# FEDERAL AVIATION ADMINISTRATION
# AIRWORTHINESS DIRECTIVES

## LARGE AIRCRAFT

## BIWEEKLY 2016-06

*3/7/2016 - 3/20/2016*

Federal Aviation Administration
Continued Operational Safety Policy Section, AIR-141
P.O. Box 25082
Oklahoma City, OK 73125-0460

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# LARGE AIRCRAFT

| AD No. | Information | Manufacturer | Applicability |
|---|---|---|---|

Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces

**Biweekly 2016-01**

| | | | |
|---|---|---|---|
| 2015-25-03 | COR | The Boeing Company | 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, and 747SR series airplanes |
| 2015-25-06 | R 2010-06-04 | Airbus | A300 B2-1C, B2-203, B2K-3C, B4-103, B4-203, and B4-2C; A310-203, -204, -221, -222, -304, -322, -324, and -325; A300 B4-601, B4-603, B4-605R, B4-620, B-622, and B4-622R airplanes |
| 2015-26-02 | | Airbus | A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes |
| 2015-26-03 | R 2011-07-10 | Bombardier, Inc. | BD-100-1A10 (Challenger 300) airplanes |
| 2015-26-07 | | The Boeing Company | 767-200, -300, -300F series airplanes |

**Biweekly 2016-02**

| | | | |
|---|---|---|---|
| 2015-25-10 | R 2011-24-05 | Airbus | A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343; A340-211, -212, -213, -311, -312, and -313 |
| 2015-26-05 | | Fokker Services B.V. | F.28 Mark 1000, 2000, 3000, and 4000 |
| 2015-26-06 | R 2004-14-09 | Airbus | A320-211, -212, and -231 |
| 2015-26-09 | | ATR–GIE Avions de Transport Régional (ATR) | ATR42-200, -300, -320, and -500 |
| 2015-27-01 | | General Electric Company (GE) | GE90-76B, -77B, -85B, -90B, and -94B |
| 2016-01-02 | | Bombardier, Inc. | CL-600-2B19 (Regional Jet Series 100 & 440) |
| 2016-01-03 | | Airbus | A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, and A330-343; A340-211, A340-212, A340-213, A340-311, A340-312, and A340-313 |
| 2016-01-04 | R 2005-01-09 | The Boeing Company | 747-100, -100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, and 747SR series |
| 2016-01-05 | | The Boeing Company | 737-400 series |
| 2016-01-07 | | Airbus | A319-113 and A319-114; A320-211 and A320-212 |
| 2016-01-08 | R 2013-13-04 | Airbus | A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -231, -232, and -233; and A321-111, -112, -131, -211, -212, -213, -231, and -232 |
| 2016-01-09 | | Bombardier, Inc. | DHC-8-400, -401, and -402 |
| 2016-01-11 | R 98-18-26 | Airbus | A320-211, -212, and -231 |
| 2016-01-12 | | Bombardier, Inc. | BD-700-1A10 and BD-700-1A11 |
| 2016-01-13 | | Airbus | A310-203, -204, -221, -222, -304, -322, -324, and -325; A300 B4-601, B4-603, B4-620, and B4-622; A300 B4-605R and B4-622R; and A300 F4-605R, F4-622R, and A300 C4-605R Variant F |
| 2016-01-16 | R 2002-23-20 | Dassault Aviation | Mystere-Falcon 900 |
| 2016-01-17 | | Bombardier, Inc. | CL-600-2C10 (Regional Jet Series 700, 701, & 702) |

**Biweekly 2016-03**

| | | | |
|---|---|---|---|
| 2015-25-08 | COR | The Boeing Company | 777-200, -200LR, -300, -300ER, and 777F series airplanes |
| 2015-28-01 | | Engine Alliance | GP7270 turbofan engines |
| 2016-01-10 | R 2004-20-14 | Airbus | A300 airplanes |
| 2016-01-18 | R 98-20-27 | Airbus | A300 airplanes |
| 2016-02-01 | R 96-18-06 | Airbus | A320-211, -212, and -231 airplanes |
| 2016-02-02 | | Airbus | A318-111 and -112; A319-111, -112, and -115; A320-214; A321-111, -112, -211, -212, and -213 airplanes |
| 2016-02-03 | | Airbus | A319-113 and -114; A320-211 and -212 airplanes |
| 2016-02-04 | | CFM International S.A. | CFM56-5B engines |
| 2016-02-05 | | Bombardier, Inc. | BD-100-1A10 (Challenger 300) airplanes |
| 2016-03-01 | | The Boeing Company | 737-100, -200, -200C, -300, -400, and -500 series airplanes |

# LARGE AIRCRAFT

| AD No. | Information | Manufacturer | Applicability |
|---|---|---|---|
| Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces | | | |
| **Biweekly 2016-04** | | | |
| 2016-03-04 | | Rolls-Royce plc | (RR) RB211-535E4-37, RB211-535E4-B-37, and RB211-535E4-C-37 turbofan engines |
| 2016-03-06 | R 2012-18-05 | The Boeing Company | DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC 9 34F, DC 9 32F (C-9A, C 9B), DC-9-41, DC-9-51, DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), MD-88, MD-90-30 airplanes. |
| 2016-04-01 | R 2015-26-02 | Airbus | A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes |
| 2016-04-02 | R 2010-26-10 | The Boeing Company | 747-200C, -200F, -400, -400D, and -400F series airplanes |
| 2016-04-03 | | The Boeing Company | 747-400F series airplanes |
| **Biweekly 2016-05** | | | |
| 2016-04-06 | | The Boeing Company | 737-600, -700, -700C, -800, -900, and -900ER series |
| 2016-04-07 | | The Boeing Company | 767-200, -300, -300F, and -400ER series |
| 2016-04-08 | | The Boeing Company | 787-8 |
| 2016-04-09 | | Dassault Aviation | FALCON 900EX and FALCON 2000EX |
| 2016-04-10 | | ATR-GIE Avions de Transport Régional | ATR42-500 and ATR72-102, -202, -212, and -212A |
| 2016-04-11 | | General Electric Company | GEnx-1B54, -1B58, -1B64, -1B67, and -1B70 |
| 2016-04-17 | | The Boeing Company | 777-200 series |
| 2016-04-18 | | The Boeing Company | 747-100, -200B, -200C, -200F, -300, -400, -400D, and -400F series |
| 2016-04-19 | | Airbus Defense and Space S.A. | CN-235, CN-235-100, CN-235-200, CN-235-300, and C-295 |
| 2016-04-20 | | The Boeing Company | 737-600, -700, -700C, -800, -900, and -900ER series; 757-200, -200PF, -200CB, and -300 series; 767-200, -300, -300F, and -400ER series; 777-200, -200LR, -300, -300ER, and -777F series |
| 2016-04-21 | R 2008-26-07 | The Boeing Company | DC-8-11, DC-8-12, DC-8-21, DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, DC-8-43, DC-8-51, DC-8-52, DC-8-53, DC-8-55, DC-8F-54, DC-8F-55, DC-8-61, DC-8-62, DC-8-63, DC-8-61F, DC-8-62F, DC-8-63F, DC-8-71, DC-8-72, DC-8-73, DC-8-71F, DC-8-72F, and DC-8-73F |
| 2016-04-22 | | Fokker Services B.V. | F.27 Mark 200, 300, 400, 500, 600, and 700 |
| 2016-04-23 | | The Boeing Company | 787-8 |
| 2016-04-24 | | The Boeing Company | 757-200 series |
| **Biweekly 2016-06** | | | |
| 2016-03-03 | S 2013-11-13 | Rolls-Royce plc | Viper Mk. 521, Viper Mk. 522, and Viper Mk. 601-22 turbojet engines |
| 2016-03-07 | | Airbus | A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343, A340-211, -212, -213, -311, -312, -313, -541, and -642 |
| 2016-04-13 | S 2015-04-03 | Rolls-Royce plc | RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines |
| 2016-04-16 | R 2013-08-23 | The Boeing Company | DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, MD-10-30F, MD-11, and MD-11F |
| 2016-05-02 | R 2011-13-11 & R 2013-16-09 | Airbus | A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, and -133, A320-211, -212, -214, -231, -232, and -233, A321-111, -112, -131, -211, -212, -213, -231, and -232 |
| 2016-05-04 | | Dowty Propellers | R352/6-123-F/1, R352/6-123-F/2, and R410/6-123-F/35 |
| 2016-05-05 | | Airbus | A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203, A300 B4-601, B4-603, B4-620, and B4-622, A300 B4-605R and B4-622R, A300 F4-605R and F4-622R, A300 C4-605R Variant F, A310-203, -204, -221, -222, -304, -322, -324, and -325 |
| 2016-05-07 | | Engine Alliance | GP7270 turbofan engine |
| 2016-05-12 | R 2012-15-13 | The Boeing Company | 747-100B SUD, 747-300, 747-400, and 747-400D series, 747-200B series |

