

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

**LARGE AIRCRAFT**

**BIWEEKLY 2019-01**

*12/24/2018 - 1/6/2019*



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
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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



**AD 2018-22-07 Engine Alliance:** Amendment 39-19480; Docket No. FAA-2018-0938; Product Identifier 2018-NE-36-AD.

**(a) Effective Date**

This AD is effective January 11, 2019.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Engine Alliance (EA) GP7270, GP7272, and GP7277 model turbofan engines.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a shop finding of axial cracks in the interstage 5-6 seal teeth of the high-pressure compressor (HPC) stages 2-5 spool spacer arm, due to an incorrectly installed stage 6 seal ring. We are issuing this AD to prevent failure of the HPC stage 5-6 seal teeth and uncontained HPC stages 2-5 spool release. The unsafe condition, if not addressed, could result in an uncontained failure of the HPC stages 2-5 spool, damage to the engine, and damage to the airplane.

**(f) Compliance**

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

**(g) Required Actions**

(1) Borescope inspect the stage 6 seal ring location in accordance with the Accomplishment Instructions, paragraph 1.F, in EA Alert Service Bulletin (ASB) EAGP7-A72-395, Revision No. 2, dated August 2, 2018, and within the compliance times specified in Table 1 to paragraph (g) of this AD. If the stage 6 seal ring is incorrectly installed, remove the HPC stages 2-5 spool from service within 50 cycles and replace with a part eligible for installation.

(2) Borescope inspect the interstage 5-6 seal tooth aft face and interstage 5-6 forward face for cracks and missing coating in accordance with the Accomplishment Instructions, paragraphs 2.C and 2.E, in EA ASB EAGP7-A72-395, Revision No. 2, dated August 2, 2018, and within the compliance times specified in Table 1 to paragraph (g) of this AD.

(i) If coating is missing on the interstage 5-6 seal tooth forward or aft faces, repeat the borescope inspection required by paragraph (g)(2) of this AD for cracks every 150 cycles.

(ii) If cracks are found in the interstage 5-6 seal tooth forward or aft faces, remove the HPC stages 2-5 spool from service and replace with a part eligible for installation before further flight.

**Table 1 to Paragraph (g) of this AD – Compliance Times**

<b>Cycles Since New (CSN) on HPC Stages 2-5 Spool as of the effective date of this AD</b>	<b>Complete the Inspection</b>
2499 or less	Within 900 cycles after the effective date of this AD, not to exceed 2,850 CSN
2500 to 3499	Within 350 cycles after the effective date of this AD, not to exceed 3,600 CSN
3500 or more	Within 100 cycles after the effective date of this AD

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

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

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

**(i) Related Information**

For 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.

**(j) 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-A72-395, Revision No. 2, dated August 2, 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 December 19, 2018.  
Robert J. Ganley,  
Manager, Engine and Propeller Standards Branch,  
Aircraft Certification Service.



**2018-23-12 Zodiac Aero Evacuation Systems (also known as Air Cruisers Company):**  
Amendment 39-19499; Docket No. FAA-2016-9392; Product Identifier 2016-NM-003-AD.

**(a) Effective Date**

This AD is effective December 28, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Zodiac Aero Evacuation Systems (also known as Air Cruisers Company) fusible plugs installed on emergency evacuation equipment identified in the service information specified in paragraphs (c)(1) through (c)(16) of this AD. These affected fusible plugs might be installed on the emergency evacuation equipment of the following manufacturers' airplanes: Airbus SAS, The Boeing Company, BAE Systems (Operations) Limited, and Fokker Services B.V.

- (1) Air Cruisers Service Bulletin 737 103-25-50, dated August 27, 2010.
- (2) Air Cruisers Service Bulletin 757 105-25-80, dated August 27, 2010.
- (3) Air Cruisers Service Bulletin 757 105-25-81, dated August 27, 2010.
- (4) Air Cruisers Service Bulletin 767 106-25-10, Rev. No. 1, dated October 15, 2010.
- (5) Air Cruisers Service Bulletin 777 107-25-29, Rev. No. 1, dated July 8, 2011.
- (6) Air Cruisers Service Bulletin A300/A310 001-25-19, dated August 27, 2010.
- (7) Air Cruisers Service Bulletin A300/A310 003-25-33, dated August 27, 2010.
- (8) Air Cruisers Service Bulletin A310 002-25-08, dated August 27, 2010.
- (9) Air Cruisers Service Bulletin A320 004-25-87, Rev. No. 2, dated January 7, 2011.
- (10) Air Cruisers Service Bulletin A321 005-25-21, dated August 27, 2010.
- (11) Air Cruisers Service Bulletin BAe 146 201-25-23, dated December 10, 2010.
- (12) Air Cruisers Service Bulletin F28 352-25-02, dated December 10, 2010.
- (13) Air Cruisers Service Bulletin F100 351-25-07, dated December 10, 2010.
- (14) Air Cruisers Service Bulletin Liferaft 35-25-79, dated August 27, 2010.
- (15) Air Cruisers Service Bulletin MD11 305-25-35, dated August 27, 2010.
- (16) Air Cruisers Service Bulletin MD80/90/717 304-25-45, dated August 27, 2010.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by reports indicating that affected fusible plugs activated (vented gas) below the rated temperature. We are issuing this AD to address fusible plugs that might activate below the rated temperature and render the evacuation system unusable.

