1263, dated April 28, 2017, or Airbus Service Bulletin A320-27-1264, dated April 28, 2017, as applicable; or in accordance with modification instructions approved by the Manager, International Section, Transport Standards Branch, FAA, or by the European Aviation Safety Agency (EASA), or by Airbus SAS's EASA Design Organization Approval (DOA); or in accordance with modification instructions that are part of an FAA-accepted maintenance or inspection program, as applicable, provided the conditions specified in paragraphs (h)(1) through (h)(4) of this AD are met. If approved by the DOA, the approval must include the DOA-authorized signature.

(1) Absence of electronic centralized aircraft monitor (ECAM) warning or maintenance message related to ELAC, before the data-loadable ELAC unit is removed and software is loaded.

(2) The data-loadable ELAC unit is removed as specified in Airbus SAS Aircraft Maintenance Manual (AMM) Task 27-93-34-000-001-A. The access and closing instructions identified in AMM Task 27-93-34-000-001-A are not required by this AD. Operators may perform those actions in accordance with instructions that are part of an FAA-accepted maintenance or inspection program, as applicable.

(3) The data-loadable ELAC unit is checked by two different means: by the line replaceable unit (LRU) identification and either the label call-up or the Alpha Call-up ELA 1 and ELA 2 (if available).

(4) After the software is loaded, the data-loadable ELAC unit is re-installed as specified in Airbus SAS AMM Task 27-93-34-400-001-A. The access and closing instructions identified in AMM Task 27-93-34-400-001-A are not required by this AD. Operators may perform those actions in accordance with instructions that are part of an FAA-accepted maintenance or inspection program, as applicable.

Note 1 to paragraph (h) of this AD: Non-data-loadable ELAC L99 P/N 3945128217 units are fully interchangeable and mixable with data-loadable ELAC L99 P/N 3945129100 units with L99 software P/N 3945129111 loaded.

Figure 1 to paragraph (h) of this AD – Compliance Times

Airplanes (models)	Compliance Time (after the effective date of this AD)
A318, A319, and A321 series airplanes	Within 24 months
A320 series airplanes	Within 36 months

(i) Parts Installation Prohibition

(1) For airplanes with ELAC units listed in table 1 to paragraphs (g), (h), and (i) of this AD: After modification of an airplane as required by paragraph (h) of this AD, do not install any affected ELAC unit on that airplane.

(2) For airplanes with ELAC units not listed in table 1 to paragraphs (g), (h), and (i) of this AD: From the effective date of this AD, do not install any affected ELAC unit on that airplane.

(j) Installation or Onboard Loading of Later Software Versions

Installation or onboard loading of an ELAC unit with a software standard above L99 is equal to compliance with the requirements of paragraph (h) of this AD, provided the conditions specified in paragraphs (j)(1) and (j)(2) of this AD are met.

(1) The ELAC unit part number is approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus SAS's EASA DOA.

(2) The installation is accomplished in accordance with modification instructions approved by the Manager, International Section, Transport Standards Branch, FAA, or by EASA, or by Airbus SAS's EASA DOA; or in accordance with modification instructions that are part of an FAA-accepted maintenance or inspection program, as applicable, provided the conditions in paragraphs (j)(2)(i) through (j)(2)(iv) of this AD are met.

(i) Absence of ECAM warning or maintenance message related to ELAC, before the data-loadable ELAC unit is removed and software is loaded.

(ii) The data-loadable ELAC unit is removed as specified in Airbus SAS AMM Task 27-93-34-000-001-A. This does not apply to the onboard loading of ELAC units. The access and closing instructions identified in AMM Task 27-93-34-000-001-A are not required by this AD. Operators may perform those actions in accordance with instructions that are part of an FAA-accepted maintenance or inspection program, as applicable.

(iii) The data-loadable ELAC unit is checked by two different means: by the LRU identification and either the label call-up or the Alpha Call-up ELA 1 and ELA 2 (if available).

(iv) After the software is loaded, the data-loadable ELAC unit is re-installed as specified in Airbus SAS AMM Task 27-93-34-400-001-A. This does not apply to the onboard loading of ELAC units. The access and closing instructions identified in AMM Task 27-93-34-400-001-A are not required by this AD. Operators may perform those actions in accordance with instructions that are part of an FAA-accepted maintenance or inspection program, as applicable.

(k) Airplanes Not Affected by the Requirements of Paragraph (h) of This AD

(1) An airplane on which any modification (mod) specified in paragraphs (k)(1)(i) and (k)(1)(ii) of this AD was embodied in production is not affected by the requirements of paragraph (h) of this AD, provided it is determined that no affected ELAC unit is installed as of the effective date of this AD.

(i) Airbus SAS mod 161843 (installation of data-loadable ELAC P/N 3945129100 unit with L99 software P/N 3945129111) or mod 159979 (installation of non-data-loadable ELAC L99 P/N 3945128217 unit).

(ii) Airbus SAS mod 160577 (installation of data-loadable ELAC P/N 3945129100 unit with L101 software P/N 3945129112) or mod 162042 (installation of non-data-loadable ELAC L101 P/N 3945128218 unit).

(2) An airplane that has been modified as specified in the service information identified in paragraph (k)(2)(i), (k)(2)(ii), or (k)(2)(iii) of this AD is not affected by the requirements of paragraph (h) of this AD, provided it is determined that no affected ELAC unit is installed as of the effective date of this AD.

(i) Airbus Service Bulletin A320-27-1267, dated September 27, 2017 (installation of non-data-loadable ELAC L101 P/N 3945128218 unit).

(ii) Airbus Service Bulletin A320-27-1268, dated September 27, 2017 (installation of data-loadable ELAC P/N 3945129100 unit with L101 software P/N 3945129112 for A320 NEO).

(iii) Airbus Service Bulletin A320-27-1269, dated September 27, 2017 (installation of data-loadable ELAC P/N 3945129100 unit with L101 software P/N 3945129112).

