

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

**LARGE AIRCRAFT**

**BIWEEKLY 2018-11**

*5/14/2018 - 5/27/2018*



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; S – Supersedes, R - Replaces

## Biweekly 2018-01

2017-26-06		Rolls-Royce Corporation	AE 3007A, AE 3007A1, AE 3007A1/1, AE 3007A1/2, AE 3007A1/3, AE 3007A1P, AE 3007A1E, AE 3007A3, AE 3007C and 3007C1 turbofan engines
2017-26-07		The Boeing Company	757-200, -200CB, and -300 series airplanes
2017-26-08		ATR-GIE Avions de Transport Régional	ATR42-500 and ATR72-212A airplanes
2017-26-09		ATR-GIE Avions de Transport Régional	ATR42-500 and ATR72-212A airplanes
2017-26-10		The Boeing Company	757-200, -200PF, -200CB, and -300 series airplanes,
2018-01-01		The Boeing Company	MD-11 and MD-11F airplanes
2018-01-02	R 2017-02-03	The Boeing Company	767-200, -300, and -400ER series airplanes
2018-01-03		Airbus	A300, A310 airplanes
2018-01-04	R 2011-04-05	Airbus	A340 airplanes
2018-01-05		Fokker Services B.V.	F28 Mark 0070 and 0100 airplanes
2018-01-06		Fokker Services B.V.	F28 Mark 0070 and 0100 airplanes

## Biweekly 2018-02

2018-01-07		Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes
2018-01-08		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2018-01-09	R 95-25-02	Fokker Services B.V.	F28 Mark 0100 series airplanes
2018-01-10	R 2011-14-10	Airbus	A330-342 airplanes
2018-01-11		Airbus	A319-115 and A319-133 airplanes
2018-02-03		Fokker Services B.V.	F28 Mark 0070 and Mark 0100 series airplanes
2018-02-06		Dassault Aviation	FALCON 7X, FALCON 2000EX, FALCON 900EX airplanes

## Biweekly 2018-03

2018-02-09	R 2008-06-20 R1	Fokker Services B.V.	F28 Mark 1000, 2000, 3000, and 4000 airplanes
2018-02-10		Pratt & Whitney Division	PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090-3 turbofan engines
2018-02-11		Airbus	A330-301, -321, -322 and A330-342 airplanes
2018-02-12	R 2016-02-01	Airbus	A320-211, -212, and -231 airplanes
2018-02-15	S 2007-08-06	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201 airplanes
2018-02-16		Bombardier, Inc.	DHC-8-400, -401, and -402 airplanes

## Biweekly 2018-04

2018-02-17	R 2012-12-12 R 2013-16-26	Airbus	A330, A340 airplanes
2018-02-18		Airbus	A318, A319, A320, A321 airplanes
2018-02-20		The Boeing Company	777-200, -200LR, -300, and -300ER series airplanes
2018-03-02		328 Support Services GmbH	328-300 airplanes
2018-03-04		Rosemount Aerospace, Inc.	Model 851AK pitot probes
2018-03-06	R 2015-02-18	Airbus	A330-201, -202, -203, -301, -302, and -303 airplanes
2018-03-07		Airbus	A330-202, -203, -223, and -243; A340-211, -212, -311, and -313 airplanes
2018-03-08	R 2005-19-28	Airbus	A330-301, -321, -322, and -342; A340-211, -212, -213, -311, -312, and -313 airplanes
2018-03-09		Airbus	A321-211 and -231 airplanes
2018-03-10		The Boeing Company	757-300 series airplanes
2018-03-11		Bombardier, Inc.	CL-600-2C10, -2D15, -2D24, -2E25 airplanes
2018-03-12		Airbus	A318, A319, A320, A321 airplanes
2018-03-13		General Electric Company	CT7-5A2, CT7-5A3, CT7-7A, CT7-7A1, CT7-9B, CT7-9B1, CT7-9B2, CT7-9C and CT7-9C3 model turboprop engines
2018-03-19		Dassault Aviation	FALCON 7X airplanes,
2018-03-20		Airbus	A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes
2018-03-21		Airbus	A330-202, -203, -223, and -243 airplanes
2018-03-22		GE Aviation Czech s.r.o.	M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, and M601F turboprop engines
2018-04-01		Airbus	A320-271N, A321-271N, and A321-272N airplanes

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AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces			
<b>Biweekly 2018-05</b>			
2017-06-06	R 2012-22-15	Fokker Services B.V.	F28 Mark 0070 and Mark 0100 airplanes
2018-04-03		Fokker Services B.V.	F28 Mark 0100 airplanes
2018-04-04		Bombardier, Inc.	CL-600-2C10, -2D15, -2D24, -2E25 airplanes
2018-04-05		Airbus	A319-112, A319-115, A320-214, A320-232, and A321-211 airplanes
2018-04-06	R 2012-12-05	The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2018-04-07		The Boeing Company	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes
2018-04-08		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
<b>Biweekly 2018-06</b>			
2018-02-17	R 2012-12-12	Airbus	A330, A340 airplanes
2018-04-12		The Boeing Company	737-100, -200, -200C, -300, -400, -500 series airplanes
2018-04-13		Honeywell International Inc.	AS907-1-1A model turbofan engines
2018-05-04		Airbus	A318, A319, A320, A321 airplanes
2018-05-05		Dassault Aviation	MYSTERE-FALCON 900, FALCON 900EX, FALCON 2000, and FALCON 2000EX airplanes
2018-05-06	R 2016-09-12	The Boeing Company	787-8 and 787-9 airplanes
2018-05-07		The Boeing Company	787-8 and 787-9 airplanes
2018-05-11		Airbus	A320-214, -251N, and -271N airplanes
2018-06-03	R 2009-18-16	Airbus	A310-203, -204, -221, -222, -304, -322, -324 and -325 airplanes
2018-06-06		Bombardier, Inc.	CL-600-2B16 (CL-604 Variant) airplanes
2018-06-08		The Boeing Company	757-200 series airplanes
<b>Biweekly 2018-07</b>			
2018-06-01		Airbus	A318, A319, A320, A321 airplanes
2018-06-02		Bombardier, Inc.	CL-600-2B19, -2C10, -2D15, -2D24 airplanes
2018-06-04		Airbus	A318, A319, A320, A321 airplanes
2018-06-05		The Boeing Company	737-300 and -500 series airplanes
2018-06-07		The Boeing Company	757-200, -200CB, and -300 series airplanes
<b>Biweekly 2018-08</b>			
2018-07-05		General Electric Company	CF6-80A, -80A1, -80A2, and -80A3 turbofan engines
2018-07-06		The Boeing Company	747-8 series airplanes
2018-07-07		Dassault Aviation	FAN JET FALCON, FAN JET FALCON SERIES D, E, F, and G; MYSTERE-FALCON 20-C5, 20-D5, 20-E5, and 20-F5 airplanes
2018-07-09		Bombardier, Inc.	CL-600-2C10, -2D15, -2D24, -2E25 airplanes
2018-07-10		Embraer S.A.	EMB-500 and EMB-505 airplanes
2018-07-11		Fokker Services B.V.	F28 Mark 0100 airplanes
2018-07-12		Airbus	A350-941 airplanes
<b>Biweekly 2018-09</b>			
2018-07-18	R 2015-19-12	The Boeing Company	767-200, -300, -300F, and -400ER series airplanes
2018-07-19		The Boeing Company	787-8 and 787-9 airplanes
2018-07-20	R 2014-03-07	The Boeing Company	MD-11 and MD-11F airplanes
2018-07-21	R 2005-12-16	Fokker Services B.V.	F28 Mark 0100 airplanes
2018-08-02		Rolls-Royce plc	Trent 1000-A2, Trent 1000-AE2, Trent 1000-C2, Trent 1000-CE2, Trent 1000-D2, Trent 1000-E2, Trent 1000-G2, Trent 1000-H2, Trent 1000-J2, Trent 1000-K2, and Trent 1000-L2 turbofan engines
2018-08-03		The Boeing Company	787-8 and 787-9 airplanes
2018-09-05		The Boeing Company	787-8 and 787-9 airplanes
2018-09-51		CFM International S.A.	CFM56-7B engines
<b>Biweekly 2018-10</b>			
2018-09-01		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2018-09-02	R 99-23-16	Airbus	A330 and A340 airplanes
2018-09-03	R 2009-11-08	Airbus	A330-202, -223, -243, -301, -322, and -342 airplanes
2018-09-04		Gulfstream Aerospace Corporation	G-IV, GIV-X airplanes