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| AD No. | Information | Manufacturer | Applicability |
|---|---|---|---|
| Information Key: E - Emergency; COR - Correction; S – Supersedes, R - Replaces | | | |
| 2016-06-02 | | The Boeing Company | 737-300, -400, and -500 series |
| 2016-06-03 | | Airbus | A319-131, -132, and -133, A320-232 and -233, A321-131, -231, and -232 |
| 2016-06-04 | | The Boeing Company | 737-300, -400, and -500 series |
| 2016-06-05 | | The Boeing Company | 777-200, -200LR, -300, -300ER, and -777F series |
| 2016-06-06 | | Quest Aircraft Design, LLC | KODIAK 100 |
| 2016-06-07 | R 2006-22-15 | 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 |
| 2016-06-08 | | The Boeing Company | 787-8 and 787-9 |

**2016-03-03 Rolls-Royce plc (Type Certificate previously held by Rolls-Royce (1971) Limited, Bristol Engine Division):** Amendment 39-18390; Docket No. FAA-2012-1331; Directorate Identifier 2012-NE-44-AD.

**(a) Effective Date**

This AD is effective April 14, 2016.

**(b) Affected ADs**

This AD supersedes AD 2013-11-13.

**(c) Applicability**

This AD applies to all Rolls-Royce plc (RR) Viper Mk. 521, Viper Mk. 522, and Viper Mk. 601-22 turbojet engines.

**(d) Unsafe Condition**

This AD was prompted by a review by RR of the lives of certain critical parts. We are issuing this AD to prevent failure of life-limited parts, which could lead to an uncontained part release, damage to the engine, and damage to the airplane.

**(e) Compliance**

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

(1) Within 30 days after the effective date of this AD, or before any affected part exceeds its new revised life limit, whichever occurs later, remove any affected engine from service. Use Table 1 of RR Alert Service Bulletin (ASB) Mk. 521 Number 72-A408, Circulation A, dated January 2015; RR ASB Mk. 521 Number 72-A408, Circulation B, dated January 2015; RR ASB Mk. 522 Number 72-A413, Circulation A, dated January 2015; RR ASB Mk. 522 Number 72-A412, Circulation B, dated January 2015; and RR ASB Mk 601-22 Number 72-A207, dated January 2015, to identify the affected parts installed on each engine and determine their respective new life limits.

(2) For the RR Viper Mk. 601-22 turbojet engine, remove compressor shaft, part number V900766, from service before the compressor shaft accumulates 20,720 flight cycles since new.

(3) Replace any part identified in paragraph (e)(1) or (e)(2) of this AD with a part eligible for installation before the affected part reaches its new life limit specified in paragraph (e)(2) of this AD or in the ASBs referenced in paragraph (e)(1) of this AD.

**(f) Installation Prohibition**

After the effective date of this AD, do not install any affected part identified in paragraph (e) of this AD into any engine, nor return any engine to service with any affected part identified in paragraph (e) of this AD installed, if any affected part exceeds the life limit specified in the

appropriate ASB identified in paragraph (e)(1) of this AD and/or the life limit identified in paragraph (e)(2) of this AD.

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

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

**(h) Related Information**

(1) For more information about this AD, contact Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2015-0127R1, dated August 14, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2012-1331.

**(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) Rolls-Royce plc (RR) Alert Service Bulletin (ASB) Mk. 521 Number 72-A408, Circulation A, dated January 2015.

(ii) RR ASB Mk. 521 Number 72-A408, Circulation B, dated January 2015.

(iii) RR ASB Mk. 522 Number 72-A413, Circulation A, dated January 2015.

(iv) RR ASB Mk. 522 Number 72-A412, Circulation B, dated January 2015.

(v) RR ASB Mk 601-22 Number 72-A207, dated January 2015.

(3) For RR 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.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

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

Issued in Burlington, Massachusetts, on February 2, 2016.
Ann C. Mollica,
Acting Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

**2016-03-07 Airbus:** Amendment 39-18394. Docket No. FAA-2015-3149; Directorate Identifier 2015-NM-014-AD.

**(a) Effective Date**

This AD becomes effective April 13, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the airplanes, certificated in any category, identified in paragraphs (c)(1) and (c)(2) of this AD, all manufacturer serial numbers; except those on which a gaseous system for all oxygen generators is installed.

(1) Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(2) Airbus Model A340-211, -212, -213, -311, -312, -313, -541, and -642 airplanes.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by reports of premature aging of certain chemical oxygen generators in the passenger compartment that resulted in failure of the generators to activate. We are issuing this AD to prevent failure of the chemical oxygen generator to activate during an emergency situation, which could result in unavailability of oxygen and possible incapacitation of the occupants.

**(f) Compliance**

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

**(g) Inspection**

Within 30 days after the effective date of this AD: Inspect each passenger chemical oxygen generator to identify the date of manufacture (refer to figures 1 and 2 to paragraph (g) of this AD for the location of the date) of each passenger chemical oxygen generator having any part number (P/N) listed in paragraphs (g)(1) through (g)(6) of this AD, in accordance with the Instructions of Airbus Alert Operators Transmission (AOT) A35L007-14, Revision 01, June 17, 2015, including Appendix A, Revision 01, dated June 17, 2015. A review of airplane maintenance records is acceptable in lieu of this inspection if the date of manufacture of the generator can be conclusively determined from that review.

(1) 117042-02 (15 minutes (min)–2 masks).
(2) 117042-03 (15 min–3 masks).
(3) 117042-04 (15 min–4 masks).
(4) 117042-22 (22 min–2 masks).
(5) 117042-23 (22 min–3 masks).
(6) 117042-24 (22 min–4 masks).