(l) Terminating Action for AD 2016-17-03

Accomplishing the actions required by paragraph (h) of this AD or complying with the provisions specified in paragraph (k) of this AD terminates all requirements of AD 2016-17-03.

(m) 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 (n)(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.

(n) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0007R1, dated January 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-2018-0556.

(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 (o)(3) and (o)(4) of this AD.

(o) 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 A320-27-1263, dated April 28, 2017.

(ii) Airbus Service Bulletin A320-27-1264, dated April 28, 2017.

(3) 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>.

(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 1, 2019.

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



2019-03-04 Engine Alliance: Amendment 39-19556; Docket No. FAA-2019-0048; Product Identifier 2018-NE-19-AD.

(a) Effective Date

This AD is effective March 6, 2019.

(b) Affected ADs

This AD replaces AD 2018-11-16, Amendment 39-19304 (83 FR 27891, June 15, 2018).

(c) Applicability

This AD applies to Engine Alliance (EA) GP7270 and GP7277 model turbofan engines with engine fan hub assembly, part number (P/N) 5760221 or P/N 5760321, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7230, Turbine Engine Compressor Section.

(e) Unsafe Condition

This AD was prompted by the FAA's determination that inspections need to be expanded to all EA GP7270 and GP7277 turbofan engines. We are issuing this AD to detect defects, damage, and cracks that could result in an uncontained failure of the engine fan hub assembly. The unsafe condition, if not addressed, could result in uncontained failure of the engine fan hub assembly, 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

Within 3,000 cycles since new after the effective date of this AD, or by August 15, 2019, whichever is later:

(1) For engine fan hubs at the low-pressure compressor (LPC) module assembly level:

(i) Perform a visual inspection of the engine fan hub assembly, in accordance with the Accomplishment Instructions, For Fan Hubs at LPC Module Assembly Level, paragraphs 1.A.(1), 1.A.(4), and 1.A.(6)(a), of EA ASB EAGP7-A72-389, Revision No. 3, dated October 18, 2018.

(ii) Perform an eddy current inspection (ECI) of the engine fan hub blade slot bottoms and front edges, in accordance with the Accomplishment Instructions, For Fan Hubs at LPC Module Assembly Level, paragraphs 2.A and 2.B, of EA ASB EAGP7-A72-389, Revision No. 3, dated October 18, 2018.

(2) For engine fan hub assemblies at the piece part level:

(i) Perform a visual inspection of the engine fan hub assembly, in accordance with the Accomplishment Instructions, For Fan Hubs at Piece Part Level, paragraphs 1.A.(1) and 1.A.(3), of EA ASB EAGP7-A72-389, Revision No. 3, dated October 18, 2018.

(ii) Perform an ECI of the engine fan hub blade slot bottoms and front edges, in accordance with the Accomplishment Instructions, For Fan Hubs at Piece Part Level, paragraphs 2.A and 2.B, of EA ASB EAGP7-A72-389, Revision No. 3, dated October 18, 2018.

(3) For engine fan hub assemblies installed in an engine (on-wing or off-wing):

(i) Perform a visual inspection of the engine fan hub assembly, in accordance with the Accomplishment Instructions, For Fan Hubs Installed in an Engine, paragraphs 1.C.(1), 1.C.(5), and 1.C.(7)(a), of EA ASB EAGP7-A72-389, Revision No. 3, dated October 18, 2018.

(ii) Perform an ECI of the engine fan hub blade slot bottoms and front edges, in accordance with the Accomplishment Instructions, For Fan Hubs Installed in an Engine, paragraphs 1.D.(1) and 1.D.(2), of EA ASB EAGP7-A72-389, Revision No. 3, dated October 18, 2018.

(4) If the engine fan hub assembly visual inspection reveals defects or damage to the engine fan hub assembly that are found outside the serviceable limits specified in Table 6 in the Accomplishment Instructions of EA ASB EAGP7-A72-389, Revision No. 3, dated October 18, 2018, remove the engine fan hub assembly from service and replace with a part that is eligible for installation, before further flight.

(5) If the engine fan hub assembly ECI results in a rejectable indication, per the Appendix, Added Data, of EA ASB EAGP7-A72-389, Revision No. 3, dated October 18, 2018, remove the engine fan hub assembly from service and replace with a part that is eligible for installation, before further flight.

(h) Credit for Previous Actions

You may take credit for the inspection required by paragraph (g) of this AD if you performed the inspection before the effective date of this AD, using EA ASB EAGP7-A72-389, Original Issue, dated December 19, 2017; EA ASB EAGP7-A72-389, Revision No. 1, dated January 19, 2018; or EA ASB EAGP7-A72-389, Revision No. 2, dated April 17, 2018.

(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) 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 2018-11-16 (83 FR 27891, June 15, 2018) are approved as AMOCs for the corresponding provisions of this AD.

(j) Related Information

For more information about this AD, contact Matthew Smith, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7735; fax: 781-238-7199; email: matthew.c.smith@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) Engine Alliance (EA) Alert Service Bulletin EAGP7-A72-389, Revision No. 3, dated October 18, 2018.

(ii) [Reserved]

(3) For EA service information identified in this AD, contact Engine Alliance, 411 Silver Lane, East Hartford, CT, 06118; phone: 800-565-0140; email: help24@pw.utc.com; website: www.engineallianceportal.com.

(4) 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.

(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 Burlington, Massachusetts, on February 12, 2019.

Robert J. Ganley,
Manager, Engine & Propeller Standards Branch,
Aircraft Certification Service.



2019-03-06 The Boeing Company: Amendment 39-19558; Docket No. FAA-2018-0580; Product Identifier 2018-NM-025-AD.

(a) Effective Date

This AD is effective March 29, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 737-300, -400, and -500 series airplanes, certificated in any category, as identified in the service information specified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Boeing Service Bulletin 737-25-1728, dated October 10, 2016.

