

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

**LARGE AIRCRAFT**

**BIWEEKLY 2018-10**

*4/30/2018 - 5/13/2018*



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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<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



**FAA**  
**Aviation Safety**

## **AIRWORTHINESS DIRECTIVE**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
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**2018-09-01 The Boeing Company:** Amendment 39-19257; Docket No. FAA-2017-1248; Product Identifier 2017-NM-162-AD.

**(a) Effective Date**

This AD is effective June 4, 2018.

**(b) Affected ADs**

None.

**(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 ([http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgstc.nsf/0/ebd1cec7b301293e86257cb30045557a/\\$FILE/ST01219SE.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/ebd1cec7b301293e86257cb30045557a/$FILE/ST01219SE.pdf)) 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 the report of a crack indication in the main landing gear (MLG) beam forward support fitting on the inboard side of the wing buttock line (WBL) 157 rib, and multiple reports of similar crack findings on other airplanes. We are issuing this AD to address cracking of the MLG beam forward support fitting on the inboard side of the WBL 157 rib. Undetected cracks could lead to a fuel leak, the inability of a principal structural element to carry limit load, or an MLG collapse that could prevent continued safe flight and landing.

**(f) Compliance**

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

**(g) Required Actions**

(1) For Group 1 airplanes identified in Boeing Alert Service Bulletin 737-57A1334, dated September 26, 2017: 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 (i) of this AD.

(2) For Group 2 airplanes identified in Boeing Alert Service Bulletin 737-57A1334, dated September 26, 2017: Except as required by paragraph (h) of this AD, at the applicable times specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 737-57A1334, dated September 26, 2017, do all applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 737-57A1334, dated September 26, 2017.

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

(1) For purposes of determining compliance with the requirements of this AD: Where Boeing Alert Service Bulletin 737-57A1334, dated September 26, 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 Alert Service Bulletin 737-57A1334, dated September 26, 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 (i) of this AD.

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

(1) The Manager, Los Angeles ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) 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) Except as required by paragraph (h)(2) of this AD: For service information that contains steps that are labeled as RC, the provisions of paragraphs (i)(4)(i) and (i)(4)(ii) of this AD apply.

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

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

#### **(j) Related Information**

For more information about this AD, contact 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.

**(k) Material Incorporated by Reference**

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

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

(i) Boeing Alert Service Bulletin 737-57A1334, dated September 26, 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 11, 2018.

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



**2018-09-02 Airbus:** Amendment 39-19258; Docket No. FAA-2018-0302; Product Identifier 2013-NM-228-AD.

**(a) Effective Date**

This AD becomes effective May 15, 2018.

**(b) Affected ADs**

This AD replaces AD 99-23-16, Amendment 39-11412 (64 FR 61485, November 12, 1999) (“AD 99-23-16”).

**(c) Applicability**

This AD applies to Airbus airplanes, certificated in any category, as specified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Model A330-301, A330-321, A330-322, A330-341 and A330-342 airplanes, all manufacturer serial numbers, except those on which Airbus modification 42605 has been embodied in production.

(2) Model A340-211, A340-212, A340-213, A340-311, A340-312, and A340-313 airplanes, all manufacturer serial numbers, except those on which Airbus modification 42605 has been embodied in production.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by a new fatigue and damage tolerance evaluation that concluded that the current inspection thresholds and intervals had to be more restrictive. We are issuing this AD to detect and correct fatigue cracking of the vertical flange of the inboard Z-stiffeners of the centerline panel of the fuselage belly fairing, which could result in reduced structural integrity of the belly fairing.

**(f) Compliance**

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

**(g) Required Actions**

Within 30 days after the effective date of this AD, request instructions from the Manager, International Section, Transport Standards Branch, FAA, to address the unsafe condition specified in paragraph (e) of this AD; and accomplish the actions at the times specified in, and in accordance

with, those instructions. Guidance can be found in Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) AD 2013-0241, dated October 1, 2013.

**(h) 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 (i)(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.

**(i) Related Information**

(1) Refer to MCAI EASA AD 2013-0241, dated October 1, 2013, for related information. You may examine the MCAI on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0302.

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

**(j) Material Incorporated by Reference**

None.

Issued in Des Moines, Washington, on April 11, 2018.  
Dionne Palermo,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**2018-09-03 Airbus:** Amendment 39-19259; Docket No. FAA-2018-0305; Product Identifier 2013-NM-226-AD.

**(a) Effective Date**

This AD becomes effective May 15, 2018.

**(b) Affected ADs**

This AD replaces AD 2009-11-08, Amendment 39-15918 (74 FR 25404, May 28, 2009) (“AD 2009-11-08”).

**(c) Applicability**

This AD applies to Airbus Model A330-202, -223, -243, -301, -322, and -342 airplanes, certificated in any category, manufacturer serial numbers: 0177, 0181, 0183, 0184, 0188, 0189, 0191, 0195, 0198, 0200, 0203, 0205, 0206, 0209, 0211, 0219, 0222, 0223, 0224, 0226, 0229, 0230, 0231, 0232, 0234, 0238, 0240, 0241, 0244, 0247, 0248, 0249, 0250, 0251, 0253, 0254, and 0255.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by reports of cracks on the left- and right-hand sides between the crossing area of the keel angle fitting and the front spar of the center wing box and by a new fatigue and damage tolerance evaluation that concluded the current inspection thresholds and intervals had to be modified. We are issuing this AD to detect and correct cracking on the left- and right-hand sides between the crossing area of the keel angle fitting and the front spar of the center wing box, which if not corrected, could affect the structural integrity of the airplane.