**(f) Compliance**

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

**(g) Fusible Plug Identification**

Within 42 months after the effective date of this AD, do an inspection to determine if any fusible plug has part number (P/N) B13984-3, stamped with Lot PA-21 or PA-22. A review of the airplane maintenance records is acceptable to make this determination if it can be conclusively determined from that review that a part not having P/N B13984-3, stamped with Lot PA-21 or PA-22, has been installed.

Note 1 to paragraph (g) of this AD: Guidance for performing the inspection specified in paragraph (g) of this AD can be found in applicable service information specified in paragraphs (c)(1) through (c)(16) of this AD and the applicable component maintenance manuals (CMMs) that have incorporated the appropriate Air Cruisers service information.

**(h) Replacement of Affected Fusible Plug**

If, during the inspection or records review required by paragraph (g) of this AD, it is determined that any fusible plug has part number (P/N) B13984-3, stamped with Lot PA-21 or PA-22: Within 42 months after the effective date of this AD, replace that fusible plug with a serviceable fusible plug P/N B13984-3 that is not stamped with Lot PA-21 or PA-22.

Note 2 to paragraph (h) of this AD: Guidance can be found in the applicable CMM for the replacement. In addition, Air Cruisers Service Information Letter (SIL) 25-246, Rev. No. 1, dated February 21, 2014, provides information regarding affected fusible plugs and guidance on the replacement.

**(i) Parts Installation Prohibition**

As of the effective date of this AD, no person may install on any airplane any fusible plug having P/N B13984-3, stamped with Lot PA-21 or PA-22.

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

(1) The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone: 516-228-7300; fax: 516-794-5531.

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

**(k) Related Information**

(1) For more information about this AD, contact Darren Gassetto, Aerospace Engineer, Mechanical Systems and Admin Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7323; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

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

**(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.

(3) The following service information was approved for IBR on December 28, 2018 (83 FR 59290, November 23, 2018).

- (i) Air Cruisers Service Bulletin 737 103-25-50, dated August 27, 2010.
- (ii) Air Cruisers Service Bulletin 757 105-25-80, dated August 27, 2010.
- (iii) Air Cruisers Service Bulletin 757 105-25-81, dated August 27, 2010.
- (iv) Air Cruisers Service Bulletin 767 106-25-10, Rev. No. 1, dated October 15, 2010.
- (v) Air Cruisers Service Bulletin 777 107-25-29, Rev. No. 1, dated July 8, 2011.
- (vi) Air Cruisers Service Bulletin A300/A310 001-25-19, dated August 27, 2010.
- (vii) Air Cruisers Service Bulletin A300/A310 003-25-33, dated August 27, 2010.
- (viii) Air Cruisers Service Bulletin A310 002-25-08, dated August 27, 2010.
- (ix) Air Cruisers Service Bulletin A320 004-25-87, Rev. No. 2, dated January 7, 2011.
- (x) Air Cruisers Service Bulletin A321 005-25-21, dated August 27, 2010.
- (xi) Air Cruisers Service Bulletin BAe 146 201-25-23, dated December 10, 2010.
- (xii) Air Cruisers Service Bulletin F28 352-25-02, dated December 10, 2010.
- (xiii) Air Cruisers Service Bulletin F100 351-25-07, dated December 10, 2010.
- (xiv) Air Cruisers Service Bulletin Liferaft 35-25-79, dated August 27, 2010.
- (xv) Air Cruisers Service Bulletin MD11 305-25-35, dated August 27, 2010.
- (xvi) Air Cruisers Service Bulletin MD80/90/717 304-25-45, dated August 27, 2010.

(4) For service information identified in this AD, contact Air Cruisers, 1747 State Route 34, Wall Township, NJ 07727-3935; phone 732-681-3527; email ZAESTechPubs@zodiac aerospace.com.

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

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

Issued in Des Moines, Washington, on December 13, 2018.

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



**2018-25-08 Airbus SAS:** Amendment 39-19519; Docket No. FAA-2018-0641; Product Identifier 2018-NM-032-AD.

**(a) Effective Date**

This AD is effective February 1, 2019.