(2) Boeing Requirements Bulletin 737-25-1758 RB, dated November 8, 2017.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a report indicating the passenger service units (PSUs) became separated from their attachments during several survivable accident sequences. We are issuing this AD to address the PSU becoming detached and falling into the cabin, which could lead to passenger injuries and impede egress during an evacuation.

(f) Compliance

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

(g) Required Actions

(1) For airplanes identified in Boeing Service Bulletin 737-25-1728, dated October 10, 2016: Except as required by paragraph (h)(1) of this AD, at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 737-25-1728, dated October 10, 2016, do all applicable actions identified as "RC" (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Service Bulletin 737-25-1728, dated October 10, 2016.

(2) For airplanes identified in Boeing Requirements Bulletin 737-25-1758 RB, dated November 8, 2017: Except as required by paragraph (h)(2) of this AD, at the applicable times specified in the "Compliance" paragraph of Boeing Requirements Bulletin 737-25-1758 RB, dated November 8,

2017, do all applicable actions identified in, and in accordance with, the Accomplishment Instructions of Boeing Requirements Bulletin 737-25-1758 RB, dated November 8, 2017.

Note 1 to paragraph (g)(2) of this AD: Guidance for accomplishing the actions required by paragraph (g)(2) of this AD can be found in Boeing Service Bulletin 737-25-1758, dated November 8, 2017, which is referred to in Boeing Requirements Bulletin 737-25-1758 RB, dated November 8, 2017.

(h) Exceptions to Service Information Specifications

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Service Bulletin 737-25-1728, dated October 10, 2016, uses the phrase “the original issue date of this service bulletin,” this AD requires using “the effective date of this AD.”

(2) For purposes of determining compliance with the requirements of this AD: Where Boeing Requirements Bulletin 737-25-1758 RB, dated November 8, 2017, uses the phrase “the original issue date of the Requirements Bulletin (RB),” this AD requires using “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 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 737-25-1728, dated October 10, 2016.

(ii) Boeing Requirements Bulletin 737-25-1758 RB, dated November 8, 2017.

(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 1, 2019.

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



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

2019-03-07 The Boeing Company: Amendment 39-19559; Docket No. FAA-2018-0409; Product Identifier 2017-NM-120-AD.

(a) Effective Date

This AD is effective March 29, 2019.

(b) Affected ADs

This AD replaces AD 2017-16-05, Amendment 39-18982 (82 FR 39344, August 18, 2017) (“AD 2017-16-05”).

(c) Applicability

(1) This AD applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, as specified in paragraphs (c)(1)(i) through (c)(1)(iii) of this AD.

(i) Airplanes in Groups 1 and 2 as identified in Boeing Alert Service Bulletin 737-57A1327, Revision 2, dated July 25, 2017 (“BASB 737-57A1327, R2”).

(ii) Airplanes in Group 3, as identified in BASB 737-57A1327, R2, except where this service bulletin specifies the groups as line numbers 6422 through 6465 inclusive, this AD specifies those groups as line number 6422 through any line number airplane with an original Certificate of Airworthiness or an original Export Certificate of Airworthiness dated on or before the effective date of this AD.

(iii) All Model 737-600, -700, -700C, -800, -900 and -900ER series airplanes with an original Certificate of Airworthiness or an original Export Certificate of Airworthiness dated after the effective date of this AD.

(2) Installation of Supplemental Type Certificate (STC) ST00830SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST00830SE is installed, a “change in product” alternative method of compliance (AMOC) approval request is not necessary to comply with the requirements of 14 CFR 39.17.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a report of a Krueger flap bullnose departing an airplane during taxi, which caused damage to the wing structure and thrust reverser, and a report of a missing no. 2 Krueger flap bullnose hinge bolt from an airplane that was not included in the effectivity of AD 2017-16-05. We are issuing this AD to address missing Krueger flap bullnose hardware. Such missing hardware could result in the Krueger flap bullnose departing the airplane during flight, which

could damage empennage structure and lead to the inability to maintain continued safe flight and landing.

(f) Compliance

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

(g) Required Actions

For airplanes identified in paragraphs (c)(1)(i) and (c)(1)(ii) of this AD: Except as required by paragraph (h) of this AD, at the applicable times specified in paragraph 1.E., “Compliance,” of BASB 737-57A1327, R2, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of BASB 737-57A1327, R2.

(h) Exceptions to Service Information Specifications

(1) For purposes of determining compliance with the requirements of this AD: Where BASB 737-57A1327, R2 uses the phrase “the original issue date of this service bulletin,” this AD requires using September 22, 2017 (the effective date of AD 2017-16-05).

(2) For purposes of determining compliance with the requirements of this AD: Where BASB 737-57A1327, R2 uses the phrase “the Revision 2 date of this service bulletin,” this AD requires using “the effective date of this AD.”

(i) Parts Installation Limitation

As of the effective date of this AD, no person may install a Krueger flap or Krueger flap bullnose on any airplane identified in paragraph (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this AD, unless the actions required by paragraph (g) of this AD have been accomplished on the Krueger flap bullnose after installation but prior to further flight. These actions are required only for the Krueger flap(s) or Krueger flap bullnose(s) being installed.

(j) Credit for Previous Actions

(1) This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before September 22, 2017 (the effective date of AD 2017-16-05), using Boeing Alert Service Bulletin 737-57A1327, dated May 20, 2016.

(2) This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD, using Boeing Alert Service Bulletin 737-57A1327, Revision 1, dated September 28, 2016.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Seattle ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (l)(1) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing 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) AMOCs approved previously for AD 2017-16-05 are approved as AMOCs for the corresponding provisions of BASB 737-57A1327, R2 that are required by paragraph (g) of this AD.