**(f) Compliance**

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

**(g) Required Actions**

Within 30 days after the effective date of this AD, request instructions from the Manager, International Section, Transport Standards Branch, FAA, to address the unsafe condition specified in paragraph (e) of this AD; and accomplish the actions at the times specified in, and in accordance with, those instructions. Guidance can be found in Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) AD 2013-0247, dated October 10, 2013.

**(h) 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 (i)(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.

**(i) Related Information**

(1) Refer to MCAI EASA AD 2013-0247, dated October 10, 2013, for related information. You may examine the MCAI on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0305.

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

**(j) Material Incorporated by Reference**

None.

Issued in Des Moines, Washington, on April 17, 2018.  
Michael Kaszycki,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**2018-09-04 Gulfstream Aerospace Corporation:** Amendment 39-19260; Docket No. FAA-2017-1163; Product Identifier 2017-CE-041-AD.

**(a) Effective Date**

This AD is effective June 11, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the following Gulfstream Aerospace Corporation model airplanes that are certificated in any category:

- (1) Model G-IV, serial numbers (S/Ns) 1000 through 1399 having Aircraft Service Change (ASC) 416A (MSG-3) incorporated; and S/Ns 1400 through 1535; and
- (2) Model GIV-X, S/Ns 4001 through 4355.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 32, Landing Gear.

**(e) Unsafe Condition**

This AD was prompted by the potential for fatigue cracks in the main landing gear (MLG) actuator attachment fitting that had a certain repair incorporated. We are issuing this AD to prevent failure of the MLG actuator attachment. The unsafe condition, if not addressed, could compromise the lateral support of the MLG during ground maneuvers, possibly leading to collapse of the affected MLG with consequent loss of control. In addition, this condition could also cause the MLG side brace to fail, which could result in a penetration of the wing fuel tank causing an uncontained fire.

**(f) Compliance**

At whichever of the following in paragraphs (f)(1) and (f)(2) that occurs later, comply with the actions in paragraphs (g) through (i) of this AD, unless already done.

- (1) Within the next 100 hours time-in-service after June 11, 2018 (the effective date of this AD);
- or
- (2) Within the next 3 months after June 11, 2018 (the effective date of this AD).

**(g) Inspect Maintenance Records**

Inspect the airplane maintenance records to determine if repair SE05732102 for the MLG side brace fitting has been incorporated. To do this inspection, use the Accomplishment Instructions in Gulfstream G350 Customer Bulletin Number 192A; Gulfstream G450 Customer Bulletin 192A; Gulfstream IV Customer Bulletin Number 238A; Gulfstream G300 Customer Bulletin Number 238A; and Gulfstream G400 Customer Bulletin Number 238A; all dated June 15, 2017, as applicable. The service information referenced in this paragraph specifies sending a service reply card back to Gulfstream Aerospace Corporation if repair SE05732102 for the MLG side brace fitting has been not been incorporated. This action is not required in this AD.

**(h) Determine Initial and Repetitive Inspection Requirements**

If it is determined during the maintenance records inspection required in paragraph (g) of this AD that repair SE05732102 for the MLG side brace fitting has been incorporated, determine the initial and repetitive inspection requirements using the Accomplishment Instructions of the service information identified in paragraph (g) of this AD along with the following documents, as applicable. Comply with the inspection requirements as determined.

(1) Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016, to Gulfstream G350 Customer Bulletin No. 192A, dated June 15, 2017;

(2) Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016, to Gulfstream G450 Customer Bulletin No. 192A, dated June 15, 2017;

(3) Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016, to Gulfstream IV Customer Bulletin No. 283A, dated June 15, 2017;

(4) Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016, to Gulfstream G300 Customer Bulletin No. 283A, dated June 15, 2017; and

(5) Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016, to Gulfstream G400 Customer Bulletin No. 283A, dated June 15, 2017.

**(i) Revise Limitations Section**

Insert the documents listed in paragraphs (h)(1) through (5) of this AD into the Instructions for Continued Airworthiness of the Limitations section of the FAA-approved maintenance program (e.g., maintenance manual), as applicable. The revised limitations sections establish inspections of the repaired MLG side brace actuator fittings.

**(j) 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 (k) 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.

(3) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (g) through (i) of this AD apply.

(i) The steps labeled as RC, including substeps under an RC step and any figures identified in an RC step, must be done to comply with the AD. An AMOC is required for any deviations to RC steps, including substeps and identified figures.

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

### **(k) Related Information**

For more information about this AD, contact William O. Herderich, Aerospace Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5547; fax: (404) 474-5605; email: [william.o.herderich@faa.gov](mailto:william.o.herderich@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) Gulfstream G350 Customer Bulletin Number 192A, dated June 15, 2017, that incorporates Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016.