**(b) Affected ADs**

This AD replaces AD 2017-22-07, Amendment 39-19087 (82 FR 56158, November 28, 2017) (“AD 2017-22-07”).

**(c) Applicability**

This AD applies to Airbus SAS Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes; certificated in any category; manufacturer serial numbers through 0758 inclusive.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by an evaluation by the design approval holder (DAH) indicating that the frame forks and outer skin on the forward and aft cargo compartment doors are subject to widespread fatigue damage (WFD), and a determination that a modification of the frame forks must be accomplished. We are issuing this AD to address cracks on the frame forks and outer skin on the forward and aft cargo compartment doors, which could lead to reduced structural integrity and failure of the cargo compartment door, possible decompression of the airplane, and injury to occupants.

**(f) Compliance**

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

**(g) Retained Definition of Affected Door, With No Changes**

This paragraph restates the definition in paragraph (g) of AD 2017-22-07, with no changes. For the purpose of this AD, an “affected door” is a forward or aft cargo compartment door, having any part number listed in table 1 to paragraph (g) of this AD, except a cargo compartment door on which Airbus Service Bulletin A320-52-1042 or Airbus Service Bulletin A320-52-1170 is embodied.

**Table 1 to Paragraph (g) of this AD – Affected Cargo Doors**

<b>Forward cargo compartment door part numbers</b>	<b>Aft cargo compartment door part numbers</b>
D52371000000	D52371900000
D52371000002	D52371900002
D52371000004	D52371900004
D52371000006	D52371900008
D52371000008	D52371900010
D52371000010	D52371900012
D52371000012	D52371900014
D52371000014	D52371900016
D52371000016	D52371900018
D52371000018	D52371900022
D52371000022	

**(h) Retained Repetitive Special Detailed Inspection of Frame Forks, With No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2017-22-07, with no changes. At the latest of the compliance times listed in paragraphs (h)(1) through (h)(4) of this AD: Do a special detailed inspection of all frame forks in the beam 4 area of any affected door as defined in paragraph (g) of this AD, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1171, Revision 02, dated April 10, 2017, except as specified in paragraphs (l) and (m) of this AD. Repeat the inspection thereafter at intervals not to exceed 3,000 flight cycles. A review of the airplane delivery or maintenance records is acceptable to identify any affected door installed on the airplane, provided that the cargo compartment door part number can be conclusively determined from that review.

(1) Before exceeding 37,500 flight cycles since first installation of the door on an airplane.

(2) Within 900 flight cycles after January 2, 2018 (the effective date of AD 2017-22-07), without exceeding 41,950 flight cycles since first installation of the door on an airplane.

(3) Within 50 flight cycles after January 2, 2018 (the effective date of AD 2017-22-07), for a door having reached or exceeded 41,900 flight cycles since first installation on an airplane.

(4) Within 3,000 flight cycles since the last inspection of the door as specified in Airbus Service Bulletin A320-52-1032.

**(i) Retained Corrective Actions, With No Changes**

This paragraph restates the requirements of paragraph (i) of AD 2017-22-07, with no changes. If any crack is found during any inspection required by paragraph (h) of this AD, before further flight, do all applicable corrective actions in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1171, Revision 02, dated April 10, 2017, except as specified in paragraphs (l) and (m) of this AD. Accomplishment of applicable corrective actions does not constitute terminating action for the repetitive inspections.

### **(j) Terminating Modification for Repetitive Inspections**

Before the accumulation of 56,300 flight cycles, but not before the accumulation of 21,700 flight cycles since first installation of the affected door on an airplane: Modify all affected doors of an airplane, including accomplishment of all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1170, Revision 01, dated June 14, 2018. Accomplishing this modification constitutes terminating action for the repetitive inspections specified in paragraph (h) of this AD for that airplane, provided that, after modification, no affected door is re-installed on that airplane.

### **(k) Retained Optional Terminating Action, With Changes Related to Compliance**

This paragraph restates the requirements of paragraph (j) of AD 2017-22-07, with changes related to compliance.

(1) Modification of all affected doors of an airplane before the effective date of this AD, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1042, Revision 2, dated January 14, 1997 (which is incorporated by reference in AD 2017-22-07 and is not incorporated in this AD), constitutes terminating action for the repetitive inspections specified in paragraph (h) of this AD and a method of compliance for the modification required by paragraph (j) of this AD, for that airplane, provided that, after modification, no affected door is re-installed on that airplane. For airplanes not previously modified before the effective date of this AD, the modification required by paragraph (j) of this AD must be done.

(2) Modification of all affected doors of an airplane including accomplishment of all applicable related investigative and corrective actions, if done before the effective date of this AD in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-52-1170, Revision 01, dated June 14, 2018, except as specified in paragraph (l) of this AD, constitutes terminating action for the repetitive inspections specified in paragraph (h) of this AD and a method of compliance for the modification required by paragraph (j) of this AD, for that airplane, provided that, after modification, no affected door is re-installed on that airplane. For airplanes not previously modified before the effective date of this AD, the modification required by paragraph (j) of this AD must be done.