(5) For service information that contains steps that are labeled as RC, the provisions of paragraphs (k)(5)(i) and (k)(5)(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) Operators may deviate from steps not labeled as RC by using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

(l) Related Information

(1) For more information about this AD, contact Alan Pohl, Aerospace Engineer, Airframe Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3527; email: alan.pohl@faa.gov.

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

(m) Material Incorporated by Reference

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

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

(i) Boeing Alert Service Bulletin 737-57A1327, Revision 2, dated July 25, 2017.

(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; phone: 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 7, 2019.

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



2019-03-08 Airbus SAS: Amendment 39-19560; Docket No. FAA-2018-0962; Product Identifier 2018-NM-125-AD.

(a) Effective Date

This AD is effective April 2, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A350-941 airplanes, certificated in any category, all serial numbers.

(d) Subject

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

(e) Reason

This AD was prompted by reports of an overheat failure mode of the hydraulic engine-driven pump (EDP), and a determination that the affected EDP needs to be replaced with an improved EDP. We are issuing this AD to address the overheat failure mode of the hydraulic EDP, which may cause a fast temperature rise of the hydraulic fluid, and, if combined with an inoperative fuel tank inerting system, could lead to an uncontrolled overheat of the hydraulic fluid, possibly resulting in ignition of the fuel-air mixture of the affected fuel tank.

(f) Compliance

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

(g) Required Action

Before February 6, 2020, replace each EDP having part number (P/N) 53098-04 with an improved EDP, having P/N 53098-06, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A350-29-P013, dated March 12, 2018.

(h) Parts Installation Prohibition

At the applicable time specified in paragraph (h)(1) or (h)(2) of this AD: No person may install an EDP having P/N 53098-04 on any airplane.

(1) For airplanes that, as of the effective date of this AD, have any EDP having P/N 53098-04 installed: After modification of the airplane as specified by paragraph (g) of this AD.

(2) For airplanes that, as of the effective date of this AD, are post-Modification 112192 and do not have any EDP having P/N 53098-04 installed: As of the effective date of this AD.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (j)(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 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): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0178, dated August 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-2018-0962.

(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.

(k) Material Incorporated by Reference

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

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

(i) Airbus Service Bulletin A350-29-P013, dated March 12, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office—EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email continued-airworthiness.a350@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 8, 2019.

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



2019-03-09 Airbus SAS: Amendment 39-19561; Docket No. FAA-2018-0906; Product Identifier 2018-NM-122-AD.

(a) Effective Date

This AD is effective March 29, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus SAS Model A310-304, -322, -324, and -325 airplanes, certificated in any category.

(d) Subject

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

(e) Reason

This AD was prompted by an evaluation by the design approval holder (DAH) indicating that top wing skin stringer joints at rib 19 are subject to widespread fatigue damage (WFD). We are issuing this AD to address any cracking of the top wing skin stringer joints at rib 19, which could result in reduced structural integrity of the wing.

(f) Compliance

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

(g) Definitions

(1) The affected areas are defined as the top wing skin stringers, 9 to 15, at the stringer joints, outboard of rib 19, on both wings.

(2) The average flight time (AFT) is defined as flight hours (FH) divided by flight cycles (FC) accumulated by an individual airplane since the airplane's first flight, specified in hours and hundredths of an hour. Refer to the Airbus A310 Maintenance Review Board Report Section D2 for guidance on determining the AFT.

(h) Inspection

Within the applicable compliance times specified in figure 1 to paragraph (h) of this AD, accomplish a rototest inspection of the fastener holes in the affected areas in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2108, dated November 9, 2017.

Figure 1 to paragraph (h) of this AD – Compliance times for rototest inspection

AFT	Compliance Time (FC or FH, whichever occurs first since the airplane's first flight)
Special (long) Range: AFT > 4.0 FH/FC	34,500 FC or 172,600 FH
Normal (short) Range: AFT ≤ 4.0 FH/FC	42,100 FC or 117,800 FH

(i) Corrective Actions

If, during the inspection required by paragraph (h) of this AD, any discrepancy (i.e., cracking or discrepant hole diameter) or existing repair is detected, before further flight, obtain corrective actions approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA); and accomplish the corrective actions within the compliance time specified therein. If approved by the DOA, the approval must include the DOA-authorized signature.

(j) Modification

If, during the inspection required by paragraph (h) of this AD, no existing repair or discrepancy is detected, before further flight, modify the fastener holes in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2108, dated November 9, 2017.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

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

(3) Required for Compliance (RC): 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.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0174, dated August 14, 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-2018-0906.

(2) For more information about this AD, contact Dan Rodina, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3225.

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

(m) Material Incorporated by Reference

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

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

(i) Airbus Service Bulletin A310-57-2108, dated November 9, 2017.

(ii) [Reserved]

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office—EAW, 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>.

(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 7, 2019.

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



2019-03-10 Airbus SAS: Amendment 39-19562; Docket No. FAA-2018-0907; Product Identifier 2018-NM-118 AD.

(a) Effective Date

This AD is effective March 29, 2019.

(b) Affected ADs

This AD replaces AD 2017-07-05, Amendment 39-18843 (82 FR 16101, April 3, 2017) (“AD 2017-07-05”).

(c) Applicability

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

- (1) Model A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes.
- (2) Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes.
- (3) Model A300 B4-605R and B4-622R airplanes.
- (4) Model A300 F4-605R and F4-622R airplanes.
- (5) Model A300 C4-605R Variant F airplanes.

(d) Subject

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

(e) Reason

This AD was prompted by reports of cracks in main landing gear (MLG) leg components. We are issuing this AD to address cracking of certain components in the MLG leg, which could result in an MLG collapse, and consequent damage to the airplane and injury to the airplane occupants.

(f) Compliance

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

(g) Definition

For the purpose of this AD an affected part is an MLG hinge arm/barrel pin having part number (P/N) C66441-(X) and P/N C65543-(X), where the X is representing a variable number.