(ii) Gulfstream G450 Customer Bulletin 192A, dated June 15, 2017, that incorporates Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016.

(iii) Gulfstream IV Customer Bulletin Number 238A, dated June 15, 2017, that incorporates Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016.

(iv) Gulfstream G300 Customer Bulletin Number 238A, dated June 15, 2017, that incorporates Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016.

(v) Gulfstream G400 Customer Bulletin Number 238A, dated June 15, 2017, that incorporates Appendix A, Gulfstream Document GIV-SGER-553, Revision A, Instructions for Continued Airworthiness for Gulfstream Repair Drawing SE05732102, dated December 14, 2016.

(3) For Gulfstream Aerospace Corporation service information identified in this AD, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Savannah, Georgia 31402-2206; telephone: (800) 810-4853; fax 912-965-3520; email: [pubs@gulfstream.com](mailto:pubs@gulfstream.com); internet: [http://www.gulfstream.com/product\\_support/technical\\_pubs/pubs/index.htm](http://www.gulfstream.com/product_support/technical_pubs/pubs/index.htm).

(4) You may view this service information at FAA, Policy and Innovation Division, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(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 Kansas City, Missouri, on April 19, 2018.

Melvin Johnson,  
Deputy Director, Policy and Innovation Division,  
Aircraft Certification Service.



**2018-09-07 Rolls-Royce plc:** Amendment 39-19263; Docket No. FAA-2018-0287; Product Identifier 2018-NE-10-AD.

**(a) Effective Date**

This AD is effective May 24, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Rolls-Royce plc (RR) Viper Mk. 601-22 engines.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7900, Engine Oil System (Airframe Furnished).

**(e) Unsafe Condition**

This AD was prompted by a report of an engine failure caused by the installation of an incorrect oil filter. We are issuing this AD to prevent a failure of the engine oil system. The unsafe condition, if not addressed, could result in loss of engine thrust control, and reduced control of the airplane.

**(f) Compliance**

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

**(g) Required Actions**

(1) For engines with an oil pump assembly, part number (P/N) V112225 or P/N NPN11962, installed:

(i) After the effective date of this AD, within 30 days or 25 flight hours, whichever occurs first, inspect the oil pump assembly to determine the P/N of the oil pressure filter in accordance with the Accomplishment Instructions, Paragraph 2.A.(3), of RR Alert Service Bulletin (ASB) Mk. 601-22 Number 72-A208, dated September 2017.

(ii) If an oil pressure filter, P/N V21264, is installed, replace the oil pressure filter before the next flight with oil filter, P/N 2526, in accordance with the Accomplishment Instructions, Paragraph 2.A.(3)(b), of RR ASB Mk. 601-22 Number 72-A208, dated September 2017.

(2) For engines with an oil pump assembly, P/N V112027, installed:

(i) After the effective date of this AD, within 30 days or 25 flight hours, whichever occurs first, replace the oil pump assembly with oil pump assembly, P/N V112225 or P/N NPN11962, in

accordance with the Accomplishment Instructions, Paragraph 2.A.(2), of RR ASB Mk. 601-22 Number 72-A208, dated September 2017.

(ii) Reserved.

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

After the effective date of this AD, do not install an oil pump assembly, P/N V112027, or an oil pressure filter, P/N V21264, on any engine, nor return any engine to service with an oil pump assembly, P/N V112027, or an oil pressure filter, P/N V21264, installed.

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

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

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

#### **(j) Related Information**

(1) For more information about this AD, contact Robert Green, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

(2) Refer to European Aviation Safety Agency (EASA) AD 2017-0197, dated October 6, 2017, for more information. You may examine the EASA AD in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2018-0287.

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

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

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

(i) Rolls-Royce plc Alert Service Bulletin Mk. 601-22 Number 72-A208, dated September 2017.

(ii) Reserved.

(3) For Rolls-Royce plc service information identified in this AD, contact DA Services Operations Room at Rolls-Royce plc, Defense Sector Bristol, WH-70, P.O. Box 3, Filton, Bristol BS34 7QE, United Kingdom; phone: +44 (0) 117 97 90700; fax: +44 (0) 117 97 95498; email: [defence-operations-room@rolls-royce.com](mailto:defence-operations-room@rolls-royce.com).

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

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

Issued in Burlington, Massachusetts, on April 25, 2018.  
Robert J. Ganley,  
Manager, Engine and Propeller Standards Branch,  
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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**2018-09-08 The Boeing Company:** Amendment 39-19264; Docket No. FAA-2017-0776; Product Identifier 2017-NM-062-AD.

**(a) Effective Date**

This AD is effective June 8, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

(1) This AD applies to The Boeing Company Model 737-200, -300, -400, and -500 series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 737-53A1363, dated April 7, 2017.