(3) Modification of all affected doors on an airplane, in case of finding damaged frame forks, as specified in an Airbus Repair Design Approval Sheet (RDAS), if done before the effective date of this AD and done in accordance with 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); constitutes terminating action for the repetitive inspection specified in paragraph (h) of this AD and a method of compliance for the modification required by paragraph (j) of this AD, for that airplane, provided that, after modification, no affected door is re-installed on that airplane. For airplanes not previously modified before the effective date of this AD, the modification required by paragraph (j) of this AD must be done.

### **(l) Retained Exception to Service Information, With Updated Service Information**

This paragraph restates the requirements of paragraph (k) of AD 2017-22-07, with updated service information. Where Airbus Service Bulletin A320-52-1170, dated September 5, 2016; Airbus Service Bulletin A320-52-1170, Revision 01, dated June 14, 2018; or Airbus Service Bulletin A320-52-1171, Revision 02, dated April 10, 2017; specifies to contact Airbus for appropriate action, and specifies that action as "RC" (Required for Compliance): Before further flight, accomplish corrective actions in accordance with the procedures specified in paragraph (q)(2) of this AD.

**(m) Retained Provision: No Reporting Requirement**

This paragraph restates the provision provided in paragraph (l) of AD 2017-22-07, with no changes. Although Airbus Service Bulletin A320-52-1171, Revision 02, dated April 10, 2017, specifies to submit certain information to the manufacturer, and specifies that action as “RC,” this AD does not include that requirement.

**(n) Retained Credit for Previous Actions**

This paragraph restates the provisions specified in paragraph (m) of AD 2017-22-07, with no changes.

(1) This paragraph provides credit for the actions required by paragraphs (h) and (i) of this AD, if those actions were performed before January 2, 2018 (the effective date of AD 2017-22-07), using Airbus Service Bulletin A320-52-1171, dated October 29, 2015, provided that it can be conclusively determined that any part number D52371000018 was also inspected as specified in paragraph (h) of this AD.

(2) This paragraph provides credit for the actions required by paragraphs (h) and (i) of this AD, if those actions were performed before January 2, 2018 (the effective date of AD 2017-22-07), using Airbus Service Bulletin A320-52-1171, Revision 01, dated September 5, 2016.

**(o) New Credit for Previous Actions**

(1) This paragraph provides credit for the actions required by paragraphs (j) and (k)(2) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-52-1170, dated September 5, 2016.

(2) This paragraph provides credit for the optional terminating modification specified in paragraph (k)(1) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-52-1042, Revision 2, dated January 14, 1997.

**(p) Parts Installation Limitation**

As of the effective date of this AD, no person may install, on any airplane, an affected door specified in paragraph (g) of this AD, unless less than 56,300 flight cycles have accumulated since first installation of the door on an airplane, and unless the door has been inspected in accordance with the requirements of paragraph (h) of this AD and all applicable corrective actions have been done in accordance with paragraph (i) of this AD.

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

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

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

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

#### **(r) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2018-0024, dated January 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-2018-0641.

(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 (s)(5) and (s)(6) of this AD.

#### **(s) Material Incorporated by Reference**

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

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

(3) The following service information was approved for IBR on February 1, 2019.

(i) Airbus Service Bulletin A320-52-1170, Revision 01, dated June 14, 2018.

(ii) [Reserved]

(4) The following service information was approved for IBR on January 2, 2018 (82 FR 56158, November 28, 2017).

(i) Airbus Service Bulletin A320-52-1171, Revision 02, dated April 10, 2017.

(ii) [Reserved]

(5) For service information identified in this AD, contact Airbus, Airworthiness Office–EIAS, 2 Rond Point Emile Dewoitine, 31700 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com); internet: <http://www.airbus.com>.

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

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

Issued in Des Moines, Washington, on November 23, 2018.

John P. Piccola,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**FAA**  
**Aviation Safety**

## **AIRWORTHINESS DIRECTIVE**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

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**2018-26-01 CFM International S.A.:** Amendment 39-19531; Docket No. FAA-2018-1039; Product Identifier 2018-NE-14-AD.

**(a) Effective Date**

This AD is effective January 10, 2019.

**(b) Affected ADs**

This AD replaces AD 2018-18-01, Amendment 39-19380 (83 FR 49272, October 1, 2018).