(h) Repetitive Inspections

At the applicable compliance time specified in figure 1 to paragraph (h) of this AD, and thereafter at intervals not to exceed 100 flight cycles, accomplish a detailed visual inspection of the internal diameter of each affected MLG hinge arm/barrel pin for cracking, in accordance with the instructions of Airbus Alert Operators Transmission (AOT) A32W008-16, Rev 01, dated July 30, 2018 (“AOT A32W008-16, Rev 01”).

Figure 1 to paragraph (h) of this AD – Compliance time for initial inspection

Compliance time (whichever occurs later between A and B, or between A and C, as applicable)	
A	Within 30 months since the pin’s first flight on an airplane.
B (For airplanes on which an inspection specified in Airbus AOT A32W008-16 has not been done as of the effective date of this AD)	Within 30 days after the effective date of this AD, without exceeding the later of (1) Within 30 months since the pin’s first flight on an airplane, or since the pin’s first flight on an airplane after overhaul, as applicable and (2) Within 30 days after May 8, 2017 (the effective date of AD 2017-07-05).
C (For airplanes on which an inspection specified in Airbus AOT A32W008-16 has been done as of the effective date of this AD)	Within 30 days after the effective date of this AD, without exceeding 100 flight cycles since the most recent inspection.

(i) Corrective Action

If any crack is found during any inspection required by paragraph (h) of this AD: Before further flight, replace the MLG leg in accordance with the instructions of Airbus AOT A32W008-16, Rev 01. Replacement of an MLG leg does not constitute terminating action for the repetitive inspections required by paragraph (h) of this AD.

(j) Reporting

At the applicable time specified in paragraph (j)(1) or (j)(2) of this AD, report the inspection results required by paragraph (h) of this AD to Airbus SAS. This can be accomplished using the instructions of Airbus AOT A32W008-16, Rev 01.

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

(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.

(k) Credit for Previous Actions

This paragraph provides credit for the initial inspection required by paragraph (h) of this AD and corrective actions required by paragraph (i) of this AD, if those actions were performed before the

effective date of this AD using the instructions of Airbus AOT A32W008-16, dated February 25, 2016.

(l) 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 (m)(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) 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.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0170, dated August 6, 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-2018-0907.

(2) For more information about this AD, contact Dan Rodina, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3225.

(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) Airbus Alert Operators Transmission A32W008-16, Rev 01, dated July 30, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office—EAW, 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>.

(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 8, 2019.

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



2019-03-11 Airbus SAS: Amendment 39-19563; Docket No. FAA-2018-0508; Product Identifier 2018-NM-012-AD.

(a) Effective Date

This AD is effective March 29, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category, with an original certificate of airworthiness or original export certificate of airworthiness issued on or before July 26, 2018.

(d) Subject

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

(e) Reason

This AD was prompted by a determination that more restrictive maintenance requirements and airworthiness limitations are necessary. We are issuing this AD to address safety-significant latent failures that would, in combination with one or more other specific failures or events, result in a hazardous or catastrophic failure condition.

(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 Airbus A350 Airworthiness Limitations Section (ALS) Part 3, Certification Maintenance Requirements (CMR), Revision 04, dated December 15, 2017, as supplemented by Airbus A350 ALS Part 3, Certification Maintenance Requirements (CMR), Variation 4.2, dated July 26, 2018. The initial compliance time for accomplishing the actions is at the applicable times specified in Airbus A350 Airworthiness Limitations Section (ALS) Part 3, Certification Maintenance Requirements (CMR), Revision 04, dated December 15, 2017, as supplemented by Airbus A350 ALS Part 3, Certification Maintenance Requirements (CMR), Variation 4.2, dated July 26, 2018; or within 90 days after the effective date of this AD; whichever occurs later.

(h) No Alternative Actions or Intervals

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

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0179, dated August 23, 2018; and EASA AD 2018-0004, dated January 9, 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-2018-0508.

(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.

(k) Material Incorporated by Reference

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

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

(i) Airbus A350 Airworthiness Limitations Section (ALS) Part 3, Certification Maintenance Requirements (CMR), Revision 04, dated December 15, 2017.

(ii) Airbus A350 ALS Part 3, Certification Maintenance Requirements (CMR), Variation 4.2, dated July 26, 2018.

(3) For service information identified in this AD, contact Airbus SAS, Airworthiness Office–EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email continued-airworthiness.a350@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 7, 2019.

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



2019-03-15 Airbus SAS: Amendment 39-19567; Docket No. FAA-2018-1003; Product Identifier 2018-NM-133-AD.

(a) Effective Date

This AD is effective April 3, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category, all manufacturer serial numbers, except those on which Airbus modification 207430 has been embodied in production, or Airbus Service Bulletin A330-54-3041 has been embodied in service.

- (1) Model A330-201, -202, and -203 airplanes.
- (2) Model A330-301, -302, and -303 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 54, Nacelles/pylons.

(e) Reason

This AD was prompted by reports of damaged drain pipes located above the lower aft pylon fairing (LAPF), caused by a contact between the drain pipe and the two u-shape ribs of the LAPF. We are issuing this AD to address damaged drain pipes located above the LAPF, which, combined with an additional independent failure, could lead to hydraulic leakage in the LAPF box, possibly resulting in a temporary uncontrolled fire and consequent reduced control of the airplane.

(f) Compliance

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

(g) One-Time Inspections

Within 26 months after the effective date of this AD, accomplish a one-time special detailed inspection of the pylon drain pipes (inside and outside) on the left-hand and right-hand pylons, located above both LAPFs, for contact with the U-shaped ribs of the LAPF and damage (including but not limited to cracks and leaks of the pylon drain pipe, and contact, interference, and chafing of the internal frame bracket and the shear clip of the trailing edge assembly of the LAPF with the pylon

drain pipe) in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-54-3042, dated May 17, 2018.