(2) Installation of Supplemental Type Certificate (STC) ST01219SE ([http://rgl.faa.gov/Regulatory\\_and\\_Guidance\\_Library/rgstc.nsf/0/EBD1CEC7B301293E86257CB30045557A?OpenDocument&Highlight=st01219se](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/EBD1CEC7B301293E86257CB30045557A?OpenDocument&Highlight=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 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by reports of cracks in the frame web common to the stringer ties adjacent to the air-conditioning support brackets. We are issuing this AD to detect and correct cracks in the frame web common to the stringer ties adjacent to the air-conditioning support brackets, which could result in a severed frame, and, in combination with potential multiple site damage (MSD) at the stringer S-10 lap splice or chem-milled skin cracks, could result in possible rapid decompression and loss of structural integrity of the airplane.

**(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 Alert Service Bulletin 737-53A1363, dated April 7, 2017, do all

applicable actions identified as “RC” (required for compliance) in, and in accordance with, the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1363, dated April 7, 2017.

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

(1) Where Boeing Alert Service Bulletin 737-53A1363, dated April 7, 2017, uses the phrase “after the original issue date of this service bulletin,” for purposes of determining compliance with the requirements of this AD, the phrase “after the effective date of this AD” applies.

(2) Where Boeing Alert Service Bulletin 737-53A1363, dated April 7, 2017, specifies contacting Boeing, and specifies that action as RC: This AD requires using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

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

Accomplishment of a reinforcement repair for a frame web crack at the stringer tie location using a method approved in accordance with the procedures specified in paragraph (j) of this AD terminates the repetitive inspections required by paragraph (g) of this AD for the repaired stringer tie location only, provided the crack is removed or trimmed out from the stringer tie holes.

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

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

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO Branch, 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 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 George Garrido, Aerospace Engineer, Airframe Section, FAA, Los Angeles ACO Branch, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5232; fax: 562-627-5210; email: george.garrido@faa.gov.

**(I) Material Incorporated by Reference**

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

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

(i) Boeing Alert Service Bulletin 737-53A1363, dated April 7, 2017.

(ii) Reserved.

(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 90740-5600; 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 Street, 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.



**2018-09-09 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

#### (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.



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## **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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**2018-09-10 CFM International S.A.:** Amendment 39-19267; Docket No. FAA-2018-0380; Product Identifier 2018-NE-14-AD.

**(a) Effective Date**

This AD is effective May 14, 2018.

**(b) Affected ADs**

None.

**(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 that resulted in the engine inlet cowl disintegrating and debris penetrating the fuselage, causing a loss of pressurization, and prompting an emergency descent. 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) Perform an initial inspection on each fan blade before the fan blade accumulates 20,000 cycles since new, or within 113 days from the effective date of this AD, whichever occurs later.

(ii) If cycles since new on a fan blade is unknown, perform an initial inspection within 113 days from the effective date of this AD.

(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 Service Bulletin (SB) CFM56-7B S/B 72-1033, dated April 20, 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 within the last 300 cycles 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; or General Electric Field Support Technology procedure 2370, dated December 9, 2016.

(2) You may take credit for the ECI required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using the instructions in subtask 72-21-01-220-091, of task 72-21-01-200-001, from 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.

**(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.

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

(ii) 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.

(3) 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).

(4) 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.

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

Issued in Burlington, Massachusetts, on April 27, 2018.

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



**2018-09-11 Airbus:** Amendment 39-19268; Docket No. FAA-2018-0363; Product Identifier 2017-NM-108-AD.

**(a) Effective Date**

This AD becomes effective May 29, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the Airbus airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category, on which Airbus modification 44360 has not been embodied in production.

(1) Airbus Model A330-301, -321, -322, -341, and -342 airplanes, all manufacturer serial numbers on which Airbus Service Bulletin A330-53-3093 has been embodied in service, except those on which Airbus Service Bulletin A330-53-3145 has been embodied in service.

(2) Airbus Model A340-211, -212, -213 airplanes, all manufacturer serial numbers on which Airbus Service Bulletin A340-53-4104 has been embodied in service.

(3) Airbus Model A340-311, -312, and -313 airplanes, all manufacturer serial numbers on which Airbus Service Bulletin A340-53-4104 has been embodied in service.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by reports of cracks on both left-hand (LH) and right-hand (RH) sides on certain frame (FR) 40 locations. We are issuing this AD to detect and correct cracks of the fuselage panel junction fasteners at FR40 on both LH and RH sides. Such a condition could lead to crack propagation, possibly resulting in reduced structural integrity of the airplane.

**(f) Compliance**

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

**(g) Required Action(s)**

Within 30 days after the effective date of this AD, request instructions from the Manager, International Section, Transport Standards Branch, FAA, to address the unsafe condition specified in paragraph (e) of this AD; and accomplish the actions at the times specified in, and in accordance

with, those instructions. Guidance can be found in Mandatory Continuing Airworthiness Information (MCAI) European Aviation Safety Agency (EASA) AD 2011-0171R1, dated January 11, 2013.

**(h) 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 (i)(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.

**(i) Related Information**

(1) Refer to MCAI EASA AD 2011-0171R1, dated January 11, 2013, for related information. You may examine the MCAI on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0363.

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

**(j) Material Incorporated by Reference**

None.

Issued in Des Moines, Washington, on April 27, 2018.  
Michael Kaszycki,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**2018-09-15 Bombardier, Inc.:** Amendment 39-19272; Docket No. FAA-2017-0775; Product Identifier 2017-NM-048-AD.