**(c) Applicability**

This AD applies to CFM International S.A.(CFM) CFM56-7B20, CFM56-7B22, CFM56-7B22/B1, CFM56-7B24, CFM56-7B24/B1, CFM56-7B26, CFM56-7B26/B2, CFM56-7B27, CFM56-7B27A, CFM56-7B26/B1, CFM56-7B27/B1, CFM56-7B27/B3, CFM56-7B20/2, CFM56-7B22/2, CFM56-7B24/2, CFM56-7B26/2, CFM56-7B27/2, CFM56-7B20/3, CFM56-7B22/3, CFM56-7B22/3B1, CFM56-7B24/3, CFM56-7B24/3B1, CFM56-7B26/3, CFM56-7B26/3B1, CFM56-7B26/3B2, CFM56-7B27/3, CFM56-7B27/3B1, CFM56-7B27/3B3, CFM56-7B27A/3, CFM56-7B26/3F, CFM56-7B26/3B2F, CFM56-7B27/3F, CFM56-7B27/3B1F, CFM56-7B20E, CFM56-7B22E, CFM56-7B22E/B1, CFM56-7B24E, CFM56-7B24E/B1, CFM56-7B26E, CFM56-7B26E/B1, CFM56-7B26E/B2, CFM56-7B27AE, CFM56-7B27E, CFM56-7B27E/B1, CFM56-7B27E/B3, CFM56-7B26E/F, CFM56-7B26E/B2F, CFM56-7B27E/F, and CFM56-7B27E/B1F turbofan engine models.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by further analysis by the manufacturer that indicated a need to reduce the initial fan blade inspection requirement based on its ongoing root cause investigation of an April 2018 engine failure that resulted in one fatality. We are issuing this AD to prevent failure of the fan blade. The unsafe condition, if not addressed, could result in failure of the fan blade, the engine inlet cowl disintegrating and debris penetrating the fuselage, causing a loss of pressurization, and prompting an emergency descent.

**(f) Compliance**

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

### **(g) Required Actions**

(1) Perform an ultrasonic inspection (USI) or eddy current inspection (ECI) of the concave and convex sides of the fan blade dovetail as follows:

(i) For a fan blade with less than or equal to 16,000 cycles since new (CSN), inspect prior to accumulating 17,000 CSN.

(ii) For a fan blade with more than 16,000 and less than 20,000 CSN, inspect within 1,000 cycles but no later than 20,000 CSN.

(iii) For a fan blade with 20,000 or more CSN, inspect before further flight.

(iv) Thereafter, repeat this inspection no later than 1,600 cycles since the last inspection, or within 450 cycles after October 16, 2018, the effective date of AD 2018-18-01, whichever occurs later.

(v) Use the Accomplishment Instructions, paragraphs 3.A.(3)(a) through (i), of CFM International Service Bulletin (SB) CFM56-7B S/B 72-1033, Revision 3, dated November 6, 2018, to perform a USI or use the instructions in subtask 72-21-01-220-091, of task 72-21-01-200-001, from CFM CFM56-7B Engine Shop Manual, Revision 57, dated January 15, 2018, to perform an ECI.

(2) If any unserviceable indication, as specified in the applicable service information in paragraph (g)(1)(v) of this AD, is found during the inspections required by paragraph (g) of this AD, replace the fan blade before further flight with a part eligible for installation.

### **(h) Installation Prohibition**

Do not install any replacement fan blade unless it meets one of the following criteria:

(1) The replacement fan blade has fewer than 17,000 CSN, or;

(2) The replacement fan blade has been inspected, per paragraph (g)(1) of this AD, within the last 1,600 cycles before installation.

### **(i) Definition**

For the purpose of this AD, a “replacement fan blade” is a fan blade that is being installed into an engine from which it was not previously removed. Removing and reinstalling a fan blade for the purpose of relubrication is not subject to the Installation Prohibition of this AD.

### **(j) Credit for Previous Actions**

You may take credit for the actions that are required by paragraph (g) of this AD, if you performed those actions before the effective date of this AD using CFM SB CFM56-7B S/B 72-1019, dated March 24, 2017; CFM SB CFM56-7B S/B 72-1019, Revision 1, dated June 13, 2017; CFM SB CFM56-7B S/B 72-1024, dated July 26, 2017; CFM SB CFM56-7B S/B 72-1033 dated April 20, 2018; CFM SB CFM56-7B S/B 72-1033, Revision 1, dated May 9, 2018; or CFM International SB CFM56-7B S/B 72-1033, Revision 2, dated July 27, 2018; or performed an ECI using the instructions in task 72-21-01-200-001, subtask 72-21-01-220-091 of CFM56-7B Engine Shop Manual, earlier than Revision 57, dated January 15, 2018.

### **(k) 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 (l) 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) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(3)(i) and (k)(3)(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. 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.

(4) AMOCs approved previously for AD 2018-10-11 (83 FR 22836, May 17, 2018) and AD 2018-18-01 (83 FR 49272, October 1, 2018) are approved as AMOCs for the corresponding provisions of this AD.