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2018-09-07		Rolls-Royce plc	Viper Mk. 601-22 engines
2018-09-08		The Boeing Company	737-200, -300, -400, and -500 series airplanes
2018-09-09		Airbus	A318, A319, A320, and A321 airplanes
2018-09-10		CFM International S.A.	CFM56-7B engines
2018-09-11		Airbus	A330 and A340 airplanes
2018-09-15	R 2016-25-18	Bombardier, Inc.	BD-700-1A10 and BD-700-1A11 airplanes
2018-09-16	R 2015-15-13	Airbus	A319, A320, and A321 airplanes
2018-10-02		The Boeing Company	787-8 airplanes
<b>Biweekly 2018-11</b>			
2018-09-09	Republication	Airbus	A318, A319, A320, and A321 airplanes
2018-09-12		The Boeing Company	747-200B, 747-300, and 747-400 series airplanes
2018-09-13		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2018-09-14	R 2016-11-02	Bombardier, Inc.	CL-600-2C10, -2D15, -2D24, and -2E25 airplanes
2018-09-17		Bombardier, Inc.	CL-600-1A11, -2A12, and -2B16 airplanes
2018-09-51		CFM International S.A.	CFM56-7B engines
2018-10-05	R 2016-23-01	Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes
2018-10-08	R 2016-09-05	The Boeing Company	717-200 airplanes
2018-10-11	R 2018-09-10	CFM International S.A.	CFM56-7B engines
2018-10-12		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2018-11-02		Lockheed Martin Corporation/Lockheed Martin Aeronautics Company	188A and 188C airplanes; and P3A, P-3A, and P3B airplanes



**2018-09-09 Airbus:** Amendment 39-19266; Docket No. FAA-2017-1245; Product Identifier 2017-NM-099-AD.

**(a) Effective Date**

This AD is effective June 11, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Airbus Model A318-111, -112, -121, and -122 airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes; certificated in any category; all manufacturer serial numbers, except airplanes specified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model A318 series airplanes on which Airbus Modification (Mod) 39195 has been embodied in production or Airbus Service Bulletin A320-00-1219 has been embodied in service.

(2) Model A319 series airplanes on which Airbus Mod 28238, Mod 28162, and Mod 28342 have been embodied in production.

**(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 indicating that the holes of the upper cleat to upper stringer attachments at rib 2 through rib 7 of the left- and right-hand wings are subject to widespread fatigue damage. We are issuing this AD to prevent fatigue cracking in the stringer attachment holes of the wings, which could result in reduced structural integrity of the wings.

**(f) Compliance**

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

**(g) Modification**

Before reaching the upper limit, but not before reaching the lower limit, as defined in table 1 to paragraph (g) of this AD, as applicable: Modify the holes of the upper cleat to upper stringer attachments at rib 2 through rib 7 inclusive, on the left- and right-hand wings by oversizing the holes, doing eddy current inspections of the holes for damage, and repairing any damage found before

further flight, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-57-1208, dated November 21, 2016, except as required by paragraph (h) of this AD; or using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**Table 1 to paragraph (g) of this AD – Window of Embodiment (Total Accumulated Flight Hours (TFH) or Total Accumulated Flight Cycles (TFC), whichever occurs first since airplane first flight)**

Airplanes affected		Lower Limit		Upper Limit	
		TFH	TFC	TFH	TFC
A318-100	All	94,000	47,000	159,200	79,600
A319-100 and A320-200	Pre-mod 160001 and Pre-Airbus Service Bulletin A320-57-1193	94,000	47,000	159,200	79,600
A319-100 and A320-200	Post-mod 160001 or Post-Airbus Service Bulletin A320-57-1193	52,260	26,130	101,610	50,805
A321-100 and A321-200	Pre-mod 160021	101,200	50,600	148,300	74,100
A321-200	Post-mod 160021	44,796	22,398	112,808	56,404

#### (h) Service Information Exception

Where Airbus Service Bulletin A320-57-1208, dated November 21, 2016, 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 (i)(2) 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: 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 EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(3) Required for Compliance (RC): Except as required by paragraph (h) 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.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-0117, dated July 7, 2017, 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-2017-1245.

(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.

**(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 A320-57-1208, dated November 21, 2016.

(ii) Reserved.

(3) For service information identified in this AD, contact Airbus, Airworthiness Office–EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: [account.airworth-eas@airbus.com](mailto: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 April 20, 2018.

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



**2018-09-12 The Boeing Company:** Amendment 39-19269; Docket No. FAA-2018-0362; Product Identifier 2018-NM-020-AD.

**(a) Effective Date**

This AD is effective May 30, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 747-200B, 747-300, and 747-400 series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 747-35-2134, dated November 22, 2017.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by reports of low-pressure flex-hoses of the flightcrew oxygen system that burned through due to inadvertent electrical current from a short circuit. We are issuing this AD to prevent electrical current from passing through the low-pressure oxygen flex-hoses in the gaseous passenger oxygen system, which can cause the flex-hoses to melt or burn, and a consequent oxygen-fed fire in the passenger cabin.

**(f) Compliance**

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

**(g) Required Actions**

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 747-35-2134, dated November 22, 2017, do all applicable actions identified as "RC" (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Special Attention Service Bulletin 747-35-2134, dated November 22, 2017.

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

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Special Attention Service Bulletin 747-35-2134, dated November 22, 2017, uses the phrase “the original issue date of this service bulletin,” this AD requires using “the effective date of this AD.”

(2) Where Boeing Special Attention Service Bulletin 747-35-2134, dated November 22, 2017, specifies contacting Boeing, and specifies that action as RC: This AD requires repair using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(3) Where the Condition column of Table 3 in paragraph 1.E., “Compliance,” of Boeing Special Attention Service Bulletin 747-35-2134, dated November 22, 2017, specifies “all airplanes,” for this AD, the Condition column of Table 3 is “airplanes on which one or more hose assemblies were replaced or disconnected.”

**(i) Parts Installation Prohibition**

As of the effective date of this AD, no person may install, on any airplane, the hose assembly part numbers identified as “Removed hose assembly part numbers” in Table 3, “Hose Assembly Replacement,” of Boeing Special Attention Service Bulletin 747-35-2134, dated November 22, 2017, in the locations for hose assembly installation as identified in Figures 1 through 14 of Boeing Special Attention Service Bulletin 747-35-2134, dated November 22, 2017.

**(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, 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)(2) of this AD: 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. 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 Susan L. Monroe, Aerospace Engineer, Cabin Safety and Environmental Systems Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3570; email: susan.l.monroe@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 Special Attention Service Bulletin 747-35-2134, dated November 22, 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 April 27, 2018.

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



**2018-09-13 The Boeing Company:** Amendment 39-19270; Docket No. FAA-2016-9523; Product Identifier 2016-NM-134-AD.

**(a) Effective Date**

This AD is effective June 19, 2018.

**(b) Affected ADs**

This AD affects AD 2014-12-13, Amendment 39-17874 (79 FR 39300, July 10, 2014) (“AD 2014-12-13”); and AD 2015-21-08, Amendment 39-18301 (80 FR 65921, October 28, 2015) (“AD 2015-21-08”).

**(c) Applicability**

(1) This AD applies to all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, certificated in any category.