**Figure 1 to paragraph (g) of this AD - Location of date (MM-YY)**

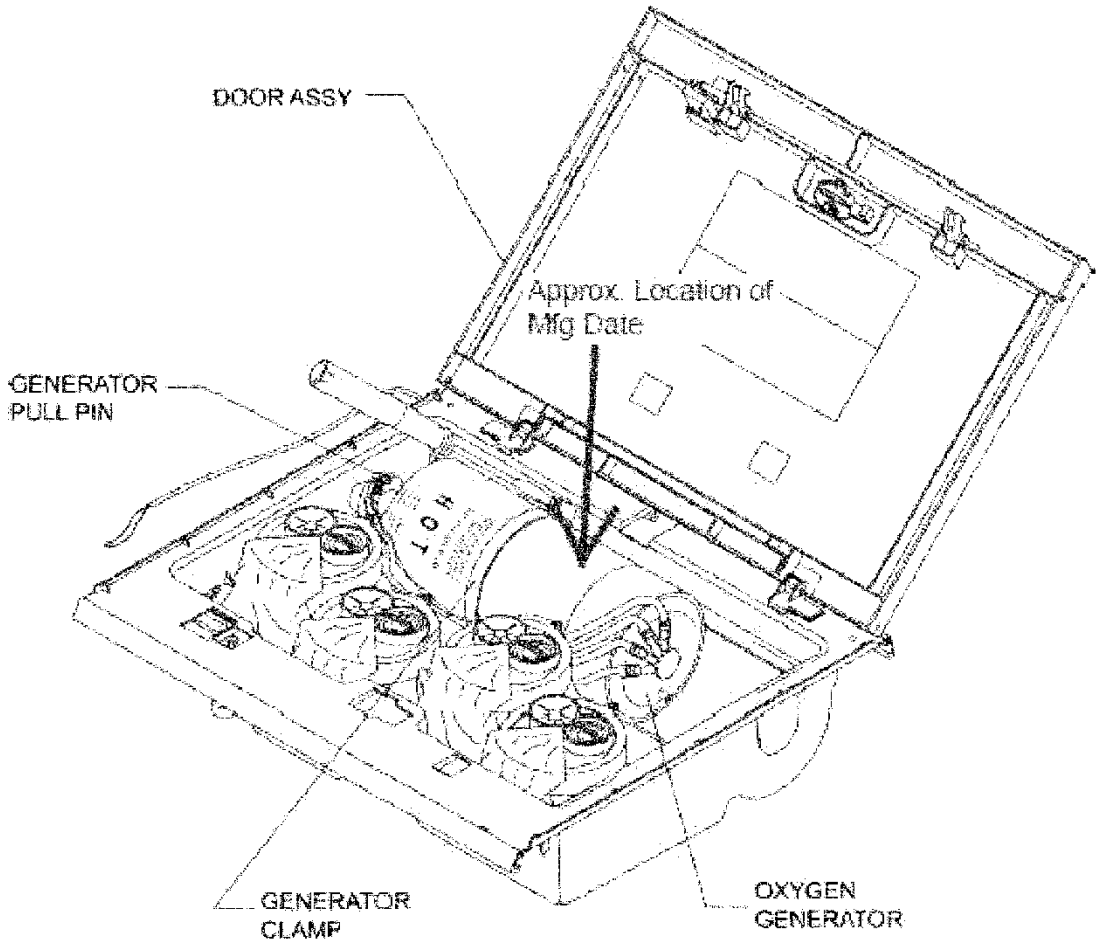
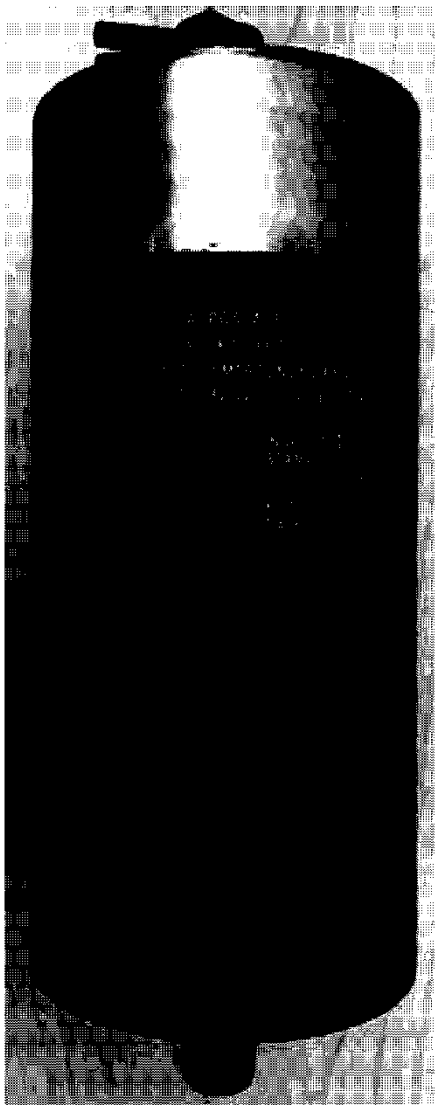


**Figure 2 to paragraph (g) of this AD – Manufacturing (MFG.) date (05-02 = May 2002) example**



**(h) Replacement of Pre-2002 Passenger Oxygen Generators**

If, during any inspection required by paragraph (g) of this AD, any passenger chemical oxygen generator having a date of manufacture of 1999, 2000, or 2001 is found: At the time specified in paragraph (h)(1), (h)(2), or (h)(3) of this AD, as applicable, replace the affected passenger chemical oxygen generator, in accordance with the Instructions of Airbus AOT A35L007-14, Revision 01, June 17, 2015; including Appendix A, Revision 01, dated June 17, 2015 (for 15- and 22-minute passenger chemical oxygen generators); or in accordance with the Accomplishment Instructions of B/E Aerospace Service Bulletin 117042-35-001, dated December 10, 2014 (for 15-minute passenger chemical oxygen generators).

(1) For units manufactured in 1999: Within 30 days after the effective date of this AD.

(2) For units manufactured in 2000: Within 6 months after the effective date of this AD.

(3) For units manufactured in 2001: Within 12 months after the effective date of this AD.

**(i) Replacement of 2002 or Later Passenger Oxygen Generators**

If, during any inspection required by paragraph (g) of this AD, any passenger chemical oxygen generator having a date of manufacture of 2002 or later is found: At the time specified in paragraph

(i)(1), (i)(2), (i)(3), (i)(4), (i)(5), (i)(6), (i)(7), or (i)(8) of this AD, as applicable, replace the affected passenger chemical oxygen generator with a serviceable unit, in accordance with the Instructions of Airbus AOT A35L007-14, Revision 01, June 17, 2015; including Appendix A, Revision 01, dated June 17, 2015 (for 15- and 22-minute passenger chemical oxygen generators); or in accordance with the Accomplishment Instructions of B/E Aerospace Service Bulletin 117042-35-001, dated December 10, 2014 (for 15-minute passenger chemical oxygen generators).

(1) For units manufactured in 2002: Within 12 months after the effective date of this AD.

(2) For units manufactured in 2003: Within 16 months after the effective date of this AD.

(3) For units manufactured in 2004: Within 20 months after the effective date of this AD.

(4) For units manufactured in 2005: Within 24 months after the effective date of this AD.

(5) For units manufactured in 2006: Within 28 months after the effective date of this AD.

(6) For units manufactured in 2007: Within 32 months after the effective date of this AD.

(7) For units manufactured in 2008: Within 36 months after the effective date of this AD.

(8) For units manufactured in 2009 or later: Before the accumulation of 10 years since date of manufacture.

**(j) Definition of a Serviceable Unit**

A serviceable unit is an oxygen generator having P/N 117042-XX, with a manufacturing date not older than 10 years, or any other FAA-approved part number, provided that the generator has not exceeded the life limit established by the manufacturer for that generator.

**(k) Credit for Previous Actions**

This paragraph provides credit for the applicable actions required by paragraphs (g), (h), and (i) of this AD, if those actions were performed before the effective date of this AD using Airbus AOT A35L007-14, dated December 18, 2014.

**(l) Parts Installation Limitation**

As of the effective date of this AD, no person may install a passenger chemical oxygen generator on any airplane, unless the passenger chemical oxygen generator is determined to be a serviceable unit, as defined in paragraph (j) of this AD.

**(m) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. 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. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, 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.

**(n) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0119, dated June 24, 2015, correction January 12, 2016, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-3149.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (o)(3) and (o)(5) 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 Alert Operators Transmission (AOT) A35L007-14, Revision 01, June 17, 2015; including Appendix A, Revision 01, dated June 17, 2015. The revision date is not shown on Appendix A.

(ii) B/E Aerospace Service Bulletin 117042-35-001, dated December 10, 2014.

(3) For Airbus service information identified in this AD, contact Airbus SAS, Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email airworthiness.A330-A340@airbus.com; Internet http://www.airbus.com.

(4) For B/E Aerospace service information identified in this AD, contact B/E Aerospace Inc., 10800 Pflumm Road, Lenexa, KS 66215; telephone 913-338-9800; fax 913-469-8419; Internet http://beaerospace.com/home/globalsupport.