(h) Corrective Actions

If, during any inspection required by paragraph (g) of this AD, any damage is found, at the applicable time specified in Airbus Service Bulletin A330-54-3042, dated May 17, 2018, accomplish the applicable corrective actions on the affected pylon in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-54-3042, dated May 17, 2018; and Airbus Service Bulletin A330-54-3041, dated May 17, 2018.

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

(j) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0198, dated September 6, 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-2018-1003.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3229.

(k) Material Incorporated by Reference

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

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

(i) Airbus Service Bulletin A330-54-3041, dated May 17, 2018.

(ii) Airbus Service Bulletin A330-54-3042, dated May 17, 2018.

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



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

2019-03-17 Airbus SAS: Amendment 39-19569; Docket No. FAA-2018-0554; Product Identifier 2018-NM-064-AD.

(a) Effective Date

This AD is effective April 3, 2019.

(b) Affected ADs

This AD affects AD 2017-25-04, Amendment 39-19118 (82 FR 58098, December 11, 2017) (“AD 2017-25-04”).

(c) Applicability

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD, certificated in any category, with an original certificate of airworthiness or original export certificate of airworthiness issued on or before June 13, 2018.

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

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

(3) Model A320-211, -212, -214, -216, -231, -232, -233, -251N, and -271N airplanes.

(4) Model A321-111, -112, -131, -211, -212, -213, -231, -232, -251N, -251NX, -252N, -252NX, -253N, -253NX, -271N, -271NX, -272N, and -272NX airplanes.

(d) Subject

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

(e) Reason

This AD was prompted by a revision of an airworthiness limitation item (ALI) document, which requires more restrictive maintenance requirements and airworthiness limitations. We are issuing this AD to address a safety-significant latent failure (that is not annunciated), which, in combination with one or more other specific failures or events, could result in a hazardous or catastrophic failure condition.

(f) Compliance

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

(g) Revision of Maintenance or Inspection Program

Within 90 days after the effective date of this AD, revise the operator's maintenance or inspection program, as applicable, to incorporate the information specified in Airbus A318/A319/A320/A321 Airworthiness Limitations Section (ALS) Part 3, Certification Maintenance

Requirements (CMR), Revision 06, dated June 13, 2018 (“ALS Part 3, CMR, R6”). The initial compliance time for accomplishing the tasks specified in ALS Part 3, CMR, R6, is at the applicable time specified in ALS Part 3, CMR, R6, or within 90 days after the effective date of this AD, whichever occurs later.

(h) Terminating Actions for AD 2017-25-04

Accomplishing the actions required by paragraph (g) of this AD terminates all of the requirements of AD 2017-25-04.

(i) No Alternative Actions or Intervals

After the operator's maintenance or inspection program, as applicable, 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 and intervals are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (j)(1) of this AD.

(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.

(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 2017-25-04, or AD 2014-22-08, Amendment 39-18013 (79 FR 67042, November 12, 2014), that allow incorporation of ALS Part 3, CMR, R6, are considered approved as AMOCs for the corresponding provisions of this AD.

(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 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): 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) EASA AD 2018-0180, dated August 27, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0554.

(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.

(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 this AD specifies otherwise.

(i) Airbus A318/A319/A320/A321 Airworthiness Limitations Section (ALS) Part 3, Certification Maintenance Requirements (CMR), Revision 06, dated June 13, 2018.

(ii) [Reserved]

(3) 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>.

(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.



2019-03-19 Saab AB, Saab Aeronautics (Formerly Known as Saab AB, Saab Aerosystems):
Amendment 39-19571; Docket No. FAA-2018-0964; Product Identifier 2018-NM-127-AD.

(a) Effective Date

This AD is effective April 2, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Saab AB, Saab Aeronautics (formerly known as Saab AB, Saab Aerosystems) Model SAAB 2000 airplanes, certificated in any category.

(d) Subject

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

(e) Reason

This AD was prompted by reports that certain fuel probes indicated misleading fuel quantities on the engine indicating and crew alerting system (EICAS). We are issuing this AD to address deteriorated capacity of the fuel probes, which could lead to incorrect fuel reading, possibly resulting in fuel starvation and uncommanded engine in-flight shutdown, and consequent reduced control of the airplane.

(f) Compliance

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

(g) Definitions

(1) An affected part is a fuel probe having part number (P/N) 20136-0101, P/N 20136-0102, P/N 20136-0103, P/N 20136-0104, P/N 20136-0105, or P/N 20136-0106; with fuel low level sensors having P/N 20137-0101.

(2) A serviceable part is an affected part that has accumulated less than 1,500 total flight hours or 12 months since first installation on an airplane.

(h) Functional Check

Within 1,500 flight hours or 12 months after the effective date of this AD, whichever occurs first, accomplish a functional check of the fuel indicator gauging accuracy and the low level warning,

in accordance with the Accomplishment Instructions of Saab Service Bulletin 2000-28-028, dated April 19, 2018.

(i) Corrective Action

If the functional check required by paragraph (h) of this AD is found to be out of tolerance, within the limits and under the applicable conditions, as specified in the operator's Minimum Equipment List, replace the affected part with a serviceable part, in accordance with the Accomplishment Instructions of Saab Service Bulletin 2000-28-028, dated April 19, 2018.

(j) Parts Installation Limitation

As of the effective date of this AD, no person may install, on any airplane, an affected part, unless it is a serviceable part, as defined in paragraph (g)(2) of this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

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

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2018-0187, dated August 29, 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-2018-0964.

(2) For more information about this AD, contact Shahram Daneshmandi, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3220.

(m) Material Incorporated by Reference

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

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

(i) Saab Service Bulletin 2000-28-028, dated April 19, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; email saab2000.techsupport@saabgroup.com; internet <http://www.saabgroup.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.



2019-03-20 Dassault Aviation: Amendment 39-19572; Docket No. FAA-2018-0643; Product Identifier 2018-NM-084-AD.

(a) Effective Date

This AD is effective April 2, 2019.