(2) Installation of Supplemental Type Certificate (STC) ST01219SE does not affect the ability to accomplish the actions required by this AD. Therefore, for airplanes on which STC ST01219SE 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 reports of additional cracking in the inspar upper skin at wing buttock line 157 and in the skin at two holes common to the rear spar in the same area; rear spar web cracks were also noted on both wings. Subsequent inspections revealed that the right rear spar upper chord was almost completely severed and the left rear spar upper chord was completely severed. Additional reports identified cracking in the main landing gear (MLG) beam forward support fitting. We are issuing this AD to detect and correct cracking of the forward and aft support fittings for the MLG beam, and the rear spar upper chord and rear spar web in the area of rear spar station 224.14, which could grow and result in a fuel leak and possible fire.

**(f) Compliance**

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

**(g) Required Actions for Group 1 Airplanes (MLG Support Fittings and Rear Spar)**

For airplanes identified as Group 1 in Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016: At the applicable time specified in table 1 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016, do applicable inspections and corrective actions using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

**(h) Required Actions for Groups 2-7 Airplanes (MLG Support Fittings and Rear Spar)**

For airplanes identified as Groups 2-7 in Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016: At the applicable time specified in table 2 through table 9 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016, except as required by paragraph (j)(3) of this AD, do high frequency eddy current (HFEC) open hole inspections for any cracking in the forward support fitting, the aft support fitting, the rear spar upper chord, and the rear spar web at the 12 fastener holes (locations 1-12); or HFEC open hole inspections for any cracking in the forward support fitting, the aft support fitting, the rear spar upper chord, and the rear spar web, and an HFEC surface inspection for any cracking in the rear spar upper chord and rear spar upper web; as applicable; and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016, except as provided by paragraph (h)(1) of this AD, and except as required by paragraphs (h)(2) and (j)(1) of this AD. Do all applicable related investigative and corrective actions before further flight. Thereafter, repeat the HFEC inspection at the applicable time specified in table 2 through table 9 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016.

(1) Options provided in Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016, for accomplishing the inspection are acceptable for the corresponding requirements in the introductory text of paragraph (h) of this AD, provided that the inspections are done at the applicable times in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016.

(2) For Group 7, Configuration 1, airplanes identified in Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016: Install standard-size fasteners in accordance with figures 29 and 30 of Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016. If the existing fastener holes exceed the permitted hole diameter, repair before further flight using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

**(i) Eddy Current Inspection (Inspar Upper Skin)**

For airplanes identified in Boeing Alert Service Bulletin 737-57A1328, dated July 22, 2016: At the applicable time specified in table 1 and table 2 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1328, dated July 22, 2016, except as required by paragraph (j)(2) of this AD, do an eddy current inspection of the left and right wings for any cracking in the inspar upper skin, and at the repair parts if installed, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1328, dated July 22, 2016, except as required by paragraph (j)(1) of this AD. Do all related investigative and corrective actions before further flight. Thereafter, repeat the eddy current inspection at the applicable time specified in table 1 and table 2 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1328, dated July 22, 2016.

## **(j) Exceptions to the Service Information**

(1) If any cracking is found during any inspection required by this AD, and Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016; or Boeing Alert Service Bulletin 737-57A1328, dated July 22, 2016; specifies to contact Boeing for appropriate action: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(2) Where Boeing Alert Service Bulletin 737-57A1328, dated July 22, 2016, specifies a compliance time “after the Original Issue date of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(3) Where Boeing Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016, specifies a compliance time “after the Revision 1 date of this service bulletin, whichever occurs later,” this AD requires compliance within the specified compliance time after the effective date of this AD.

## **(k) Terminating Action**

(1) Accomplishing the initial inspections and applicable related investigative and corrective actions required by paragraphs (g), (h), and (i) of this AD, as applicable, terminates all requirements of AD 2015-21-08.

(2) Accomplishing the initial inspections and applicable related investigative and corrective actions required by paragraphs (g) and (h) of this AD, as applicable, terminates all requirements of AD 2014-12-13.

## **(l) 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 (m) 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, 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 2014-12-13 are approved as AMOCs for the corresponding provisions of paragraphs (g) and (h) of this AD.

(5) Except as required by paragraph (j)(1) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (l)(5)(i) and (l)(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 sub-step is labeled “RC Exempt,” then the RC requirement is removed from that step or sub-step. 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**

For more information about this AD, contact Payman Soltani, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5313; fax: 562-627-5210; email: [payman.soltani@faa.gov](mailto:payman.soltani@faa.gov).

**(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 Alert Service Bulletin 737-57A1318, Revision 1, dated July 22, 2016.

(ii) Boeing Alert Service Bulletin 737-57A1328, dated July 22, 2016.

(3) For Boeing 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; 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 April 27, 2018.

Michael Kaszycki,  
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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**2018-09-14 Bombardier, Inc.:** Amendment 39-19271; Docket No. FAA-2017-0530; Product Identifier 2017-NM-012-AD.

### **(a) Effective Date**

This AD is effective June 28, 2018.

### **(b) Affected ADs**

This AD replaces AD 2016-11-02, Amendment 39-18529 (81 FR 33371, May 26, 2016) (“AD 2016-11-02”).

### **(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1) through (c)(4) of this AD, certificated in any category.

(1) Bombardier, Inc., Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial numbers (S/Ns) 10002 through 10344 inclusive.

(2) Bombardier, Inc., Model CL-600-2D15 (Regional Jet Series 705) airplanes, S/Ns 15001 through 15388 inclusive, 15391, 15392, and 15395.

(3) Bombardier, Inc., Model CL-600-2D24 (Regional Jet Series 900) airplanes, S/Ns 15001 through 15388 inclusive, 15391, 15392, and 15395.

(4) Bombardier, Inc., Model CL-600-2E25 (Regional Jet Series 1000) airplanes, S/Ns 19001 through 19044 inclusive.

### **(d) Subject**

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

### **(e) Reason**

This AD was prompted by reports of loose or missing fasteners and collars on the upper and lower engine pylon structure common to the upper and lower pylon skin panels and engine thrust fitting. We are issuing this AD to prevent protruding, loose, or missing fasteners, which could result in structural failure of the engine pylons.

### **(f) Compliance**

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

### **(g) Retained Inspection, With a Reference To Terminating Action and Additional Service Information**

This paragraph restates the requirements of paragraph (g) of AD 2016-11-02, with a reference to new terminating action and additional service information. At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD: Do a detailed visual inspection for protruding, loose, or missing fasteners of the upper and lower engine pylons, in accordance with Bombardier Temporary Revision 54-0007, dated March 8, 2016, to the CRJ700/900/1000 Aircraft Maintenance Manual; or Task 54-51-01-220-801, "Detailed Inspection of the Engine Pylon Rib and Skin Fasteners," to Chapter 54, "Nacelle/Pylons," to Part 2 of the Bombardier CRJ700/900/1000 Aircraft Maintenance Manual, CSP B-001, Revision 56, dated September 25, 2017. Repeat the inspection thereafter at intervals not to exceed 1,500 flight hours. Accomplishment of the replacement required by paragraph (j) of this AD is terminating action for the inspections required by this paragraph.

(1) For airplanes that have accumulated more than 840 total flight hours as of June 10, 2016 (the effective date of AD 2016-11-02): Inspect within 660 flight hours or 3 months, whichever occurs first, after June 10, 2016.

(2) For airplanes that have accumulated 840 total flight hours or less as of June 10, 2016 (the effective date of AD 2016-11-02): Inspect before the accumulation of 1,500 total flight hours.