(5) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

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

Issued in Renton, Washington, on February 19, 2016.

Dorr M. Anderson,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

**2016-04-13 Rolls-Royce plc:** Amendment 39-18407; Docket No. FAA-2014-0561; Directorate Identifier 2014-NE-12-AD.

**(a) Effective Date**

This AD is effective April 19, 2016.

**(b) Affected ADs**

This AD supersedes AD 2015-04-03.

**(c) Applicability**

This AD applies to Rolls-Royce plc (RR) RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines, all serial numbers, except those engines:

(1) That have had Modification 72-H754 applied in production, or

(2) that have been modified in accordance with RR Service Bulletin (SB) No. RB.211-72-H754, including the Supplement, Revision 1, dated July 29, 2015 or initial issue dated October 1, 2014; or

(3) with sealing sleeve, part number (P/N) FW15003, with markings 102013, 112013, or 102013L.

**(d) Unsafe Condition**

This AD was prompted by fractures of the high-pressure/intermediate pressure (HP/IP) turbine support internal oil feed tube. We are issuing this AD to prevent failure of the HP/IP turbine support internal oil feed tube, uncontained engine failure, and damage to the airplane.

**(e) Compliance**

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

(1) If sealing sleeve, P/N FW15003, is installed without markings 102013, 112013, or 102013L, or if the markings cannot be sufficiently identified, then within 1,600 flight cycles or 24 months after the effective date of this AD, whichever occurs first:

(i) Remove the affected sealing sleeve, P/N FW15003, and replace it with a part eligible for installation. Use paragraph 3.A.(4)(b) of RR Alert Non-Modification Service Bulletin No. RB.211-72-AJ035, Revision 2, dated August 10, 2015, to perform the part replacement, or,

(ii) Remove the affected sealing sleeve, P/N FW15003, and the oil feed tube, P/N FW14193, and replace with parts eligible for installation. Use paragraph 3.B. or 3.C., as appropriate, of RR SB No. RB.211-72-H754, including the Supplement, Revision 1, dated July 29, 2015, to perform the parts replacement.

(2) Reserved.

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

The Manager, Engine Certification Office, FAA, may approve AMOCs to this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

**(g) Related Information**

(1) For more information about this AD, contact Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

(2) Refer to MCAI, European Aviation Safety Agency, AD 2015-0105R1, dated August 18, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2014-0561-0003.

**(h) 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 (RR) Alert Non-Modification Service Bulletin No. RB.211-72-AJ035, Revision 2, dated August 10, 2015.

(ii) RR Service Bulletin No. RB.211-72-H754, including the Supplement, Revision 1, dated July 29, 2015.

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

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

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

Issued in Burlington, Massachusetts, on February 12, 2016.
Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

**2016-04-16 The Boeing Company:** Amendment 39-18410; Docket No. FAA-2015-0248; Directorate Identifier 2014-NM-143-AD.

**(a) Effective Date**

This AD is effective April 15, 2016.

**(b) Affected ADs**

(1) This AD replaces AD 2013-08-23, Amendment 39-17441 (78 FR 24037, April 24, 2013).
(2) This AD affects AD 2008-06-21 R1, Amendment 39-16100 (74 FR 61504, November 25, 2009).
(3) This AD affects AD 2002-13-10, Amendment 39-12798 (67 FR 45053, July 8, 2002).
(4) This AD affects AD 2011-11-05, Amendment 39-16704 (76 FR 31462, June 1, 2011).

**(c) Applicability**

This AD applies to all The Boeing Company airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.
(1) Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F airplanes.
(2) Model MD-10-10F, MD-10-30F, MD-11, and MD-11F airplanes.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a fuel system review conducted by the manufacturer. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

**(f) Compliance**

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

**(g) Retained Criteria for Operation, With Clarifications and New Compliance Time**

This paragraph restates the actions required by paragraph (g) of AD 2013-08-23, Amendment 39-17441 (78 FR 24037, April 24, 2013), with clarification of actions for airplanes with auxiliary fuel tanks removed, clarification of the pumps that must have a protective device installed, and a new compliance time. Except as provided by paragraph (h) of this AD: As of 48 months after the effective date of this AD, no person may operate any airplane affected by this AD unless an amended type certificate or supplemental type certificate that incorporates the design features and requirements

described in paragraphs (g)(1) through (g)(4) of this AD has been approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, and those design features are installed on the airplane to meet the criteria specified in section 25.981(a) and (d) of the Federal Aviation Regulations (14 CFR 25.981(a) and (d), at Amendment 25-125 (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgFAR.nsf/0/339DAEE3E0A6379D862574CF00641951?OpenDocument)). For airplanes on which Boeing-installed auxiliary fuel tanks are removed, the actions specified in this AD for the auxiliary fuel tanks are not required.

(1) For all airplanes: Each electrically powered alternating current (AC) fuel pump installed in any fuel tank that normally empties during flight and each pump that is partially covered by a lowering fuel level–such as main tanks, center wing tanks, auxiliary fuel tanks installed by the airplane manufacturer, and tail tanks–must have a protective device installed to detect electrical faults that can cause arcing and burn through of the fuel pump housing and pump electrical connector. The same device must shut off the pump by automatically removing electrical power from the pump when such faults are detected. When a fuel pump is shut off resulting from detection of an electrical fault, the device must stay latched off, until the fault is cleared through maintenance action and the pump is verified safe for operation.

(2) For airplanes with a 2-person flightcrew: Additional design features, if not originally installed by the airplane manufacturer, must be installed to meet 3 criteria: To detect a running fuel pump in a tank that is normally emptied during flight, to provide an indication to the flightcrew that the tank is empty, and to automatically shut off that fuel pump. The prospective pump indication and shutoff system must automatically shut off each pump in case the flightcrew does not shut off a pump running dry in an empty tank within 60 seconds after each fuel tank is emptied. An airplane flight manual supplement (AFMS) that includes flightcrew manual pump shutoff procedures in the Limitations section of the AFMS must be submitted to the Los Angeles ACO, FAA, for approval.

(3) For airplanes with a 3-person flightcrew: Additional design features, if not originally installed by the airplane manufacturer, must be installed to detect when a fuel pump in a tank that is normally emptied during flight is running in an empty fuel tank, and to provide an indication to the flightcrew that the tank is empty. The flight engineer must manually shut off each pump running dry in an empty tank within 60 seconds after the tank is emptied. The AFMS Limitations section must be revised to specify that this pump shutoff must be done by the flight engineer.

(4) For all airplanes with tanks that normally empty during flight: Separate means must be provided to detect and shut off a pump that was previously commanded to be shut off automatically or manually but remained running in an empty tank during flight.

**(h) New Optional Method of Compliance**

In lieu of doing the requirements of paragraph (g) of this AD, do the applicable actions specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD.

(1) For MD-11 and MD-11F airplanes: Do the actions specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD.

(i) As of 48 months after the effective date of this AD, change the fuel pump control and indication system wiring, in accordance with the Accomplishment Instructions of Boeing Service Bulletin MD11-28-137, dated June 24, 2014.

(ii) Prior to or concurrently with accomplishing the actions specified in paragraph (h)(1)(i) of this AD: Replace the fuel pump control relays with fault current detectors, and change the fuel tank boost/transfer pump wire termination, in accordance with Accomplishment Instructions of Boeing Alert Service Bulletin MD11-28A133, dated June 5, 2014.

(2) For Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, and MD-10-30F airplanes: Do the actions specified in paragraphs (h)(2)(i) and (h)(2)(ii) of this AD.

(i) As of 48 months after the effective date of this AD, change the fuel pump control and indication system wiring, in accordance with the Accomplishment Instructions of Boeing Service Bulletin DC10-28-256, dated June 24, 2014.