**(a) Effective Date**

This AD is effective June 15, 2018.

**(b) Affected ADs**

This AD replaces AD 2016-25-18, Amendment 39-18744 (81 FR 90961, December 16, 2016) (“AD 2016-25-18”).

**(c) Applicability**

This AD applies to Bombardier, Inc., Model BD-700-1A10 and BD-700-1A11 airplanes, certificated in any category, serial numbers (S/Ns) 9002 through 9785 inclusive, and 9998.

**(d) Subject**

Air Transport Association (ATA) of America Code 72, Engine.

**(e) Reason**

This AD was prompted by a report indicating that during maintenance, an engine mount pin was found backed out of the rear mount link, and the associated retaining bolt was also found fractured at the groove that holds the locking spring, and a determination that replacement of certain nuts and bolts in the engine rear mount assemblies is necessary. We are issuing this AD to detect and correct broken engine attachment hardware, which could result in separation of an engine from the airplane.

**(f) Compliance**

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

**(g) Retained Inspection, With No Changes**

This paragraph restates the requirements of paragraph (g) of AD 2016-25-18, with no changes. For airplanes having S/Ns 9002 through 9763 inclusive, 9765, 9767 through 9770 inclusive, and 9998: Within 500 flight hours or 4 months, whichever occurs first after January 3, 2017 (the effective date of AD 2016-25-18), do an inspection for discrepancies of the engine rear mount assemblies (including missing or broken bolts, missing nuts, incorrect torque values, and an incorrect gap between the bushing and washer); in accordance with Part A of the Accomplishment Instructions of the applicable service information specified in paragraphs (g)(1) through (g)(4) of this AD. Accomplishing the actions required by paragraphs (j) and (k) of this AD terminates the requirements of this paragraph.

(1) Bombardier Service Bulletin 700-1A11-71-002, Revision 01, dated June 30, 2016 (for Bombardier Model BD-700-1A11 airplanes).

(2) Bombardier Service Bulletin 700-71-002, Revision 01, dated June 30, 2016 (for Bombardier Model BD-700-1A10 airplanes).

(3) Bombardier Service Bulletin 700-71-5002, Revision 01, dated June 30, 2016 (for Bombardier Model BD-700-1A11 airplanes).

(4) Bombardier Service Bulletin 700-71-6002, Revision 01, dated June 30, 2016 (for Bombardier Model BD-700-1A10 airplanes).

**(h) Retained Corrective Action for Paragraph (g) of This AD, With No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2016-25-18, with no changes. If any discrepancy is detected during the inspection required by paragraph (g) of this AD, before further flight, replace missing parts and correct noncompliant gaps and bolt torque, as specified in the Accomplishment Instructions of the applicable service information specified in paragraphs (g)(1) through (g)(4) of this AD, except as required by paragraph (i) of this AD. Accomplishing the actions required by paragraphs (j) and (k) of this AD terminates the requirements of this paragraph.

**(i) Retained Exception to Service Information Specifications, With No Changes**

This paragraph restates the requirements of paragraph (i) of AD 2016-25-18, with no changes. Where the applicable Bombardier service bulletin specified in paragraphs (g)(1) through (g)(4) of this AD provides no instructions for corrective actions, or specifies to contact Bombardier for appropriate action, accomplish corrective actions in accordance with the procedures specified in paragraph (o)(2) of this AD.

**(j) New Requirement of This AD: Gap Measurement**

Within 1,000 flight hours or 12 months, whichever occurs first after the effective date of this AD: Measure the gaps between the applicable shouldered bushing fitted on the mount beam and the washer; and between the applicable engine ring lug and the head of the mount pin to determine if the gaps are within acceptable limits; in accordance with Part A of the Accomplishment Instructions of the applicable service information specified in paragraphs (j)(1) through (j)(4) of this AD. Accomplishing the actions required by paragraphs (j) and (k) of this AD terminates the requirements of paragraphs (g) and (h) of this AD.

(1) Bombardier Service Bulletin 700-1A11-71-003, dated December 5, 2016 (for Bombardier Model BD-700-1A11 airplanes).

(2) Bombardier Service Bulletin 700-71-003, dated December 5, 2016 (for Bombardier Model BD-700-1A10 airplanes).

(3) Bombardier Service Bulletin 700-71-5003, dated December 5, 2016 (for Bombardier Model BD-700-1A11 airplanes).

(4) Bombardier Service Bulletin 700-71-6003, dated December 5, 2016 (for Bombardier Model BD-700-1A10 airplanes).

**(k) New Requirement of This AD: Nut and Bolt Replacements, and Gap Measurement**

Within 1,000 flight hours or 12 months, whichever occurs first after the effective date of this AD: Replace the nuts having part number (P/N) AS54365 and the bolts having P/N AS54020 and AS54002 in the engine rear mount assembly with new nuts and new bolts; and do the gap measurement to determine if the gap is within acceptable limits; in accordance with Part B of the Accomplishment Instructions of the applicable service information specified in paragraphs (j)(1) through (j)(4) of this AD.