### **(h) Retained Repair, With New Service Information and Contact Information**

This paragraph restates the requirements of paragraph (h) of AD 2016-11-02, with new service information and contact information. If any protruding, loose, or missing fastener is found during any inspection required by paragraph (g) of this AD, before further flight, repair, including applicable related investigative and corrective actions, in accordance with Bombardier Repair Engineering Order (REO) 670-54-51-034, "Repair for Missing or Loose/Protruding Fasteners in Upper and Lower Pylon Skins FS 1088-FS 1098, PBL 69.3 L & RHS," dated March 7, 2016, or Revision A, dated April 20, 2016; except where Bombardier REO 670-54-51-034, "Repair for Missing or Loose/Protruding Fasteners in Upper and Lower Pylon Skins FS 1088-FS 1098, PBL 69.3 L & RHS," dated March 7, 2016, or Revision A, dated April 20, 2016; specifies to contact Bombardier for further instruction, before further flight, repair using a method approved by the Manager, FAA, New York ACO Branch; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). As of the effective date of this AD, use Bombardier REO 670-54-51-034, "Repair for Missing or Loose/Protruding Fasteners in Upper and Lower Pylon Skins FS 1088-FS 1098, PBL 69.3 L & RHS," Revision A, dated April 20, 2016, for the actions required by this paragraph.

### **(i) Retained Credit for Previous Actions, With No Changes**

This paragraph restates paragraph (i) of AD 2016-11-02, with no changes. This paragraph provides credit only for the initial inspection specified in paragraph (g) of this AD, if that action was performed before June 10, 2016 (the effective date of AD 2016-11-02) using Bombardier Reference Instruction Letter 4212, dated December 23, 2015; or Bombardier Reference Instruction Letter 4212A, Revision A, dated January 28, 2016. These documents are not incorporated by reference in this AD.

### **(j) New Requirements of This AD: Fastener and Collar Replacement**

Within 12,600 flight hours or 72 months after the effective date of this AD, whichever occurs first: Replace affected fasteners and collars, including doing all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-54-007, dated May 13, 2016. Where Bombardier Service Bulletin 670BA-54-007,

dated May 13, 2016, specifies to contact Bombardier for appropriate action: Before further flight, accomplish the applicable corrective action in accordance with the procedures specified in paragraph (m)(2) of this AD.

**(k) Terminating Action for the Introductory Text of Paragraph (g) of This AD**

Accomplishing the replacement required by paragraph (j) of this AD constitutes terminating action for the inspections required by the introductory text of paragraph (g) of this AD.

**(l) Credit for Previous Actions**

(1) This paragraph provides credit for the actions specified in paragraph (h) of this AD, if those actions were performed before the effective date of this AD using Bombardier REO 670-54-51-034, "Repair for Missing or Loose/Protruding Fasteners in Upper and Lower Pylon Skins FS 1088-FS 1098, PBL 69.3 L & RHS," dated March 7, 2016. This document was incorporated by reference in AD 2016-11-02.

(2) This paragraph provides credit for the actions specified in paragraph (j) of this AD, if those actions were performed before the effective date of this AD using Bombardier REO 670-54-51-035, "Permanent Repair for Clearance Fit Installed (-8) Size Fasteners in Upper and Lower Pylon Skins FS 1088-FS 1098, PBL 69.3 L & RHS & Terminating Action for GREO 670-54-51-034," dated April 20, 2016. This document is not incorporated by reference in this AD.

**(m) Other FAA AD Provisions**

The following provisions also apply to this AD:

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

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

(ii) AMOCs approved previously for AD 2016-11-02 are acceptable 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, FAA, New York ACO Branch; or TCCA; or Bombardier, Inc.'s TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

**(n) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2016-10R1, dated July 8, 2016, 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-2017-0530.

(2) For more information about this AD, contact Aziz Ahmed, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7329; fax 516-794-5531.

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

(3) The following service information was approved for IBR on June 28, 2018.

(i) Bombardier Repair Engineering Order 670-54-51-034, "Repair for Missing or Loose/Protruding Fasteners in Upper and Lower Pylon Skins FS 1088–FS 1098, PBL 69.3 L & RHS," Revision A, dated April 20, 2016.

(ii) Bombardier Service Bulletin 670BA-54-007, dated May 13, 2016.

(iii) Task 54-51-01-220-801, "Detailed Inspection of the Engine Pylon Rib and Skin Fasteners," to Chapter 54, "Nacelle/Pylons," to Part 2 of the Bombardier CRJ700/900/1000 Aircraft Maintenance Manual, CSP B-001, Revision 56, dated September 25, 2017.

(4) The following service information was approved for IBR on June 10, 2016 (81 FR 33371, May 26, 2016).

(i) Bombardier Temporary Revision 54-0007, dated March 8, 2016, to the CRJ700/900/1000 Aircraft Maintenance Manual.

(ii) Reserved.

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

(6) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th Street, 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 April 27, 2018.

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



**2018-09-17 Bombardier, Inc.:** Amendment 39-19274; Docket No. FAA-2017-0907; Product Identifier 2017-NM-069-AD.

**(a) Effective Date**

This AD is effective June 25, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the Bombardier, Inc., airplanes identified in paragraphs (c)(1) through (c)(3) of this AD, certificated in any category.

(1) Model CL-600-1A11 (CL-600) airplanes, serial numbers (S/Ns) 1004 through 1085 inclusive.

(2) Model CL-600-2A12 (CL-601 Variant) airplanes, S/Ns 3001 through 3066 inclusive.

(3) Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes, S/Ns 5001 through 5194 inclusive, S/Ns 5301 through 5665 inclusive, S/Ns 5701 through 5988 inclusive, and S/Ns 6050 through 6099 inclusive.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by reports of fractured rudder pedal tubes on the pilot-side rudder bar assembly. We are issuing this AD to address cracking of the pilot-side rudder pedal tubes. Loss of pilot rudder pedal input during flight could result in reduced yaw controllability of the airplane. Loss of pilot rudder pedal input during takeoff or landing could lead to a runway excursion.

**(f) Compliance**

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

**(g) Repetitive Inspections and Part Marking**

At the applicable time specified in figure 1 to paragraph (g) of this AD, do a detailed or eddy current inspection of both pilot-side rudder pedal tubes for cracking, in accordance with Part A of the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1) through (g)(6) of this AD. If no cracking is found, before further flight, mark the part in accordance with Part A of the Accomplishment Instructions of the applicable service information identified in

paragraphs (g)(1) through (g)(6) of this AD. Repeat the detailed or eddy current inspection thereafter at intervals not to exceed 600 flight cycles if a detailed inspection was performed, or 1,000 flight cycles if an eddy current inspection was performed. Repeat the inspection until the terminating action specified in paragraph (i) of this AD is accomplished.

(1) For Model CL-600-1A11 (CL-600) airplanes, S/Ns 1004 through 1085 inclusive: Bombardier Service Bulletin 600-0770, including Appendix A, both Revision 01, both dated March 31, 2016.

(2) For Model CL-600-2A12 (CL-601 Variant) airplanes, S/Ns 3001 through 3066 inclusive: Bombardier Service Bulletin 601-0643, including Appendix A, both Revision 01, both dated March 31, 2016.

(3) For Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes, S/Ns 5001 through 5194 inclusive: Bombardier Service Bulletin 601-0643, including Appendix A, both Revision 01, both dated March 31, 2016.

(4) For Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes, S/Ns 5301 through 5665 inclusive: Bombardier Service Bulletin 604-27-037, including Appendix A, Revision 01, both dated March 31, 2016.

(5) For Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes, S/Ns 5701 through 5988 inclusive: Bombardier Service Bulletin 605-27-008, including Appendix A, Revision 01, both dated March 31, 2016.

(6) For Model CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604 Variants) airplanes, S/Ns 6050 through 6099 inclusive: Bombardier Service Bulletin 650-27-002, dated June 30, 2016, including Appendix A, Revision 01, dated March 31, 2016.

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

<b>Airplanes</b>	<b>Compliance Time</b>
Airplanes with fewer than 8,250 total flight cycles as of the effective date of this AD	Prior to the accumulation of 9,000 total flight cycles
Airplanes with 8,250 total flight cycles or more but fewer than 16,625 total flight cycles as of the effective date of this AD	Within 24 months or 750 flight cycles, whichever occurs first, after the effective date of this AD
Airplanes with 16,625 total flight cycles or more as of the effective date of this AD	Within 12 months or 375 flight cycles, whichever occurs first, after the effective date of this AD

#### **(h) Corrective Actions**

(1) If any cracking is found around the aft tapered holes during any inspection required by paragraph (g) of this AD, before further flight, replace both pilot-side rudder bar assemblies, in accordance with Part B of the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1) through (g)(6) of this AD.