(ii) Prior to or concurrently with accomplishing the actions specified in paragraph (h)(2)(i) of this AD: Replace the fuel pump control relays with fault current detectors, and change the fuel tank boost/transfer pump wire termination, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC10-28A253, dated June 5, 2014.

(3) For all airplanes: Within 30 days after accomplishing the actions required by paragraph (h)(1) or (h)(2) of this AD, or within 30 days after the effective date of this AD, whichever occurs later, revise the maintenance or inspection program, as applicable, to incorporate the Critical Design Configuration Control Limitations (CDCCLs), Airworthiness Limitation Instructions (ALIs), and short-term extensions specified in Appendices B, C, and D of Boeing Trijet Special Compliance Item (SCI) Report MDC-02K1003, Revision M, dated July 25, 2014. The initial compliance time for accomplishing the actions specified in the ALIs is at the later of the times specified in paragraphs (h)(3)(i) and (h)(3)(ii) of this AD. Revising the maintenance or inspection program required by this paragraph terminates the requirements in paragraphs (g) and (h) of AD 2008-06-21 R1, Amendment 39-16100 (74 FR 61504, November 25, 2009).

(i) At the applicable time specified in Appendix C of Boeing Trijet SCI Report MDC-02K1003, Revision M, dated July 25, 2014, except as provided by Appendix D of Boeing Trijet SCI Report MDC-02K1003, Revision M, dated July 25, 2014.

(ii) Within 30 days after accomplishing the actions required by paragraph (h)(1) or (h)(2) of this AD, as applicable; or within 30 days after the effective date of this AD; whichever occurs later.

**(i) No Alternative Actions, Intervals, or CDCCLs**

If the option in paragraph (h)(3) of this AD is accomplished: After the maintenance or inspection program has been revised as provided by paragraph (h)(3) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used unless the actions, intervals, or CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (k) of this AD.

**(j) Compliance Time Extension in Related ADs**

Accomplishment of the actions specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD, as applicable, extends the 18-month repetitive inspections and tests required by paragraph (a) of AD 2002-13-10, Amendment 39-12798 (67 FR 45053, July 8, 2002); and the 18-month repetitive inspections required by paragraph (j) of AD 2011-11-05, Amendment 39-16704 (76 FR 31462, June 1, 2011); to 24-month intervals for pumps affected by those ADs, regardless if the pump is installed in a tank that normally empties, provided the remaining actions required by those two ADs have been accomplished.

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

(1) The Manager, Los Angeles ACO, 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 ACO, send it to the attention of the person identified in paragraph (l) 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 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, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved for AD 2013-08-23, Amendment 39-17441 (78 FR 24037, April 24, 2013), are approved as AMOCs for the corresponding provisions of this AD.

**(l) Related Information**

For more information about this AD, contact Serj Harutunian, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5254; fax: 562-627-5210; email: serj.harutunian@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) Boeing Alert Service Bulletin DC10-28A253, dated June 5, 2014.

(ii) Boeing Alert Service Bulletin MD11-28A133, dated June 5, 2014.

(iii) Boeing Service Bulletin DC10-28-256, dated June 24, 2014.

(iv) Boeing Service Bulletin MD11-28-137, dated June 24, 2014.

(v) Boeing Trijet Special Compliance Item Report MDC-02K1003, Revision M, including Appendices A through D, dated July 25, 2014.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet https://www.myboeingfleet.com.

(4) You may view this service information at FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on February 8, 2016.

Michael Kaszycki,

Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service.

**2016-05-02 Airbus:** Amendment 39-18420. Docket No. FAA-2014-0529; Directorate Identifier 2013-NM-260-AD.

**(a) Effective Date**

This AD becomes effective April 13, 2016.

**(b) Affected ADs**

This AD replaces AD 2011-13-11, Amendment 39-16734 (76 FR 37241, June 27, 2011) ("AD 2011-13-11"); and AD 2013-16-09, Amendment 39-17547 (78 FR 48286, August 8, 2013) ("AD 2013-16-09").

**(c) Applicability**

This AD applies to the Airbus airplanes, certificated in any category, identified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD, all manufacturer serial numbers.

(1) Model A318-111, -112, -121, and -122 airplanes.
(2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
(3) Model A320-211, -212, -214, -231, -232, and -233 airplanes.
(4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by a determination that the inspection interval of the main landing gear (MLG) door opening sequence must be reduced. We are issuing this AD to detect and correct deterioration of the damping ring and associated retaining ring of the MLG door actuator, which can sufficiently increase the friction inside the actuator to restrict opening of the MLG door by gravity, during operation of the landing gear alternate (free-fall) extension system. This condition could prevent the full extension and/or down-locking of the MLG, possibly resulting in MLG collapse during landing and consequent damage to the airplane and injury to occupants.

**(f) Compliance**

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

**(g) Retained Repetitive Inspections/Replacement, With a Formatting Change**

This paragraph restates the requirements of paragraph (g) of AD 2011-13-11, with a formatting change. At the time specified in paragraph (g)(1) or (g)(2) of this AD, as applicable: Do a general visual inspection of the operation of the MLG door opening sequence to determine if a defective

actuator is installed by doing all the applicable actions, including replacing the door actuator, as applicable, specified in the Accomplishment Instructions of Airbus Service Bulletin A320-32-1309, Revision 01, dated June 19, 2006. Do all applicable replacements before further flight. Repeat the inspection thereafter at intervals not to exceed 900 flight cycles. Doing the inspection required by paragraph (l) of this AD terminates the requirements of this paragraph.

(1) For airplanes on which a record of the total number of flight cycles on the MLG door actuator is available: Before the accumulation of 3,000 total flight cycles on the MLG door actuator, or within 800 flight cycles after April 27, 2007 (the effective date of AD 2007-06-18, Amendment 39-14999 (72 FR 13681, March 23, 2007)), whichever is later.

(2) For airplanes on which a record of the total number of flight cycles on the MLG door actuator is not available: Within 800 flight cycles after April 27, 2007 (the effective date of AD 2007-06-18, Amendment 39-14999 (72 FR 13681, March 23, 2007)).

(3) 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 enhance visual access to all exposed 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."

**(h) Retained Provision Regarding Reporting/Parts Return, With No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2011-13-11, with no changes. Although the Accomplishment Instructions of Airbus Service Bulletin A320-32-1309, Revision 01, dated June 19, 2006, specify submitting certain information to the manufacturer and sending defective actuators back to the component manufacturer for investigation, this AD does not include those requirements.

**(i) Retained Revision of the Airplane Flight Manual (AFM), With Formatting Changes**

This paragraph restates the requirements of paragraph (i) of AD 2011-13-11, with formatting changes. Within 14 days after July 12, 2011 (the effective date of AD 2011-13-11), revise the Emergency Procedure Section of the AFM to incorporate the information in figure 1 to paragraph (i) of this AD. This may be done by inserting a copy of this AD into the AFM. When a statement identical to that in figure 1 to paragraph (i) of this AD has been included in the Emergency Procedure Section of the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM. Doing the actions required by paragraph (t) of this AD terminates the requirements of this paragraph.

**Figure 1 to Paragraph (i) of This AD–AFM Revision**

- If ECAM triggers the “L/G GEAR NOT DOWNLOCKED” warning, apply the following procedure:

  Recycle landing gear.

- If unsuccessful after 2 min:

  Extend landing gear by gravity. Refer to ABN-32 L/G GRAVITY EXTENSION.