(b) Affected ADs

This AD affects AD 2014-16-23, Amendment 39-17947 (79 FR 52545, September 4, 2014) (“AD 2014-16-23”) and AD 2016-16-09, Amendment 39-18607 (81 FR 52752, August 10, 2016) (“AD 2016-16-09”).

(c) Applicability

This AD applies to Dassault Aviation Model FALCON 7X airplanes, certificated in any category, with an original certificate of airworthiness or original export certificate of airworthiness issued on or before August 24, 2018.

Note 1 to paragraph (c) of this AD: Model FALCON 7X airplanes with modifications M1000 and M1254 incorporated are commonly referred to as “Model FALCON 8X” airplanes as a marketing designation.

(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 maintenance requirements and airworthiness limitations are necessary. We are issuing this AD to address reduced structural integrity and reduced control of airplanes due to the failure of system components.

(f) Compliance

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

(g) Revise the Existing Maintenance or Inspection Program

Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, by incorporating the information specified in Chapter 5-40-00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X Maintenance Manual (MM). The initial compliance times for the tasks specified in Chapter 5-40-00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X MM are at the applicable compliance times specified in Chapter 5-40-00, Airworthiness

Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X MM, or within 90 days after the effective date of this AD, whichever occurs later.

(h) Terminating Action for Other ADs

(1) Accomplishing the actions required by paragraph (g) of this AD terminates the requirements of paragraph (q) of AD 2014-16-23.

(2) Accomplishing the actions required by paragraph (g) of this AD terminates all requirements of AD 2016-16-09.

(i) No Alternative Actions, Intervals, and Critical Design Configuration Control Limitations (CDCCLs)

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

(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 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.

(k) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0101, dated May 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-2018-0643.

(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; phone 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) Chapter 5-40-00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X Maintenance Manual (MM).

(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; phone: 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 14, 2019.

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



2019-03-21 Embraer S.A.: Amendment 39-19573; Docket No. FAA-2018-0905; Product Identifier 2018-NM-115-AD.

(a) Effective Date

This AD is effective April 2, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Embraer S.A. Model ERJ 190-100 STD, -100 LR, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes; certificated in any category; all serial numbers.

(d) Subject

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

(e) Reason

This AD was prompted by reports of corrosion and chromium layer chipping of the forward and aft pintle pins of the main landing gear (MLG) shock struts. We are issuing this AD to address discrepancies of affected forward and aft pintle pins of the MLG shock struts, which could result in the pintle pin shearing under normal load and consequent collapse of the MLG during takeoff or landing.

(f) Compliance

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

(g) Repetitive Inspections

At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD: Do a detailed inspection for discrepancies of affected forward and aft pintle pins of the left- and right-hand MLG shock struts, in accordance with the Accomplishment Instructions of Embraer Service Bulletin 190-32-0065, Revision 02, dated November 1, 2017. Repeat the inspection thereafter at intervals not to exceed 72 months.

(1) For airplanes on which any MLG pintle pin having part number (P/N) 2821-0067 or 2821-0025 has accumulated fewer than 17,000 total flight cycles since new: Before the accumulation of 17,750 total flight cycles.

(2) For airplanes on which any MLG pintle pin having P/N 2821-0067 or 2821-0025 has accumulated 17,000 or more total flight cycles since new: Within 750 flight cycles after the effective date of this AD.

(h) Corrective Actions

If any discrepancy of any pintle pin is found during any inspection required by paragraph (g) of this AD: Before further flight, repair the affected pintle pin or replace it with a new pintle pin, as applicable, in accordance with the Accomplishment Instructions of Embraer Service Bulletin 190-32-0065, Revision 02, dated November 1, 2017.

(i) Credit for Previous Actions

This paragraph provides credit for the initial inspection required by paragraph (g) of this AD, if that inspection was performed before the effective date of this AD using the applicable service information identified in paragraphs (i)(1) through (i)(6) of this AD.

(1) Task 57-50-007-1247, “Main Landing Gear Trunnion Fittings–Inside Surfaces–Internal,” Embraer 190/195 Maintenance Review Board Report MRB-1928, Revision 11, dated May 10, 2017; or Revision 12, dated September 27, 2018.

(2) Task 32-11-00-001, “Main Landing Gear (MLG),” Embraer 190/195 Maintenance Review Board Report MRB-1928, Revision 11, dated May 10, 2017; or Revision 12, dated September 27, 2018.

(3) Task 32-11-001-1034, “Main Landing Gear Shock Strut Pintle Pins–Internal,” Embraer 190/195 Maintenance Review Board Report MRB-1928, Revision 11, dated May 10, 2017.

(4) Embraer Service Bulletin 190-32-0002, Revision 01, dated November 8, 2012.

(5) Embraer Service Bulletin 190-32-0065, dated August 31, 2016.

(6) Embraer Service Bulletin 190-32-0065, Revision 01, dated October 24, 2017.

(j) Equivalent Inspection

Performing a detailed inspection for discrepancies of affected forward and aft pintle pins of the left- and right-hand MLG shock struts, in accordance with Task 32-11-001-1034, “Main Landing Gear Shock Strut Pintle Pins–Internal,” of the Embraer 190/195 Maintenance Review Board Report MRB-1928, Revision 12, dated September 27, 2018, at intervals not to exceed 72 months, is equivalent to an inspection required by paragraph (g) of this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the 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.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Brazilian Airworthiness Directive 2018-07-01, effective July 24, 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-2018-0905.

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

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

(m) Material Incorporated by Reference

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

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

(i) Embraer Service Bulletin 190-32-0065, Revision 02, dated November 1, 2017.

(ii) Task 32-11-001-1034, "Main Landing Gear Shock Strut Pintle Pins—Internal," of the Embraer 190/195 Maintenance Review Board Report MRB-1928, Revision 12, dated September 27, 2018.

(3) For service information identified in this AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170—Putim—12227-901 São Jose dos Campos—SP—Brazil; 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>.

(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.