(2) If any other damage (e.g., corrosion) is found, during any inspection required by paragraph (g) of this AD, before further flight, repair using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

**(i) Optional Terminating Action**

Replacement of both pilot-side rudder bar assemblies in accordance with Part B of the Accomplishment Instructions of the applicable service information identified in paragraphs (g)(1) through (g)(6) of this AD terminates the inspections required by paragraph (g) of this AD.

**(j) Replacement–No Terminating Action**

Replacement of both pilot-side rudder bar assemblies using Part B of the Accomplishment Instructions of Bombardier Service Bulletin 600-0770, dated August 31, 2015; or Bombardier Service Bulletin 601-0643, dated August 31, 2015; is not a terminating action for the inspections 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, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or TCCA; or Bombardier, Inc.'s TCCA DAO. If approved by the DAO, the approval must include the DAO-authorized signature.

**(l) Special Flight Permits**

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed if any cracking is found during any inspection required by paragraph (g) of this AD.

**(m) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2017-09, dated February 22, 2017, 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-2017-0907.

(2) For more information about this AD, contact Aziz Ahmed, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7329; fax 516-794-5531.

**(n) Material Incorporated by Reference**

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

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

(i) Bombardier Service Bulletin 600-0770, including Appendix A, both Revision 01, both dated March 31, 2016.

(ii) Bombardier Service Bulletin 601-0643, including Appendix A, both Revision 01, both dated March 31, 2016.

(iii) Bombardier Service Bulletin 604-27-037, including Appendix A, Revision 01, both dated March 31, 2016.

(iv) Bombardier Service Bulletin 605-27-008, including Appendix A, Revision 01, both dated March 31, 2016.

(v) Bombardier Service Bulletin 650-27-002, dated June 30, 2016, including Appendix A, Revision 01, dated March 31, 2016.

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte Vertu Road West, Dorval, Québec H4S 1Y9, Canada; Widebody Customer Response Center North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; fax 514-855-7401; email [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); internet <http://www.bombardier.com>.

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

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

Issued in Des Moines, Washington, on April 27, 2018.

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



**2018-09-51 CFM International S.A.:** Amendment 39-19287; Docket No. FAA-2018-0429; Product Identifier 2018-NE-13-AD.

**(a) Effective Date**

This AD is effective June 7, 2018 to all persons except those persons to whom it was made immediately effective by Emergency AD 2018-09-51, issued on April 20, 2018, which contained the requirements of this amendment.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all CFM International, S.A., (CFM) CFM56-7B20, -7B22, -7B24, -7B26, -7B27, -7B22/B1, -7B24/B1, -7B26/B1, -7B26/B2, -7B27/B1, -7B27/B3, -7B20/3, -7B22/3, -7B24/3, -7B26/3, -7B27/3, -7B22/3B1, -7B24/3B1, -7B26/3B1, -7B26/3B2, -7B26/3F, -7B26/3B2F, -7B27/3B1, -7B27/3B3, -7B27/3F, -7B27/3B1F, -7B20E, -7B22E, -7B24E, -7B26E, -7B27E, -7B22E/B1, -7B24E/B1, -7B26E/B1, -7B26E/B2, -7B26E/F, -7B26E/B2F, -7B27E/B1, -7B27E/B3, -7B27E/F, -7B27E/B1F, -7B20/2, -7B22/2, -7B24/2, -7B26/2, -7B27/2, -7B27A, -7B27AE, and -7B27A/3 engine models, with 30,000 or more total accumulated flight cycles since new, as of April 20, 2018.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by recent event involving an engine failure, resulting in the engine inlet cowl disintegrating, debris penetrating the fuselage causing a loss of pressurization and prompting an emergency descent. There was one passenger fatality as a result of the event. We are issuing this AD to address fan blade failure due to cracking, which could result in an engine in-flight shutdown (IFSD), uncontained release of debris, damage to the engine, damage to the airplane, and possible airplane decompression.

**(f) Compliance**

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

**(g) Inspection**

(1) Within 20 days after the effective date of this AD, perform a one-time ultrasonic inspection of all 24 fan blade dovetail concave and convex sides to detect cracking.

(2) Use the Accomplishment Instructions, paragraphs 3.A.(3)(a) through (i), of CFM Service Bulletin (SB) CFM56-7B S/B 72-1033, dated April 20, 2018, to perform the inspection required by paragraph (g)(1) of this AD.

**(h) Corrective Action**

If any unserviceable indication, as specified in CFM SB CFM56-7B S/B 72-1033, dated April 20, 2018, is found during any inspection required by this AD, remove the affected fan blade from service before further flight.

**(i) No Reporting Required**

Although CFM SB CFM56-7B S/B 72-1033, dated April 20, 2018, specifies to report findings, this AD does not include that requirement.

**(j) Credit for Previous Actions**

This paragraph provides credit for the actions specified in paragraph (g)(1) of this AD, if those actions were performed before receipt of this AD using CFM SB CFM56-7B S/B 72-1019, dated March 24, 2017; or Revision 1, dated June 13, 2017; or CFM SB CFM56-7B S/B 72-1024, dated July 24, 2017.

**(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.

**(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 May 14, 2018 (83 FR 19176, May 2, 2018).

(i) CFM International, S.A., (CFM) Service Bulletin CFM56-7B S/B 72-1033, dated April 20, 2018.

(ii) Reserved.

(4) 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.

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

(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 Burlington, Massachusetts, on May 18, 2018.

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



**2018-10-05 Airbus:** Amendment 39-19280; FAA-2018-0071; Product Identifier 2017-NM-063-AD.

**(a) Effective Date**

This AD is effective June 19, 2018.

**(b) Affected ADs**

This AD replaces AD 2016-23-01, Amendment 39-18708 (81 FR 78899, November 10, 2016) (“AD 2016-23-01”).

**(c) Applicability**

This AD applies to all Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes, certificated in any category, all manufacturer serial numbers.

**(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 the wing top skin panel fastener holes at ribs 2 and 3 are subject to widespread fatigue damage (WFD). We are issuing this AD to detect and correct fatigue cracking around the fastener holes, which could result in reduced structural integrity of the airplane.

**(f) Compliance**

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

**(g) Retained Repetitive Inspections, With Revised Service Information**

This paragraph restates the requirements of paragraph (g) of AD 2016-23-01, with revised service information. Except as required by paragraph (i) of this AD: Within the initial compliance time and thereafter at the repetitive intervals specified in paragraphs (h)(1) through (h)(3) of this AD, as applicable, accomplish the actions specified in paragraphs (g)(1) and (g)(2) of this AD concurrently and in sequence, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2096, Revision 03, dated June 30, 2015, or Revision 04, dated December 5, 2016; except as provided by paragraph (j) of this AD. As of the effective date of this AD, use only Airbus Service Bulletin A310-57-2096, Revision 04, dated December 5, 2016, to accomplish the required actions.

(1) Accomplish a detailed inspection for cracking around the fastener holes in the wing top skin panels 1 and 2, along ribs 2 and 3, between the front and rear spars on the left- and right-hand sides of the fuselage.

(2) Accomplish an ultrasonic inspection for cracking around the fastener holes in the wing top skin panels 1 and 2, along ribs 2 and 3, between stringer (STG) 2 and STG10 on the left- and right-hand sides of the fuselage.

#### **(h) Retained Compliance Times for Airplanes Not Previously Inspected, With No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2016-23-01, with no changes.

(1) For Model A310-203, -204, -221, and -222 airplanes: Do the actions required by paragraphs (g)(1) and (g)(2) of this AD at the later of the times specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD. Repeat the inspections specified in paragraphs (g)(1) and (g)(2) of this AD thereafter at intervals not to exceed 2,000 flight cycles or 4,100 flight hours, whichever occurs first.