**(l) New Requirement of This AD: Corrective Action**

If any gap is detected, during any measurement required by paragraph (j) or (k) of this AD, that is not within the applicable limits specified in the service information specified in paragraphs (j)(1) through (j)(4) 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.

**(m) No Reporting Required**

Although the service information identified in paragraphs (j)(1) through (j)(4) of this AD specifies to submit certain information to the manufacturer, this AD does not include that requirement.

**(n) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD, if those actions were performed before January 3, 2017 (the effective date of AD 2016-25-18), in accordance with the Accomplishment Instructions of the applicable service information specified in paragraphs (n)(1) through (n)(4) of this AD.

(1) Bombardier Service Bulletin 700-1A11-71-002, dated May 31, 2016 (for Bombardier Model BD-700-1A11 airplanes).

(2) Bombardier Service Bulletin 700-71-002, dated May 31, 2016 (for Bombardier Model BD-700-1A10 airplanes).

(3) Bombardier Service Bulletin 700-71-5002, dated May 31, 2016 (for Bombardier Model BD-700-1A11 airplanes).

(4) Bombardier Service Bulletin 700-71-6002, dated May 31, 2016 (for Bombardier Model BD-700-1A10 airplanes).

**(o) 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. 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.

**(p) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2016-23R1, dated February 20, 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-2017-0775.

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

**(q) Material Incorporated by Reference**

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

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

(3) The following service information was approved for IBR on June 15, 2018.

(i) Bombardier Service Bulletin 700-1A11-71-003, dated December 5, 2016.

(ii) Bombardier Service Bulletin 700-71-003, dated December 5, 2016.

(iii) Bombardier Service Bulletin 700-71-5003, dated December 5, 2016.

(iv) Bombardier Service Bulletin 700-71-6003, dated December 5, 2016.

(4) The following service information was approved for IBR on January 3, 2017 (81 FR 90961, December 16, 2016).

(i) Bombardier Service Bulletin 700-1A11-71-002, Revision 01, dated June 30, 2016.

(ii) Bombardier Service Bulletin 700-71-002, Revision 01, dated June 30, 2016.

(iii) Bombardier Service Bulletin 700-71-5002, Revision 01, dated June 30, 2016.

(iv) Bombardier Service Bulletin 700-71-6002, Revision 01, dated June 30, 2016.

(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.



**2018-09-16 Airbus:** Amendment 39-19273; Docket No. FAA-2017-1100; Product Identifier 2017-NM-077-AD.

**(a) Effective Date**

This AD is effective June 15, 2018.

**(b) Affected ADs**

This AD replaces AD 2015-15-13, Amendment 39-18223 (80 FR 45857, August 3, 2015) (“AD 2015-15-13”).

**(c) Applicability**

This AD applies to the airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category, except for those airplanes on which Airbus modification 160055 or modification 160056 has been embodied in production, and except for Model A319 series airplanes on which modification 28162, 28238, and 28342 have been embodied (“Corporate Jet”).

- (1) Airbus Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (2) Airbus Model A320-211, -212, -214, -216, -231, -232, and -233 airplanes.
- (3) Airbus Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by an evaluation by the design approval holder (DAH) indicating that the potable water and waste water service panel areas are subject to widespread fatigue damage (WFD). We are issuing this AD to prevent cracking of the potable water and waste water service panel areas, 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) Modification of the Potable Water Service Panel**

(1) Within the compliance times specified in table 1 to paragraphs (g)(1) and (i) of this AD, as applicable, modify the potable water service panel, including doing a check of the diameter of the holes of removed fasteners, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-53-1272,

Revision 04, dated November 29, 2016, except as required by paragraph (g)(2) of this AD. Do all applicable related investigative and corrective actions before further flight.

**Table 1 to Paragraphs (g)(1) and (i) of this AD – Compliance Times for the Potable Water Service Panel Reinforcement**

<b>Affected Airplanes*</b>	<b>Compliance Time Minimum**</b>	<b>Compliance Time Maximum</b> (Before the accumulation of the specified total flight cycles since the airplane's first flight)
A319, pre-modification 160001 and pre-service bulletin A320-57-1193	33,100 total flight cycles	48,500 total flight cycles
A319, post-modification 160001 or post-service bulletin A320-57-1193	None	46,000 total flight cycles
A320, pre-modification 160001 and pre-service bulletin A320-57-1193	25,100 total flight cycles	54,200 total flight cycles
A320, post-modification 160001 or post-service bulletin A320-57-1193	None	48,300 total flight cycles
A321-100	25,100 total flight cycles	60,000 total flight cycles
A321-200 pre-modification 160021	22,100 total flight cycles	60,000 total flight cycles
A321-200 post-modification 160021	None	60,000 total flight cycles

\*A321-111, A321-112 and A321-131 airplanes are collectively referred to as "A321-100." Similarly, A321-211, A321-212, A321-213, A321-231 and A321-232 airplanes are collectively referred to as "A321-200."  
\*\*Not before accumulating the specified total flight cycles since the airplane's first flight.

(2) Where Airbus Service Bulletin A320-53-1272, Revision 04, dated November 29, 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 (m)(2) of this AD.