### **(l) Related Information**

For more information about this AD, contact Christopher McGuire, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7120; fax: 781-238-7199; email: chris.mcguire@faa.gov.

### **(m) Material Incorporated by Reference**

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

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

(3) The following service information was approved for IBR on January 10, 2019.

(i) CFM International (CFM) Service Bulletin CFM56-7B S/B 72-1033, Revision 3, dated November 6, 2018.

(ii) [Reserved]

(4) The following service information was approved for IBR on May 14, 2018 (83 FR 19176, May 2, 2018).

(i) Subtask 72-21-01-220-091, of Task 72-21-01-200-001, from the CFM CFM56-7B Engine Shop Manual, Revision 57, dated January 15, 2018.

(ii) [Reserved]

(5) For CFM service information identified in this AD, contact CFM International Inc., Aviation Operations Center, 1 Neumann Way, M/D Room 285, Cincinnati, OH 45125; phone: 877-432-3272; fax: 877-432-3329; email: aviation.fleetsupport@ge.com.

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

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

Issued in Burlington, Massachusetts, on December 18, 2018.

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



**2018-26-03 The Boeing Company:** Amendment 39-19533; Docket No. FAA-2018-0711; Product Identifier 2018-NM-062-AD.

**(a) Effective Date**

This AD is effective January 31, 2019.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all The Boeing Company Model 757-200 series airplanes, certificated in any category.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by reports of uncommanded movement of the captain's and first officer's seats. We are issuing this AD to address the uncommanded movement of the captain's or first officer's seat, which could lead to reduced controllability of the airplane.

**(f) Compliance**

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

**(g) Identification, Check, Inspection, On-Condition Actions (Includes Overhaul of Horizontal Movement System), and Repetitive Actions**

For airplanes identified in Boeing Special Attention Service Bulletin 757-25-0308, Revision 1, dated June 7, 2018: Except as required by paragraph (h) of this AD, at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Special Attention Service Bulletin 757-25-0308, Revision 1, dated June 7, 2018, do all applicable actions identified as "RC" (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-25-0308, Revision 1, dated June 7, 2018.

**(h) Exceptions to Service Information Specifications**

For purposes of determining compliance with the requirements of this AD: Where Boeing Special Attention Service Bulletin 757-25-0308, Revision 1, dated June 7, 2018, uses the phrase “the original issue date of this service bulletin,” this AD requires using “the effective date of this AD.”

**(i) Seat Inspection, Adjustment Check for Certain Seats, and On-Condition Actions**

For airplanes identified in Boeing Special Attention Service Bulletin 757-25-0309, Revision 1, dated July 2, 2018: Within 36 months after the effective date of this AD, do all applicable actions identified as RC in, and in accordance with, the Accomplishment Instructions of Boeing Special Attention Service Bulletin 757-25-0309, Revision 1, dated July 2, 2018. A review of the airplane maintenance records may be used for the seat inspection if the part number can be conclusively determined from that review.

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

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

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

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

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

**(k) Related Information**

For more information about this AD, contact Myra Kuck, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5316; fax: 562-627-5210; email: myra.j.kuck@faa.gov.

**(I) Material Incorporated by Reference**

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

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

(i) Boeing Special Attention Service Bulletin 757-25-0308, Revision 1, dated June 7, 2018.

(ii) Boeing Special Attention Service Bulletin 757-25-0309, Revision 1, dated July 2, 2018.

(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 December 13, 2018.

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



**2018-26-04 Airbus SAS:** Amendment 39-19534; Docket No. FAA-2018-1062; Product Identifier 2018-NM-163-AD.

**(a) Effective Date**

This AD becomes effective January 14, 2019.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Airbus SAS Model A350-941 and -1041 airplanes, certificated in any category, as identified in European Aviation Safety Agency (EASA) AD 2018-0246, dated November 13, 2018 (“EASA AD 2018-0246”).

**(d) Subject**

Air Transport Association (ATA) of America Code 36, Pneumatic.

**(e) Reason**

This AD was prompted by a report that due to an issue with the flight warning system (FWS) logic, it is possible that the “AIR Auxiliary Power Unit (APU) BLEED LEAK” electronic centralized aircraft monitoring (ECAM) alert can trigger several times. We are issuing this AD to address engine bleed reset in response to the ECAM alert, which could lead to exposure of critical locations and the surrounding structure to heat stress, possibly resulting in reduced structural integrity of the airplane.

**(f) Compliance**

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

**(g) Requirements**

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2018-0246.

**(h) Exceptions to EASA AD 2018-0246**

- (1) For purposes of determining compliance with the requirements of this AD: Where EASA AD 2018-0246 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Remarks” section of EASA AD 2018-0246 does not apply to this AD.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

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

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

(3) Required for Compliance (RC): For any service information referenced in EASA AD 2018-0246 that contain RC procedures and tests: Except as required by paragraph (i)(2) of this AD, RC procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(j) Related Information**

For more information about this AD, contact 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) EASA AD 2018-0246, dated November 13, 2018.