(i) Prior to the accumulation of 18,700 flight cycles or 37,400 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after December 15, 2016 (the effective date of AD 2016-23-01).

(2) For Model A310-304, -322, -324, and -325 airplanes having an average flight time (AFT) of less than 4 hours: Do the actions required by paragraphs (g)(1) and (g)(2) of this AD at the later of the times specified in paragraphs (h)(2)(i) and (h)(2)(ii) of this AD. Repeat the inspections specified in paragraphs (g)(1) and (g)(2) of this AD thereafter at intervals not to exceed 2,000 flight cycles or 5,600 flight hours, whichever occurs first.

(i) Prior to the accumulation of 17,300 flight cycles or 48,400 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after December 15, 2016 (the effective date of AD 2016-23-01).

(3) For Model A310-304, -322, -324, and -325 airplanes having an AFT of equal to or more than 4 hours: Do the actions required by paragraphs (g)(1) and (g)(2) of this AD at the later of the times specified in paragraphs (h)(3)(i) and (h)(3)(ii) of this AD. Repeat the inspections specified in paragraphs (g)(1) and (g)(2) of this AD thereafter at intervals not to exceed 1,500 flight cycles or 7,500 flight hours, whichever occurs first.

(i) Prior to the accumulation of 12,800 flight cycles or 64,300 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after December 15, 2016 (the effective date of AD 2016-23-01).

#### **(i) Retained Compliance Times for Airplanes Previously Inspected, With Revised Service Information**

This paragraph restates the requirements of paragraph (i) of AD 2016-23-01, with revised service information. For airplanes previously inspected before December 15, 2016 (the effective date of AD 2016-23-01), using Airbus Service Bulletin A310-57-2096, dated May 6, 2008; Airbus Service Bulletin A310-57-2096, Revision 01, dated August 5, 2010; or Airbus Service Bulletin A310-57-2096, Revision 02, dated March 5, 2014: At the applicable compliance times specified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD, accomplish the actions specified in paragraphs (g)(1) and (g)(2) of this AD concurrently and in sequence, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2096, Revision 03, dated June 30, 2015, or Revision 04, dated December 5, 2016. As of the effective date of this AD, use only Airbus Service Bulletin A310-57-2096, Revision 04, dated December 5, 2016, to accomplish the required actions. Repeat the inspections specified in paragraphs (g)(1) and (g)(2) of this AD thereafter at the repetitive intervals specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD, as applicable.

(1) For Model A310-203, -204, -221, and -222 airplanes: Do the actions required by paragraphs (g)(1) and (g)(2) of this AD within 3,500 flight hours or 1,700 flight cycles, whichever occurs first since the most recent inspection.

(2) For Model A310-304, -322, -324, and -325 airplanes having an AFT of less than 4 hours: Do the actions required by paragraphs (g)(1) and (g)(2) of this AD within 4,600 flight hours or 1,600 flight cycles, whichever occurs first since the most recent inspection.

(3) For Model A310-304, -322, -324, and -325 airplanes having an AFT of equal to or more than 4 hours: Do the actions required by paragraphs (g)(1) and (g)(2) of this AD within 6,100 flight hours or 1,200 flight cycles, whichever occurs first since the most recent inspection.

**(j) Retained Compliance Times if No Ultrasonic Equipment Is Available, With Revised Service Information**

This paragraph restates the requirements of paragraph (j) of AD 2016-23-01, with revised service information. If no ultrasonic equipment is available for the initial or second inspection required by paragraph (g) or (h) of this AD, accomplish the detailed inspection specified in paragraph (g)(1) of this AD within the applicable compliance times specified in paragraphs (j)(1) and (j)(2) of this AD. After accomplishing the detailed inspection, do the inspections specified in paragraphs (g)(1) and (g)(2) of this AD at the applicable compliance times specified by paragraphs (i)(1), (i)(2), and (i)(3) of this AD. Subsequently, repeat the inspections specified in paragraphs (g)(1) and (g)(2) of this AD thereafter at the applicable repetitive intervals specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD.

(1) For airplanes not previously inspected before December 15, 2016 (the effective date of AD 2016-23-01), using the service information identified in paragraph (j)(2)(i), (j)(2)(ii), (j)(2)(iii), or (j)(2)(iv) of this AD: Do the actions required by paragraph (g)(1) of this AD within the initial compliance time specified by paragraphs (h)(1), (h)(2), and (h)(3) of this AD, as applicable.

(2) For airplanes previously inspected before December 15, 2016 (the effective date of AD 2016-23-01), using the service information identified in paragraph (j)(2)(i), (j)(2)(ii), (j)(2)(iii), or (j)(2)(iv) of this AD: Do the actions required by paragraph (g)(1) of this AD within the applicable compliance times specified in paragraphs (i)(1), (i)(2), and (i)(3) of this AD.

(i) Airbus Service Bulletin A310-57-2096, dated May 6, 2008.

(ii) Airbus Service Bulletin A310-57-2096, Revision 01, dated August 5, 2010.

(iii) Airbus Service Bulletin A310-57-2096, Revision 02, dated March 5, 2014.

(iv) Airbus Service Bulletin A310-57-2096, Revision 03, dated June 30, 2015.

**(k) Retained Repair of Cracking, With No Changes**

This paragraph restates the requirements of paragraph (k) of AD 2016-23-01, with no changes. If any cracking is found during any inspection required by paragraph (g), (h), (i), or (j) of this AD, before further flight, repair the cracking using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature. Accomplishing the repair specified in this paragraph terminates the repetitive inspections required by paragraph (g), (h), (i), or (j) of this AD, as applicable, for the repaired area only.

**(l) Retained Definition of AFT, With No Changes**

This paragraph restates the requirements of paragraph (l) of AD 2016-23-01, with no changes. For the purposes of this AD, the AFT should be established as specified in paragraphs (l)(1), (l)(2), and (l)(3) of this AD for the determination of the compliance times.

(1) The inspection threshold is defined as the total flight hours accumulated (counted from take-off to touch-down), divided by the total number of flight cycles accumulated at the effective date of this AD.

(2) The initial inspection interval is defined as the total flight hours accumulated divided by the total number of flight cycles accumulated at the time of the initial inspection threshold.

(3) The second inspection interval is defined as the total flight hours accumulated divided by the total number of flight cycles accumulated between the initial and second inspection threshold. For all inspection intervals onwards, the average flight time is the flight hours divided by the flight cycles accumulated between the last two inspections.

**(m) New Requirements of This AD: Rib 2 Inspection and Modification**

At the compliance time specified in paragraph (n) of this AD, as applicable, accomplish the actions specified in paragraphs (m)(1) and (m)(2) of this AD concurrently and in sequence, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2106, dated November 14, 2016.

(1) Accomplish a special detailed inspection to determine the diameter of the fastener holes in the wing top skin panels 1 and 2, at rib 2 of both wings.

(2) Modify the fastener holes.

**(n) New Compliance Times for Rib 2 Inspection and Modification**

(1) For Model A310-203, -204, -221, and -222 airplanes: Do the actions required by paragraphs (m)(1) and (m)(2) of this AD at the later of the times specified in paragraphs (n)(1)(i) and (n)(1)(ii) of this AD.

(i) Prior to the accumulation of 40,000 flight cycles or 93,300 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after the effective date of this AD.

(2) For Model A310-304, -322, -324, and -325 airplanes having an AFT of less than 4 hours: Do the actions required by paragraphs (m)(1) and (m)(2) of this AD at the later of the times specified in paragraphs (n)(2)(i) and (n)(2)(ii) of this AD.

(i) Prior to the accumulation of 40,000 flight cycles or 116,000 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after the effective date of this AD.

(3) For Model A310-304, -322, -324, and -325 airplanes having an AFT of 4 hours or more: Do the actions required by paragraphs (m)(1) and (m)(2) of this AD at the later of the times specified in paragraphs (n)(3)(i) and (n)(3)(ii) of this AD.