**(j) Retained Repetitive Checks, With New Optional Actions and New Service Information**

This paragraph restates the requirements of paragraph (j) of AD 2011-13-11, with new optional actions and new service information. Within 14 days after July 12, 2011 (the effective date of AD

2011-13-11), or before the accumulation of 800 total flight cycles, whichever occurs later, check the post flight report (PFR) for centralized fault display system (CFDS) messages triggered within the last 8 days, in accordance with paragraph 4.2.1 of Airbus All Operators Telex (AOT) A320-32A1390, dated February 10, 2011. Repeat the check thereafter at intervals not to exceed 8 days or 5 flight cycles, whichever occurs later. If done in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, the use of an alternative method to check the PFR for CFDS messages (e.g., AIRMAN) is acceptable in lieu of this check if the messages can be conclusively determined from that method. Repetitive inspections of the door opening sequence of the left-hand (LH) and right-hand (RH) doors of the MLG, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014, are an acceptable method of compliance for the actions required by this paragraph. Repetitive inspections of the door opening sequence of the LH and RH doors of the MLG of an airplane, as required by paragraph (p) of this AD, is an acceptable method to comply with the requirements of this paragraph.

**(k) Retained On-Condition Inspection, With New Service Information and Revised Language for an Acronym**

This paragraph restates the requirements of paragraph (k) of AD 2011-13-11, with new service information and revised langue for an acronym. If, during any check required by paragraph (j) of this AD, a pair of specific CFDS messages specified in paragraph 4.2.1 of Airbus AOT A320-32A1390, dated February 10, 2011, has been triggered by both landing gear control and interface units (LGCIU) for the same flight, before further flight, inspect the door opening sequence of the affected doors of the MLG for discrepancies (i.e., if any condition specified in steps (a) through (d) of paragraph 4.2.2 of Airbus AOT A320-32A1390, dated February 10, 2011, is not met; or if any door actuator fails any inspection check specified in Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014). Do the inspection in accordance with paragraph 4.2.2 of Airbus AOT A320-32A1390, dated February 10, 2011; or the Accomplishment Instructions of Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014. As of the effective date of this AD, use only Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014, for the actions required by this paragraph.

**(l) Retained Repetitive Inspections, With New Service Information, New Optional Actions, and Reduced Compliance Times**

This paragraph restates the requirements of paragraph (l) of AD 2011-13-11, with new service information, new optional actions, and reduced compliance times. At the applicable time specified in paragraph (l)(1) or (l)(2) of this AD: Inspect the door opening sequence of the LH and RH doors of the MLG for discrepancies (i.e., if any condition specified in steps (a) through (d) of paragraph 4.2.2 of Airbus AOT A320-32A1390, dated February 10, 2011, is not met; or if any door actuator fails any inspection check specified in the Accomplishment Instructions of Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014). Do the inspection in accordance with the instructions of paragraph 4.2.2 of Airbus AOT A320-32A1390, dated February 10, 2011; or the Accomplishment Instructions of Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014. As of the effective date of this AD, use only Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014, for the actions required by this paragraph. Repeat the inspection within 8 days or 5 flight cycles after the effective date of this AD, whichever occurs later, without exceeding 425 flight cycles since the most recent inspection; and thereafter repeat the inspection at intervals not to exceed 8 days or 5 flight cycles, whichever occurs later. In addition, whenever any airplane is not operated for a period longer than 8 days, do the inspection before further flight. Doing this inspection terminates the requirements of paragraph (g) of this AD. Repetitive inspections of the door opening sequence of the LH and RH doors of the MLG of an airplane, as required by paragraph (p) of this AD, is an acceptable method to comply with the requirements of this paragraph.

(1) For airplanes on which an inspection required by paragraph (g) of this AD has been done as of July 12, 2011 (the effective date of AD 2011-13-11): Within 800 flight cycles after doing the most recent inspection required by paragraph (g) of this AD, or within 100 flight cycles after July 12, 2011, whichever occurs later.

(2) For airplanes on which an inspection required by paragraph (g) of this AD has not been done as of July 12, 2011 (the effective date of AD 2011-13-11): Within 800 flight cycles after July 12, 2011.

**(m) Retained Replacement, With New Service Information**

This paragraph restates the requirements of paragraph (m) of AD 2011-13-11, with new service information. If any discrepancy (i.e., if any condition specified in steps (a) through (d) of paragraph 4.2.2 of Airbus AOT A320-32A1390, dated February 10, 2011, is not met; or if any door actuator fails any inspection check specified in the Accomplishment Instructions of Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014) is found during any inspection required by paragraph (k) or (l) of this AD, before further flight, replace the affected MLG door actuator with a new MLG door actuator, in accordance with the instructions of Airbus AOT A320-32A1390, dated February 10, 2011; or Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014. As of the effective date of this AD, use only Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014, to do the actions required by this paragraph.

**(n) Retained Statement of No Terminating Action for Certain Requirements, With No Changes**

This paragraph restates the statement of paragraph (n) of AD 2011-13-11, with no changes. Replacement of the MLG door actuator as required by paragraph (m) of this AD is not a terminating action for the repetitive actions required by paragraphs (j) and (l) of this AD.

**(o) Retained Configuration and Part Number Determination, With No Changes**

This paragraph restates the requirements of paragraph (g) of AD 2013-16-09, with no changes. At the later of the compliance times specified in paragraphs (o)(1) and (o)(2) of this AD: Do an inspection to determine the configuration (modification status) of the airplane and identify the part number of the LH and RH LGCIU and MLG door actuators. A review of the airplane delivery or maintenance records is acceptable for compliance with the requirements of this paragraph provided the airplane configuration and installed components can be conclusively determined from that review.

(1) Prior to the accumulation of 800 total flight cycles since first flight of the airplane.

(2) Within 14 days after August 23, 2013 (the effective date of AD 2013-16-09).

**(p) Retained MLG Door Opening Sequence Repetitive Inspections, With No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2013-16-09, with no changes. If, during the determination and identification required by paragraph (o) of this AD, the configuration of the airplane is determined to be post-Airbus Modification 39303 or post-Airbus Service Bulletin A320-32-1409 (Interlink Communication ARINC 429 installed), and both an LGCIU and a MLG door actuator are installed with a part number listed in figure 2 to paragraph (p) of this AD: Except as provided by paragraph (s) of this AD, at the later of the compliance times specified in paragraphs (o)(1) and (o)(2) of this AD, and thereafter at intervals not to exceed 8 days or 5 flight cycles, whichever occurs later, do an inspection of the door opening sequence of the LH and RH MLG doors, in accordance with the instructions of Airbus Alert Operators Transmission (AOT) A32N001-13, dated June 24, 2013.

**Figure 2 to Paragraph (p) of This AD–Affected Part Numbers**

| Component name | Part No. |
|---|---|
| LGCIU (LH and RH) | 80-178-02-88012 |
| | 80-178-03-88013 |
| MLG door actuator | 114122006 |
| | 114122007 |
| | 114122009 |
| | 114122010 |
| | 114122011 |
| | 114122012 |

**(q) Retained MLG Door Opening Sequence Corrective Action, With No Changes**

This paragraph restates the requirements of paragraph (i) of AD 2013-16-09, with no changes. If a slow door operation or restricted extension is found during any inspection required by paragraph (p) of this AD: Before further flight, replace the affected MLG door actuator with a new or serviceable actuator, in accordance with the instructions of Airbus AOT A32N001-13, dated June 24, 2013.

**(r) Retained Terminating Action Limitation for Certain Actions, With New Service Information**

This paragraph restates the requirements of paragraph (j) of AD 2013-16-09, with new service information. Replacement of a MLG door actuator, as required by paragraph (q) of this AD, does not constitute terminating action for the repetitive inspections required by paragraph (p) of this AD, unless MLG door actuators having P/N 114122014 are installed on both LH and RH sides, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1407, dated May 14, 2013; or Airbus Service Bulletin A320-32-1407, Revision 01, dated July 3, 2014. As of the effective date of this AD, use only Airbus Service Bulletin A320-32-1407, Revision 01, dated July 3, 2014, for the actions required by this paragraph.