(ii) [Reserved]

(3) For EASA AD 2018-0246, 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 2018-0246 may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-1062.

(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 14, 2018.  
Michael Kaszycki,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**2018-26-05 The Boeing Company:** Amendment 39-19535; Docket No. FAA-2016-4219; Product Identifier 2015-NM-169-AD.

**(a) Effective Date**

This AD is effective February 1, 2019.

**(b) Affected ADs**

This AD affects AD 2015-19-01, Amendment 39-18264 (80 FR 55521, September 16, 2015) (“AD 2015-19-01”).

**(c) Applicability**

This AD applies to The Boeing Company Model 777-200, 777-200LR, 777-300, 777-300ER, and 777F series airplanes, certificated in any category, excluding line numbers 1165 and subsequent.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by reports of latently failed engine fuel shutoff spar valves discovered during fuel filter replacement. We are issuing this AD to address latent failure of the fuel shutoff spar valve to the engine, which could result in the inability to terminate fuel flow to the engine and, in the case of an engine fire, could lead to wing failure.

**(f) Compliance**

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

**(g) Inspection and Replacement**

Within 24 months after the effective date of this AD: Do an inspection to determine the part numbers (P/Ns) of the motor-operated valve (MOV) actuators at the fuel shutoff spar valve positions for the left and right engines, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015. A review of airplane maintenance records is acceptable in lieu of this inspection if the part numbers can be conclusively determined from that review. If it can be definitively determined, by visual inspection or airplane maintenance records review, that P/N MA30A1017 (Boeing P/N S343T003-76) is installed, or that airplane information management system (AIMS) 2 Block Point (BP) Version 17 or later software is installed, no further action is required by paragraph (g) of this AD.

(1) For any MOV actuator with a P/N other than P/N MA30A1017 (Boeing P/N S343T003-76) on an airplane having AIMS-1 installed: Within 24 months after the effective date of this AD, install MOV actuators having part number (P/N) MA30A1017 at the engine fuel shutoff spar positions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015.

(2) For any MOV actuator with a P/N other than P/N MA30A1017 (Boeing P/N S343T003-76) on an airplane having AIMS-2 BP Version 16 software or earlier version, installed: Within 24 months after the effective date of this AD, do the actions specified in paragraph (g)(2)(i) or (g)(2)(ii) of this AD. For purposes of this AD, airplanes identified as Group 4 in Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015, also include airplanes with AIMS-2 BP Version 16 or earlier software installed.

(i) Install MOV actuators having P/N MA30A1017 at the engine fuel shutoff spar valve positions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015. For airplanes identified as Group 7 in Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015, with AIMS-2 BP Version 16 or earlier software, the instructions for installing P/N MA30A1017 (Boeing P/N S343T003-76) are in Figures 35 and 37 of Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015.

(ii) Install AIMS-2 BP Version 17A software or later-approved version, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 777-31-0218, dated September 8, 2016. Later-approved versions of the software are only those Boeing software versions that are approved as a replacement for AIMS-2 BP Version 17A software, and approved as part of the type design by the FAA after issuance of Boeing Service Bulletin 777-31-0218, dated September 8, 2016.

#### (h) Revision of Maintenance or Inspection Program

Within 24 months after the effective date of this AD, revise the maintenance or inspection program, as applicable, to add Airworthiness Limitation (AWL) 28-AWL-MOVA by incorporating the information specified in figure 1 to paragraph (h) of this AD into the Airworthiness Limitations Section of the Instructions for Continued Airworthiness.

**Figure 1 to paragraph (h) of this AD –**  
*AWL for installation prohibition of certain MOV actuators at the engine fuel shutoff spar valve positions*

AWL No.	Applicability	Description
28-AWL-MOVA	1) Airplanes with AIMS-1 system, or 2) Airplanes with AIMS-2 Block Point (BP) Version 16 and earlier software.	Motor-Operated Valve (MOV) Actuator – Prohibition of Installation of Specific Part Numbers (P/Ns)  Installation of MOV actuator P/N MA30A1001 (Boeing P/N S343T003-66) and P/N MA20A2027 (Boeing P/N S343T003-56) is prohibited at the following positions:  1. Left engine fuel shutoff spar valve position 2. Right engine fuel shutoff spar valve position

#### (i) Terminating Action for AD 2015-19-01

Accomplishment of the actions required by paragraphs (g) and (h) of this AD on all affected airplanes in an operator's fleet terminates all requirements of AD 2015-19-01.