(i) Prior to the accumulation of 30,000 flight cycles or 150,000 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after the effective date of this AD.

**(o) New Requirements of This AD: Rib 3 Inspection and Modification**

At the compliance time specified in paragraph (p) of this AD, as applicable, accomplish the actions specified in paragraphs (o)(1) and (o)(2) of this AD concurrently and in sequence, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A310-57-2107, dated November 14, 2016.

(1) Accomplish a special detailed inspection to determine the diameter of the fastener holes in the wing top skin panels 1 and 2, at rib 3 of both wings.

(2) Modify the fastener holes.

**(p) New Compliance Times for Rib 3 Inspection and Modification**

(1) For Model A310-203, -204, -221, and -222 airplanes: Do the actions required by paragraphs (o)(1) and (o)(2) of this AD at the later of the times specified in paragraphs (p)(1)(i) and (p)(1)(ii) of this AD.

(i) Prior to the accumulation of 46,400 flight cycles or 92,900 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after the effective date of this AD.

(2) For Model A310-304, -322, -324, and -325 airplanes having an AFT of less than 4 hours: Do the actions required by paragraphs (o)(1) and (o)(2) of this AD at the later of the times specified in paragraphs (p)(2)(i) and (p)(2)(ii) of this AD.

(i) Prior to the accumulation of 45,400 flight cycles or 127,300 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after the effective date of this AD.

(3) For Model A310-304, -322, -324, and -325 airplanes having an AFT of 4 hours or more: Do the actions required by paragraphs (o)(1) and (o)(2) of this AD at the later of the times specified in paragraphs (p)(3)(i) and (p)(3)(ii) of this AD.

(i) Prior to the accumulation of 33,800 flight cycles or 169,000 flight hours since first flight of the airplane, whichever occurs first.

(ii) Within 30 days after the effective date of this AD.

**(q) New Corrective Actions**

If any cracking is found during any inspection required by paragraph (m), (n), (o), or (p) of this AD, before further flight, repair the cracking using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature. Accomplishing the repair specified in this paragraph terminates the repetitive inspections required by paragraph (g), (h), (i), or (j) of this AD, as applicable, for the repaired area only.

**(r) New Terminating Actions**

(1) Accomplishment of the modification specified in paragraph (m) of this AD constitutes terminating action for the repetitive special detailed inspections required by paragraph (g)(2) of this AD for the modified fastener holes at top skin rib 2 for that airplane. After modification, the unmodified fastener holes at top skin rib 2 between the front and rear spars remain subject to the repetitive inspections required by paragraph (g)(1) of this AD.

(2) Accomplishment of the modification specified in paragraph (o) of this AD constitutes terminating action for the repetitive special detailed inspections required by paragraph (g)(2) of this AD for the modified fastener holes at top skin rib 3 for that airplane. After modification, the unmodified fastener holes at top skin rib 3 between the front and rear spars remain subject to the repetitive inspection required by paragraph (g)(1) of this AD.

**(s) 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 (t)(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 EASA; or Airbus'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.

#### **(t) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-0081, dated May 8, 2017, 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-2018-0071.

(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.

#### **(u) 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 June 19, 2018.

(i) Airbus Service Bulletin A310-57-2096, Revision 04, dated December 5, 2016.

(ii) Airbus Service Bulletin A310-57-2106, dated November 14, 2016.

(iii) Airbus Service Bulletin A310-57-2107, dated November 14, 2016.

(4) The following service information was approved for IBR on December 15, 2016 (81 FR 78899, November 10, 2016).

(i) Airbus Service Bulletin A310-57-2096, Revision 03, dated June 30, 2015.

(ii) Reserved.

(5) For service information identified in this AD, contact Airbus SAS, Airworthiness Office—EAW, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33 5 61 93 36 96; fax: +33 5 61 93 44 51; email: [account.airworth-eas@airbus.com](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 May 7, 2018.  
Michael Kaszycki,  
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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**2018-10-08 The Boeing Company:** Amendment 39-19283; Docket No. FAA-2018-0413; Product Identifier 2018-NM-061-AD.

**(a) Effective Date**

This Airworthiness Directive (AD) is effective May 31, 2018.

**(b) Affected ADs**

This AD replaces AD 2016-09-05, Amendment 39-18503 (81 FR 26673, May 4, 2016) (“AD 2016-09-05”).

**(c) Applicability**

This AD applies to The Boeing Company Model 717-200 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 717-55A0012, Revision 1, dated April 11, 2018.

**(d) Subject**

Air Transport Association (ATA) of America Code 55, Stabilizers.

**(e) Unsafe Condition**

This AD was prompted by multiple reports of the vertical stabilizer leading edge showing signs of fastener distress, multiple cracked or severed front spar caps, and cracks in the left skin of the vertical stabilizer leading edge and in the front spar web, discovered during initial inspections required by AD 2016-09-05. We have determined that a revised compliance time is needed for airplanes on which the initial inspection has not been done as specified in AD 2016-09-05. We are issuing this AD to address cracking in the vertical stabilizer leading edge and front spar cap, which may result in the structure becoming unable to support limit load, and may lead to loss of the vertical stabilizer.

**(f) Compliance**

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

**(g) Required Actions**

Except as required by paragraph (h) of this AD, at the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 717-55A0012, Revision 1, dated April 11, 2018, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 717-55A0012, Revision 1, dated April 11, 2018.

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

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Service Bulletin 717-55A0012, Revision 1, dated April 11, 2018, uses the phrase “the Revision 1 issue date of this service bulletin,” this AD requires using the effective date of this AD.

(2) Where Boeing Alert Service Bulletin 717-55A0012, Revision 1, dated April 11, 2018, specifies contacting Boeing, and specifies that action as RC: This AD requires repair using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

**(i) Credit for Previous Actions**

(1) This paragraph provides credit for the initial inspection specified in paragraph (g) of this AD, if that inspection was performed before June 8, 2016 (the effective date of AD 2016-09-05), using Boeing MOM-MOM-14-0437-01B(R1), dated July 3, 2014. This service information is not incorporated by reference in this AD.

(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 717-55A0012, dated June 12, 2015. This service information was incorporated by reference in AD 2016-09-05.

**(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)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-Requests@faa.gov.

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, 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 2016-09-05 are approved as AMOCs for the corresponding provisions of Boeing Alert Service Bulletin 717-55A0012, Revision 1, dated April 11, 2018, that are required by paragraph (g) of this AD.

(5) Except as required by paragraph (h)(2) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (j)(5)(i) and (j)(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) Steps not labeled as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the RC steps, including substeps and identified figures, can still be done as specified, and the airplane can be put back in an airworthy condition.

**(k) Related Information**

(1) For more information about this AD, contact: Muoi Vuong, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5205; fax: 562-627-5210; email: muoi.vuong@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.

**(l) Material Incorporated by Reference**

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

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

(i) Boeing Alert Service Bulletin 717-55A0012, Revision 1, dated April 11, 2018.

(ii) Reserved.

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

(4) You may view this service information at 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 May 8, 2018.

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



**2018-10-11 CFM International S.A.:** Amendment 39-19286; Docket No. FAA-2018-0443; Product Identifier 2018-NE-14-AD.

**(a) Effective Date**

This AD is effective June 1, 2018.

**(b) Affected ADs**

This AD replaces AD 2018-09-10, Amendment 39-19267 (83 FR 19176, May 2, 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 engine models.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a recent engine failure due to a fan blade fracture leading to the engine inlet cowl disintegrating and debris penetrating the fuselage, causing a loss of pressurization, and prompting an emergency descent. One passenger fatality occurred as a result. 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) Within 30 days after the effective date of this AD, perform an initial inspection of the fan blades identified using the criteria in Planning Information, either paragraph 1.C.2.(a), 1.C.2.(b), or 1.C.2.(c), of CFM Service Bulletin (SB) CFM56-7B S/B 72-1033, Revision 01, dated May 9, 2018.