**(s) Retained Repetitive Inspection Exception, With No Changes**

This paragraph restates the requirements of paragraph (k) of AD 2013-16-09, with no changes. Airplanes on which the LGCIU interlink is disconnected (Airbus Modification 155522 applied in production, or modified in-service in accordance with the instructions of Airbus AOT A32N001-13, dated June 24, 2013), or on which MLG door actuators having P/N 114122014 are installed on both LH and RH sides (Airbus Modification 153655 applied in production, or modified in-service as described in Airbus Service Bulletin A320-32-1407), are not required to do the actions required by paragraph (p) of this AD, provided that the airplane is not modified to a configuration as defined in paragraph (p) of this AD.

**(t) New Revision of the AFM**

Within 14 days after the effective date of this AD, revise the Emergency Procedure Section of the AFM to incorporate Airbus A318/A319/A320/A321 Temporary Revision (TR) TR437, L/G–GEAR NOT DOWNLOCKED, Issue 1.0, dated May 23, 2014. When this TR has been included in

general revisions of the AFM, the general revisions may be inserted in the AFM, provided the relevant information in the general revision is identical to that in this TR, and the copy of this TR may be removed from the AFM. Doing the action required by this paragraph terminates the actions required by paragraph (i) of this AD.

**(u) New Replacement of MLG Door Actuator Having P/N 114122012**

Within 12 months after the effective date of this AD: Replace each MLG door actuator having P/N 114122012 with a MLG door actuator having P/N 114122014, and flush the affected hydraulic system, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1407, Revision 01, dated July 3, 2014; or modify each actuator, including doing all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of General Electric Service Bulletin 114122-32-105, Revision 2, dated June 24, 2014; except where General Electric Service Bulletin 114122-32-105, Revision 2, dated June 24, 2014, specifies to contact the manufacturer, before further flight, repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA).

**(v) New Replacement of Certain Other MLG Door Actuators**

Within 24 months after the effective date of this AD: Replace each MLG door actuator having a part number listed in figure 3 to paragraph (v) of this AD, except P/N 114122012, with a MLG door actuator having P/N 114122014, and flush the affected hydraulic system, in accordance with Accomplishment Instructions of Airbus Service Bulletin A320-32-1407, Revision 01, dated July 3, 2014; or modify each actuator, including doing all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of General Electric Service Bulletin 114122-32-105, Revision 2, dated June 24, 2014; except where General Electric Service Bulletin 114122-32-105, Revision 2, dated June 24, 2014, specifies to contact the manufacturer, before further flight, repair using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the EASA; or Airbus's EASA DOA.

**Figure 3 to Paragraph (v) of This AD–Affected Part Numbers**

| Component name | Part No. |
|---|---|
| MLG door actuator | 114122006 |
| | 114122007 |
| | 114122009 |
| | 114122010 |
| | 114122011 |
| | 114122012 |

**(w) New Terminating Action**

Modification of an airplane as required by paragraphs (u) and (v) of this AD, as applicable, constitutes terminating action for all repetitive actions (PFR monitoring checks and inspections) required by this AD for that airplane.

**(x) New Conditional Terminating Action**

Replacement of a MLG door actuator as required by paragraphs (m) and (q) of this AD; or corrective actions as specified in Airbus AOT A320-32A1390, dated February 10, 2011; or replacement of a MLG door actuator as specified in Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014; does not constitute terminating action for the repetitive inspections required by paragraphs (j), (l), and (p) of this AD, unless MLG door actuators having P/N 114122014 are installed on both LH and RH sides, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-32-1407, Revision 01, dated July 3, 2014.

**(y) New Exception to AD Requirements**

(1) An airplane on which MLG door actuators having P/N 114122014 are installed on both LH and RH sides (Airbus Modification 153655 applied in production, or modified in service as specified in Airbus Service Bulletin A320-32-1407, dated May 14, 2013; Airbus Service Bulletin A320-32-1407, Revision 01, dated July 3, 2014; General Electric Service Bulletin 114122-32-105, dated January 17, 2013; or General Electric Service Bulletin 114122-32-105, Revision 1, dated March 26, 2013; or General Electric Service Bulletin 114122-32-105, Revision 2, dated June 24, 2014); is not affected by the requirements of paragraphs (j) through (v) of this AD, provided that no MLG door actuator with a part number in figure 3 to paragraph (v) of this AD has been installed on that airplane since first flight, or since modification, as applicable.

(2) An airplane in the configuration specified in paragraph (y)(1) of this AD, and with flight warning computers having P/N 350E053021212 (H2F7) installed (Airbus Modification 153741 applied in production, or modified in service as specified in Airbus Service Bulletin A320-31-1414), is not affected by the requirement of paragraph (t) of this AD and, following modification, Airbus A318/A319/A320/A321 TR TR437, L/G GEAR NOT DOWNLOCKED, Issue 1.0, dated May 23, 2014 (if inserted), may be removed from the AFM of that airplane.

**(z) New Parts Installation Prohibitions**

(1) Except as specified in paragraph (z)(2) of this AD, as of the effective date of this AD, do not install on any airplane a MLG door actuator having a part number listed in figure 3 to paragraph (v) of this AD.

(2) For an airplane subject to the requirements of paragraphs (u) and (v) of this AD, as applicable, do not install a MLG door actuator having a part number listed in figure 3 to paragraph (v) of this AD after modification of the airplane.

(3) Except as specified in paragraph (z)(4) of this AD, as of the effective date of this AD, do not install on any airplane a flight warning computer (FWC) having a part number listed in figure 4 to paragraph (z) of this AD.

(4) For an airplane subject to the requirements of paragraphs (u) and (v) of this AD, as applicable, do not install a FWC having a part number listed in figure 4 to paragraph (z) of this AD after modification of the airplane.

**Figure 4 to Paragraph (z) of This AD–Affected Part Numbers**

| Component name | Part No. |
|---|---|
| Flight warning computer | 350E016187171 (C5) |
| | 350E017238484 (H1D1) |
| | 350E017248685 (H1D2) |
| | 350E017251414 (H1E1) |
| | 350E017271616 (H1E2) |
| | 350E018291818 (H1E3CJ) |
| | 350E018301919 (H1E3P) |
| | 350E018312020 (H1E3Q) |
| | 350E053020202 (H2E2) |
| | 350E053020303 (H2E3) |
| | 350E053020404 (H2E4) |
| | 350E053020606 (H2F2) |
| | 350E053020707 (H2F3) |
| | 350E053021010 (H2F3P) |
| | 350E053020808 (H2F4) |
| | 350E053020909 (H2F5) |
| | 350E053021111 (H2F6) |

**(aa) Credit for Previous Actions**

(1) This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before April 27, 2007 (the effective date of AD 2007-06-18), using Airbus Service Bulletin A320-32-1309, dated March 7, 2006. This service information is not incorporated by reference in this AD.

(2) This paragraph provides credit for actions required by paragraphs (k), (l), and (m) of this AD, if those actions were performed before the effective date of this AD using Airbus Service Bulletin A320-32-1390, Revision 01, dated September 21, 2011; or Airbus Service Bulletin A320-32-1390, Revision 02, dated October 23, 2013. This service information is not incorporated by reference in this AD.

(3) This paragraph provides credit for actions required by paragraphs (u) and (v) of this AD, if those actions were performed before the effective date of this AD using General Electric Service Bulletin 114122-32-105, dated January 17, 2013; or General Electric Service Bulletin 114122-32-105, Revision 1, dated March 26, 2013. This service information is not incorporated by reference in this AD.

**(bb) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. 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. The AMOC approval letter must specifically reference this AD.

(2) Required for Compliance (RC): If any Airbus 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.

(3) Contacting the Manufacturer: As of the effective date of this AD, except as specified in paragraph (j) of this AD for the use of an alternative method to check the PFR for CFDS messages, 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 Branch, ANM-116, Transport Airplane Directorate, FAA; or EASA; or Airbus's EASA DOA. If approved by the DOA, the approval must include the DOA-authorized signature.

(4) Previously Approved AMOCs: AMOCs approved previously for AD 2011-13-11 and AD 2013-16-09 are approved as AMOCs for the corresponding provisions of this AD.