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Aviation Safety

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2019-03-23 Airbus SAS: Amendment 39-19575; Docket No. FAA-2018-0904; Product Identifier 2018-NM-108-AD.

(a) Effective Date

This AD is effective April 3, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Airbus SAS airplanes identified in paragraphs (c)(1) through (c)(7) of this AD, certificated in any category, all manufacturer serial numbers.

- (1) Model A330-223F and -243F airplanes.
- (2) Model A330-201, -202, -203, -223, and -243 airplanes.
- (3) Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.
- (4) Model A340-211, -212, and -213 airplanes.
- (5) Model A340-311, -312, and -313 airplanes.
- (6) Model A340-541 airplanes.
- (7) Model A340-642 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight controls.

(e) Reason

This AD was prompted by a report that the right-hand (RH) and left-hand (LH) track station 4 sensor struts, in the case of down drive element disconnection, would be unable to provide failure detection information for flap movements. We are issuing this AD to address abnormal flap movement due to mechanical drive station element disconnection at flap track station 4 or station 5 which could lead to undetected down drive shaft disconnection. Such a condition could result in complete flap disconnection in the case of additional failure on the remaining flap drive station, and could ultimately result in loss of control of the airplane.

(f) Compliance

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

(g) Definitions

For the purpose of this AD, the drive station elements are defined as the down drive, down drive shaft, geared rotary actuator (gearbox), geared rotary actuator (output lever and fork end), and drive strut.

(h) Detailed and General Visual Inspections

(1) At the applicable times specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD, and thereafter not to exceed the applicable intervals specified in table 1 to paragraph (h)(1) of this AD, do a detailed inspection of the LH and RH track station 4 drive station elements for corrosion or ruptured, loose, or missing components (including any attached bolts and nuts that are loose, broken, or missing) and a general visual inspection of the LH and RH track station 4 sensor struts for corrosion or ruptured, loose, or missing components (including any attached bolts that are loose, broken, or missing), in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3226, dated April 5, 2018; Airbus Service Bulletin A340-27-4206, dated April 3, 2018; or Airbus Service Bulletin A340-27-5071, dated April 3, 2018; as applicable.

Table 1 to paragraph (h)(1) of this AD - Inspection Intervals

Airplanes	Compliance Time (whichever occurs first)
A330, A340-200 and A340-300	3,300 flight cycles or 24 months
A340-500 and A340-600	1,600 flight cycles or 24 months

(i) For airplanes that, as of the effective date of this AD, have accumulated less than 1,000 flight cycles since first flight: Before exceeding 24 months since first flight or within 18 months after the effective date of this AD, whichever occurs later, but without exceeding 2,300 flight cycles since first flight.

(ii) For airplanes that, as of the effective date of this AD, have accumulated 1,000 or more flight cycles since first flight: Within 1,000 flight cycles or 12 months, whichever occurs first after the effective date of this AD.

(2) If, during any general visual inspection required by paragraph (h)(1) of this AD, any corrosion is detected or any ruptured, loose, or missing components (including any attached bolts that are loose, broken, or missing) are detected, before further flight, accomplish a detailed inspection of the applicable LH or RH track station 5 drive station elements for corrosion or ruptured, loose, or missing components (including any attached bolts and nuts that are loose, broken, or missing) in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3226, dated April 5, 2018; Airbus Service Bulletin A340-27-4206, dated April 3, 2018; or Airbus Service Bulletin A340-27-5071, dated April 3, 2018; as applicable.

(i) Corrective Actions

(1) If, during any detailed inspection required by paragraph (h)(1) of this AD, any corrosion is detected or any ruptured, loose, or missing components (including any attached bolts and nuts that are loose, broken, or missing) are detected, before further flight, replace each affected part with a serviceable part in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3226, dated April 5, 2018; Airbus Service Bulletin A340-27-4206, dated April 3, 2018; or Airbus Service Bulletin A340-27-5071, dated April 3, 2018; as applicable, or 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.

(2) If, during any general visual inspection required by paragraph (h)(1) of this AD, any corrosion is detected or any ruptured, loose, or missing components (including any attached bolts that are loose, broken, or missing) are detected, before further flight, replace each affected part with a serviceable part in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3226, dated April 5, 2018; Airbus Service Bulletin A340-27-4206, dated April 3, 2018; or Airbus Service Bulletin A340-27-5071, dated April 3, 2018; as applicable, or 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) If, during any detailed inspection required by paragraph (h)(2) of this AD, any corrosion is detected or any ruptured, loose, or missing components (including any attached bolts and nuts that are loose, broken, or missing) are detected, before further flight, replace each affected part with a serviceable part in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3226, dated April 5, 2018; Airbus Service Bulletin A340-27-4206, dated April 3, 2018; or Airbus Service Bulletin A340-27-5071, dated April 3, 2018; as applicable, or 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.

(j) Reporting

At the applicable time specified in paragraph (j)(1) or (j)(2) of this AD: Report the results (positive or negative) of each inspection required by paragraphs (h)(1) and (h)(2) of this AD to Airbus Service Bulletin Reporting Online Application on Airbus World (<https://w3.airbus.com/>), or submit the results to Airbus in accordance with the instructions of Airbus Service Bulletin A330-27-3226, dated April 5, 2018; Airbus Service Bulletin A340-27-4206, dated April 3, 2018; or Airbus Service Bulletin A340-27-5071, dated April 3, 2018.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 90 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 90 days after the effective date of this AD.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Section, send it to the attention of the person identified in paragraph (l)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or 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.

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0151, dated July 16, 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-2018-0904.

(2) For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3229.

(m) Material Incorporated by Reference

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

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

(i) Airbus Service Bulletin A330-27-3226, dated April 5, 2018.

(ii) Airbus Service Bulletin A340-27-4206, dated April 3, 2018.

(iii) Airbus Service Bulletin A340-27-5071, dated April 3, 2018.

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