#### **(h) Modification of the Waste Water Service Panel**

(1) Within the compliance times specified in table 2 to paragraphs (h)(1) and (i) of this AD, as applicable, modify the waste water service panel, including doing a check of the diameter of the holes of removed fasteners, and do all applicable related investigative and corrective actions in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-53-1267, Revision 05, dated November 29, 2016, except as required by paragraph (h)(2) of this AD. Do all applicable related investigative and corrective actions before further flight.

**Table 2 to Paragraphs (h)(1) and (i) of this AD – Compliance Times for the Waste Water Service Panel Reinforcement**

<b>Affected Airplanes*</b>	<b>Compliance Time Minimum**</b>	<b>Compliance Time Maximum</b>
A319, pre-modification 160001 and pre-service bulletin A320-57-1193	38,600 total flight cycles	Before the accumulation of 44,400 total flight cycles since the airplane's first flight
A319, post-modification 160001 or post-service bulletin A320-57-1193	None	Before the accumulation of 43,600 total flight cycles since the airplane's first flight
A320, pre-modification 160001 and pre-service bulletin A320-57-1193	35,800 total flight cycles	Before the accumulation of 46,000 total flight cycles since the airplane's first flight; or within 2,300 flight cycles since the last accomplishment of Airworthiness Limitation Section (ALS) Part 2 Task 534126-01-3 without exceeding 48,000 total flight cycles since the airplane's first flight; whichever occurs later
A320, post-modification 160001 or post-service bulletin A320-57-1193	5,400 total flight cycles	Before the accumulation of 39,200 total flight cycles since the airplane's first flight
A321-100	36,900 total flight cycles	Before the accumulation of 52,500 total flight cycles since the airplane's first flight
A321-200 pre-modification 160021	35,700 total flight cycles	Before the accumulation of 53,500 total flight cycles since the airplane's first flight
A321-200 post-modification 160021	None	Before the accumulation of 51,200 total flight cycles since the airplane's first flight
*A321-111, A321-112 and A321-131 airplanes are collectively referred to as "A321-100." Similarly, A321-211, A321-212, A321-213, A321-231 and A321-232 airplanes are collectively referred to as "A321-200."		
**Not before accumulating the specified total flight cycles since the airplane's first flight.		

(2) Where Airbus Service Bulletin A320-53-1267, Revision 05, dated November 29, 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 (m)(2) of this AD.

**(i) Corrective Action for Airplanes With Certain Modifications**

For airplanes on which the modification, as required by paragraph (g) or (h) of this AD, as applicable, was accomplished before reaching the applicable minimum compliance time as defined in table 1 to paragraphs (g)(1) and (i) of this AD or table 2 to paragraphs (h)(1) and (i) of this AD: Before exceeding 60,000 flight cycles since the airplane's first flight, contact the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA) for approved corrective action instructions and accomplish those instructions accordingly. If approved by the DOA, the approval must include the DOA-authorized signature.

**(j) Terminating Action for Airplanes on Which the Potable Water Service Panel Modification Is Done**

Modification of an airplane as required by paragraph (g) of this AD terminates the requirement for accomplishing the ALS Part 2 task for that airplane as specified in table 3 to paragraph (j) of this AD, as applicable.

**Table 3 to Paragraph (j) of this AD – ALS Part 2 Task terminated after Potable Water Service Panel Modification**

<b>Affected Airplanes</b>	<b>ALS Part 2 Task Number</b>
A319, pre-modification 160001 and pre-service bulletin A320-57-1193	534125-01-2
A319, post-modification 160001 or post-service bulletin A320-57-1193	534125-01-5
A320, pre-modification 160001 and pre-service bulletin A320-57-1193	534125-01-3
A320, post-modification 160001 or post-service bulletin A320-57-1193	534125-01-6
A321 pre-modification 160021	534125-01-4
A321 post-modification 160021	534125-01-7

**(k) Terminating Action for Airplanes on Which the Waste Water Service Panel Modification Is Done**

Modification of an airplane as required by paragraph (h) of this AD terminates the requirement for accomplishing the ALS Part 2 task for that airplane as specified in table 4 to paragraph (k) of this AD, as applicable.

**Table 4 to Paragraph (k) of this AD – ALS Part 2 Task terminated after Waste Water Service Panel Modification**

<b>Affected Airplanes</b>	<b>ALS Part 2 Task Number</b>
A319, pre-modification 160001 and pre-service bulletin A320-57-1193	534126-01-2
A319, post-modification 160001 or post-service bulletin A320-57-1193	534126-01-5
A320, pre-modification 160001 and pre-service bulletin A320-57-1193	534126-01-3
A320, post-modification 160001 or post-service bulletin A320-57-1193	534126-01-6
A321 pre-modification 160021	534126-01-4
A321 post-modification 160021	534126-01-7

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

(1) This paragraph provides credit for actions required by paragraph (g) of this AD if those actions were performed before the effective date of this AD using the service information in paragraphs (l)(1)(i) through (l)(1)(iv) of this AD.

(i) Airbus Service Bulletin A320-53-1272, Revision 00, dated January 10, 2013, which is not incorporated by reference in this AD.