(ii) For all fan blades not inspected in accordance with paragraph (g)(1)(i) of this AD, perform an initial inspection prior to accumulating 20,000 flight cycles on the fan blade or within 90 days from the effective date of this AD, whichever occurs later.

(iii) Thereafter, repeat this inspection no later than 3,000 cycles since the last inspection.

(iv) Use the Accomplishment Instructions, paragraphs 3.A.(3)(a) through (i), of CFM SB CFM56-7B S/B 72-1033, Revision 01, dated May 9, 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)(iv) 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 20,000 cycles since new, or;

(2) The replacement fan blade has been inspected in accordance with paragraph (g) of this AD.

### **(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**

(1) You may take credit for the USI required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using CFM SB CFM56-7B S/B 72-1019, dated March 24, 2017; or Revision 1, dated June 13, 2017; or CFM SB CFM56-7B S/B 72-1024, dated July 26, 2017; CFM SB CFM56-7B S/B 72-1033, dated April 20, 2018; or General Electric Field Support Technology procedure 2370, dated December 9, 2016.

(2) You may take credit for an ECI using the instructions in Subtask 72-21-01-220-091, of Task 72-21-01-200-001, from the 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.

### **(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](mailto: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 June 1, 2018.

(i) CFM Service Bulletin (SB) CFM56-7B S/B 72-1033, Revision 01, dated May 9, 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](mailto:aviation.fleetsupport@ge.com).

(6) You may view this service information at the FAA, Engine and Propeller Standards Branch, Policy and Innovation Division, 1200 District Avenue, Burlington, MA. 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 May 15, 2018.

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



**2018-10-12 The Boeing Company:** Amendment 39-19288; Docket No. FAA-2018-0446; Product Identifier 2018-NM-069-AD.

**(a) Effective Date**

This AD is effective June 7, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all The Boeing Company Model 737-100, -200, -200C, -300, -400, and -500 series airplanes, certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 57, Wings; 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by a report of cracks in the left-side and right-side keel beam upper chords and aft vertical stiffeners. Cracks in the aft vertical stiffeners may lead to the inability of the keel beam structure to sustain required flight loads, which could adversely affect the structural integrity of the airplane.

**(f) Compliance**

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

**(g) Required Actions for Group 1 Airplanes**

For airplanes identified as Group 1 in Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018: Within 120 days after the effective date of this AD, inspect the airplane and do all applicable corrective actions using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

**(h) Required Actions for Group 2 Airplanes**

Except as required by paragraph (i) of this AD: For airplanes identified as Group 2 in Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018, at the applicable times specified in the “Compliance” paragraph of Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018, do all applicable actions identified in, and in accordance with, the

Accomplishment Instructions of Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018.

Note 1 to paragraph (h) of this AD: Guidance for accomplishing the actions required by this AD can be found in Boeing Alert Service Bulletin 737-57A1339, dated April 16, 2018, which is referred to in Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018.

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

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018, uses the phrase “the original issue date of Requirements Bulletin 737-57A1339 RB,” this AD requires using the effective date of this AD.

(2) Where Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018, specifies contacting Boeing, this AD requires repair using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

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

Removal of the time-limited repair and accomplishment of additional actions in accordance with the Accomplishment Instructions of Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018, terminate the repetitive inspections of the aft vertical stiffeners and time-limited repair, as specified in the Accomplishment Instructions of Boeing Alert Requirements Bulletin 737-57A1339 RB, dated April 16, 2018, and required by paragraph (h) of this AD.

**(k) 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 (l)(1) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-Requests@faa.gov.

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, 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.

**(l) Related Information**

(1) For more information about this AD, contact Galib Abumeri, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5324; fax: 562-627-5210; email: Galib.Abumeri@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 Requirements Bulletin 737-57A1339 RB, dated April 16, 2018.

(ii) Reserved.

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

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

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

Issued in Des Moines, Washington, on May 11, 2018.

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



**2018-11-02 Lockheed Martin Corporation/Lockheed Martin Aeronautics Company and various other type certificate holders:** Amendment 39-19290; Docket No. FAA-2018-0447; Product Identifier 2018-NM-080-AD.

**(a) Effective Date**

This AD is effective May 23, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Lockheed Martin Corporation/Lockheed Martin Aeronautics Company Model 188A and 188C airplanes; and Model P3A, P-3A, and P3B airplanes type certificated under various other type certificate holders; certificated in any category.

Note 1 to paragraph (c) of this AD: Certain variants of Model 188A and 188C airplanes are known as “P-3” series airplanes. P-3 series airplanes include but are not limited to Model CP-140, NP-3A, P3A, P-3A, P3B, P-3B, P-3C, P-3P, and WP-3D airplanes.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a report indicating that certain aileron control rod bodies, part number (P/N) 826999-3, were incorrectly machined so that they did not include the load-carrying threads in the bore of the aileron control rod body. As a result, aileron control rod assemblies, P/N 826998-3, which contain the discrepant part, do not provide adequate load carrying capabilities. We are issuing this AD to address failure of the aileron control rod assembly, or loss or failure of the #10 (0.190-inch diameter) screw holding the left (or right) aileron control rod assembly together, which will result in loss of aileron authority, and could result in the jamming of both left and right ailerons, and loss of control of the airplane.

**(f) Compliance**

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

**(g) Inspection**

Within 3 days after the effective date of this AD, perform a borescope inspection of the aileron control rod assembly, P/N 826998-3, to determine if threads exist on the aileron control rod body, P/N 826999-3, in accordance with Lockheed Martin Aeronautics Company Aircraft Maintenance Bulletin M0017R2, Revision 2, dated May 10, 2018. If the inspection indicates missing threads on the aileron control rod body, before further flight, replace the aileron control rod assembly with a serviceable part. A serviceable aileron control rod assembly is one that has been inspected in accordance with the requirements of this paragraph and found to have internal threads on the aileron control rod body.

Note 2 to paragraph (g) of this AD: Guidance on replacing the aileron control rod assembly can be found in Lockheed Martin Aircraft Maintenance Manual Sections 27-2-2 AILERON PRIMARY CONTROL CABLES, Maintenance Practices, Rigging of Aileron Primary Control Cable System; 27-2-3 AILERON PUSH-PULL TUBES, BRACKETS AND BELLCRANKS, Maintenance Practices, Aileron Push-Pull Tubes, Brackets and Bellcranks, Remove/Replace/Adjust/Rig; and 27-2-4 AILERON, Maintenance Practices, Removal/Installation/Adjustment/Lubrication aileron.

**(h) Parts Installation Limitation**

As of the effective date of this AD, no person may install an aileron control rod assembly, P/N 826998-3, on any airplane, unless the aileron control rod assembly is serviceable as defined in paragraph (g) of this AD.

**(i) Reporting Provisions**

Although Lockheed Martin Aeronautics Company Aircraft Maintenance Bulletin M0017R2, Revision 2, dated May 10, 2018, recommends that inspection reports be submitted to Lockheed, this AD does not require that action.

**(j) Special Flight Permit**

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

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

(1) The Manager, Atlanta 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) of this AD.

(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**

For more information about this AD, contact Hector Hernandez, Aerospace Engineer, Systems and Equipment Section, FAA, Atlanta ACO Branch, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5587; fax: 404-474-5606; email: Hector.Hernandez@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.

(i) Lockheed Martin Aeronautics Company Aircraft Maintenance Bulletin M0017R2, Revision 2, dated May 10, 2018 (only the first page contains the date).

(ii) Reserved.

(3) For service information identified in this AD, contact Lockheed Martin Corporation/Lockheed Martin Aeronautics Company, Customer Support Center, Dept. 3E1M, Zone 0591, 86 S Cobb Drive, Marietta, GA 30063; telephone 770-494-9131; email [electra.support@lmco.com](mailto:electra.support@lmco.com); internet <https://www.lockheedmartin.com/en-us/who-we-are/business-areas/aeronautics/mmro/customer-support-center.html>.

(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 May 17, 2018.

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