## **(j) Alternative Methods of Compliance (AMOCs)**

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

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

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

(4) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(4)(i) and (j)(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. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

(ii) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

## **(k) Related Information**

For more information about this AD, contact Kevin Nguyen, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3555; email: Kevin.Nguyen@faa.gov.

## **(l) Material Incorporated by Reference**

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

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

(i) Boeing Service Bulletin 777-28A0034, Revision 3, dated September 25, 2015.

(ii) Boeing Service Bulletin 777-31-0218, dated September 8, 2016.

(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 December 18, 2018.  
Michael Kaszycki,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**2018-26-06 The Boeing Company:** Amendment 39-19536; Docket No. FAA-2018-0393; Product Identifier 2018-NM-010-AD.

**(a) Effective Date**

This AD is effective February 1, 2019.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all The Boeing Company Model 737-600, -700, -700C, -800, -900, and -900ER series airplanes, certificated in any category, as specified in paragraphs (c)(1) through (c)(4) of this AD.

(1) Airplanes in Group 1, and in Group 2, Configuration 1, as identified in Boeing Special Attention Service Bulletin 737-52-1170, Revision 1, dated December 19, 2017 (“BSASB 737-52-1170, R1”).

(2) Airplanes in Group 2, Configuration 2, as identified in BSASB 737-52-1170, R1.

(3) Airplanes in Group 3, as identified in BSASB 737-52-1170, R1, except where this service bulletin specifies the groups as line numbers 4275 through 6724 inclusive, and 6736, this AD specifies those groups as line number 4275 through any line number of an airplane with an original Certificate of Airworthiness or an original Export Certificate of Airworthiness dated on or before the effective date of this AD.

(4) 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.

(5) 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 52, Doors.

**(e) Unsafe Condition**

This AD was prompted by reports of loose, worn, or missing attachment bolts for the main landing gear (MLG) center door assemblies. We are issuing this AD to address loose, missing, damaged, or bottomed-out attachment bolts, and any wear to the retention clip assemblies, which could result in departure of the center and inboard MLG door assemblies, subsequent damage to the main flap and horizontal stabilizer, and loss of control of the airplane.

**(f) Compliance**

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

**(g) Required Actions**

For airplanes identified in paragraphs (c)(1), (c)(2), or (c)(3) of this AD: Except as required by paragraph (h) of this AD, at the applicable time specified in Tables 1 through 6, as applicable, of paragraph 1E., “Compliance,” of BSASB 737-52-1170, R1, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of BSASB 737-52-1170, R1. Replacement of an entire MLG assembly within the required compliance time satisfies the requirements of this paragraph, provided that the requirements of paragraph (j) of this AD are satisfied for that MLG assembly.

**(h) Exceptions to Service Information Specifications**

(1) For purposes of determining compliance with the requirements of this AD: Where BSASB 737-52-1170, R1, uses the phrase “the original issue date of this service bulletin” or “the Revision 1 date of this service bulletin” this AD requires using “the effective date of this AD.”

(2) Where BSASB 737-52-1170, R1, limits use of Figures 3 and 4 to Group 2 airplanes, for the purposes of this AD, those figures apply to all airplane groups.

(3) If any action(s) identified as RC in BSASB 737-52-1170, R1, cannot be accomplished as specified therein, those action(s) must be accomplished using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

**(i) Optional Terminating Action for Repetitive Inspections**

Accomplishment of the modification of the MLG center door retention clip assemblies specified in Part 5 of the Accomplishment Instructions of BSASB 737-52-1170, R1, terminates the repetitive inspections required by paragraph (g) of this AD for that MLG center door retention clip only. The requirements of paragraph (j) of this AD continue to apply.

**(j) Parts Installation Limitation**

As of the effective date of this AD, no person may install an MLG assembly or MLG center door assembly on any airplane identified in paragraphs (c)(1) through (c)(4) of this AD unless all actions for Group 3 airplanes pertaining to that MLG center door attachment, and identified as RC in, and in accordance with, the Accomplishment Instructions of BSASB 737-52-1170, R1, have been accomplished on that MLG assembly or MLG center door assembly within the compliance times specified in Tables 4, 5, and 6, as applicable, of paragraph 1E., “Compliance,” of BSASB 737-52-1170, R1. The actions for Group 3 airplanes apply to all airplanes for the requirement of this paragraph.

**(k) Credit for Previous Actions**

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Special Attention Service Bulletin 737-52-1170, dated July 29, 2014.

**(l) 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 (m)(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) Except as required by paragraph (h) of this AD: For service information that contains steps that are labeled as RC, the provisions of paragraphs (l)(4)(i) and (l)(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.

**(m) 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 (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 the AD specifies otherwise.

(i) Boeing Special Attention Service Bulletin 737-52-1170, Revision 1, dated December 19, 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; 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 December 18, 2018.  
Michael Kaszycki,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.