(ii) Airbus Service Bulletin A320-53-1272, Revision 01, dated August 6, 2013, which is not incorporated by reference in this AD.

(iii) Airbus Service Bulletin A320-53-1272, Revision 02, dated May 19, 2014, which was incorporated by reference in AD 2015-15-13.

(iv) Airbus Service Bulletin A320-53-1272, Revision 03, dated November 26, 2015, which is not incorporated by reference in this AD.

(2) This paragraph provides credit for actions required by paragraph (h) of this AD if those actions were performed before the effective date of this AD using the service information in paragraphs (l)(2)(i) through (l)(2)(v) of this AD.

(i) Airbus Service Bulletin A320-53-1267, Revision 00, dated June 24, 2013, which is not incorporated by reference in this AD.

(ii) Airbus Service Bulletin A320-53-1267, Revision 01, dated October 2, 2013, which is not incorporated by reference in this AD.

(iii) Airbus Service Bulletin A320-53-1267, Revision 02, dated May 19, 2014, which was incorporated by reference in AD 2015-15-13.

(iv) Airbus Service Bulletin A320-53-1267, Revision 03, dated November 26, 2015, which is not incorporated by reference in this AD.

(v) Airbus Service Bulletin A320-53-1267, Revision 04, dated February 1, 2016, which 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, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested

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

(2) Contacting the Manufacturer: As of the effective date of this AD, for any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the 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 paragraphs (g)(2) and (h)(2) 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.

#### **(n) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2017-0098, dated June 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-2017-1100.

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

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

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

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

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

(i) Airbus Service Bulletin A320-53-1272, Revision 04, dated November 29, 2016.

(ii) Airbus Service Bulletin A320-53-1267, Revision 05, dated November 29, 2016.

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

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

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

Issued in Des Moines, Washington, on April 27, 2018.  
Michael Kaszycki,  
Acting Director, System Oversight Division,  
Aircraft Certification Service.



**2018-10-02 The Boeing Company:** Amendment 39-19277; Docket No. FAA-2018-0398; Product Identifier 2017-NM-113-AD.

**(a) Effective Date**

This AD is effective May 29, 2018.

**(b) Affected ADs**

None.

**(c) Applicability**

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

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a report of loose attachment bolts on the occupant restraint system on a standard attendant seat due to the bolts being over-torqued. We are issuing this AD to address potential failure of the restraint system of the attendant seat during turbulence or a high-G load event, which could result in serious injury.

**(f) Compliance**

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

**(g) Inspection and Applicable Corrective Actions**

Within 5 years after the effective date of this AD: Inspect the occupant restraint system on the standard attendant seats for any restraint system having a part number identified in the Accomplishment Instructions of Boeing Service Bulletin B787-81205-SB250052-00, Issue 001, dated January 27, 2014.

(1) For any affected occupant restraint system: Within 5 years after the effective date of this AD, inspect the affected attendant seat for discrepancies, including a general visual inspection for any gap of the interface of the lever and spacer, a general visual inspection for any flattened or stripped threads, verification that the lap belt bolt helicoil in the lever does not protrude beyond the bottom surface of the counterbore, and a general visual inspection for visible metal shavings or fragments of the lap belt bolt and lever helicoil; and do all applicable torquing of the lap belt bolt, in accordance with the Accomplishment Instructions of Boeing Service Bulletin B787-81205-SB250052-00, Issue 001, dated January 27, 2014.

(2) For any discrepant attendant seat, before further flight rework the attachment bolt, the seat pan lever and bolts, and the dampener bolt, in accordance with the Accomplishment Instructions of Boeing Service Bulletin B787-81205-SB250052-00, Issue 001, dated January 27, 2014.

Note 1 to paragraph (g) of this AD: Guidance on the inspections and rework can be found in Goodrich Service Bulletin 2787-25-009, dated June 28, 2013.

#### **(h) Inspection Definition**

For the purposes of this AD, a general visual inspection is: “A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to ensure visual access to all surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked.”

#### **(i) Parts Installation Prohibition**

As of the effective date of this AD, no person may install an occupant restraint system having a part number identified in the Accomplishment Instructions of Boeing Service Bulletin B787-81205-SB250052-00, Issue 001, dated January 27, 2014, on any airplane.

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

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

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair, modification, or alteration required by this AD if it is approved by the Boeing 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.

#### **(k) Related Information**

(1) For more information about this AD, contact Julie Moon, Aerospace Engineer, Cabin Safety and Environmental Systems Section, Seattle ACO Branch, FAA, 2200 South 216th St., Des Moines, WA 98198-6547; phone: 206-231-3571; email: julie.moon@faa.gov.

(2) For Goodrich service information identified in this AD, contact Goodrich Corporation, Aircraft Interior Products, ATTN: Technical Publications, 3414 South Fifth Street, Phoenix, AZ 85040-1169; telephone 602-243-2200; internet <http://www.goodrich.com/TechPubs>.

**(I) Material Incorporated by Reference**

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

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

(i) Boeing Service Bulletin B787-81205-SB250052-00, Issue 001, dated January 27, 2014.

(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 1, 2018.

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