**(cc) Special Flight Permits**

Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the airplane can be modified (if the operator elects to do so), provided the MLG remains extended and locked, and that no MLG recycle is done.

**(dd) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0221, dated September 30, 2014, 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-2014-0529.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (ee)(7), (ee)(8), and (ee)(9) of this AD.

**(ee) Material Incorporated by Reference**

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

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

(3) The following service information was approved for IBR on April 13, 2016.

(i) Airbus A318/A319/A320/A321 Temporary Revision TR437, L/G–

GEAR NOT DOWNLOCKED, Issue 1.0, dated May 23, 2014, to the Airbus A318/A319/A320/A321 Airplane Flight Manual.

(ii) Airbus Service Bulletin A320-32-1390, Revision 03, dated July 3, 2014.

(iii) Airbus Service Bulletin A320-32-1407, Revision 01, dated July 3, 2014.

(iv) General Electric Service Bulletin 114122-32-105, Revision 2, dated June 24, 2014.

(4) The following service information was approved for IBR on August 23, 2013 (78 FR 48286, August 8, 2013).

(i) Airbus Alert Operators Transmission A32N001-13, dated June 24, 2013.

(ii) Reserved.

(5) The following service information was approved for IBR on July 12, 2011 (76 FR 37241, June 27, 2011).

(i) Airbus All Operators Telex A320-32A1390, dated February 10, 2011.

(ii) Reserved.

(6) The following service information was approved for IBR on April 27, 2007 (72 FR 13681, March 23, 2007).

(i) Airbus Service Bulletin A320-32-1309, Revision 01, dated June 19, 2006.

(ii) Reserved.

(7) For Airbus 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.

(8) For General Electric service information identified in this AD contact GE Aviation, Customer Support Center, 1 Neumann Way, Cincinnati, OH 45215; phone: 513-552-3272; email: cs.techpubs@ge.com; Internet: http://www.geaviation.com.

(9) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(10) 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 Renton, Washington, on February 18, 2016.

Dionne Palermo,

Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service.

**2016-05-04 Dowty Propellers:** Amendment 39-18422; Docket No. FAA-2015-3661; Directorate Identifier 2015-NE-24-AD.

**(a) Effective Date**

This AD becomes effective April 15, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Dowty Propellers R352/6-123-F/1, R352/6-123-F/2, and R410/6-123-F/35 model propellers, part numbers (P/Ns) 660715001, 660715004, and 660715005 with hub P/Ns 660715201, 660715255, 660720217, 660720241, 660720252, 660720260, and 660720288, installed.

**(d) Reason**

This AD was prompted by reports of dowel hole cracks in the face of the rear hub half. We are issuing this AD to prevent loss of structural integrity of the propeller hub, which could result in damage to the propeller and damage to the airplane.

**(e) Actions and Compliance**

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

(1) At the next removal of the propeller from the airplane, after the effective date of this AD, install liners into the hub location dowel holes and identify the hub P/N.

(2) Use Dowty Propellers Alert Service Bulletin (ASB) No. F50-61-A165, Revision 2, dated July 28, 2015 to install the liners and identify the hub.

**(f) Credit for Previous Actions**

You may take credit for the actions required by paragraph (e) of this AD if you performed those actions before the effective date of this AD using Dowty Propellers ASB No. F50-61-A165, Revision 1, dated May 12, 2015; or initial issue, dated November 19, 2012.

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

The Manager, Boston Aircraft Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

**(h) Related Information**

(1) For more information about this AD, contact Michael Schwetz, Aerospace Engineer, Boston Aircraft Certification Office, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7761; fax: 781-238-7898; email: michael.schwetz@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2015-0158, dated July 30, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating it in Docket No. FAA-2015-3661.

**(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) Dowty Propellers Alert Service Bulletin No. F50-61-A165, Revision 2, dated July 28, 2015.

(ii) Reserved.

(3) For Dowty Propellers service information identified in this AD, contact Dowty Propellers, 114 Powers Court, Sterling, VA 20166; phone: 703-421-4434; fax: 703-450-0087; email: technicalsupport@dowty.com; Internet: http://dowty.com/services/repair-and-overhaul.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

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

Issued in Burlington, Massachusetts, on February 24, 2016.
Robert J. Ganley,
Acting Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

**2016-05-05 Airbus:** Amendment 39-18423. Docket No. FAA-2015-0243; Directorate Identifier 2014-NM-114-AD.

**(a) Effective Date**

This AD becomes effective April 13, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the Airbus airplanes specified in paragraphs (c)(1) through (c)(6) of this AD, certificated in any category, all manufacturer serial numbers.

(1) Airbus Model A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes.
(2) Airbus Model A300 B4-601, B4-603, B4-620, and B4-622 airplanes.
(3) Airbus Model A300 B4-605R and B4-622R airplanes.
(4) Airbus Model A300 F4-605R and F4-622R airplanes.
(5) Airbus Model A300 C4-605R Variant F airplanes.
(6) Airbus Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by reports of cracked aluminum support struts of the trimmable horizontal stabilizer (THS) caused by stress corrosion. We are issuing this AD to detect and correct cracked THS support struts, which could lead to the rupture of all four support struts making the remaining structure unable to carry limit loads, which could result in loss of the THS and reduced control of the airplane.

**(f) Compliance**

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

**(g) Inspection for Part Number**

For airplanes in pre-modification 06101 configuration: Within 12 months after the effective date of this AD, do an inspection to identify the part number of each support strut installed on the THS at frame (FR) 91, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in paragraphs (g)(1) through (g)(3) of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection, provided those records can be relied upon for that purpose and

the part number can be positively identified from that review. If no aluminum strut(s) having part number (P/N) R21449, R21449D, R21449G, or R21449H is found during any inspection required by this paragraph, no further action is required by this AD for that horizontal stabilizer, except for paragraph (l) of this AD.

(1) For Airbus Model A300 series airplanes: Airbus Service Bulletin A300-53-0395, dated February 14, 2014.

(2) For Airbus Model A300 B4-600, B4-600R, and F4-600R series airplanes, and A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes): Airbus Service Bulletin A300-53-6174, dated February 14, 2014.

(3) For Airbus Model A310 series airplanes: Airbus Service Bulletin A310-53-2137, dated February 14, 2014.

**(h) Repetitive High Frequency Eddy Current (HFEC) Inspections**

For airplanes in post-modification 06101 configuration; and for airplanes in pre-modification 06101 configuration on which any aluminum support strut(s) having P/N R21449, P/N R21449D, P/N R21449G, or P/N R21449H is found: Within the applicable compliance times specified in paragraph (h)(1), (h)(2), or (h)(3) of this AD, do an HFEC inspection for cracking of the aluminum THS support strut ends at FR 91, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in paragraphs (g)(1) through (g)(3) of this AD. Reinforcing clamps already installed on strut ends must be removed before accomplishing the HFEC inspection and re-installed after the inspection, in accordance with the Accomplishment Instructions of the applicable service bulletin specified in paragraphs (g)(1) through (g)(3) of this AD. Repeat the inspection thereafter at intervals not to exceed 24 months.

(1) For airplanes having manufacturer serial number (MSN) 0499 through MSN 0747 inclusive (post-mod 06101): Within 12 months after the effective date of this AD.

(2) For airplanes having MSN 0748 through MSN 0878 inclusive (post-mod 06101): Within 18 months after the effective date of this AD.

(3) For airplanes having MSN 0001 through MSN 0498 inclusive (pre-mod 06101) having one or more aluminum struts: Within 24 months after the effective date of this AD.

**(i) Installation of Reinforcing Clamps**

Concurrently with the initial HFEC inspection required by paragraph (h) of this AD, identify struts having P/N R21449, P/N R21449D, P/N R21449G, or P/N R21449H with no reinforcing clamps previously installed, and before next flight, install reinforcing clamps on each strut end, in accordance with the Accomplishment Instructions of the applicable service bulletin specified in paragraphs (i)(1) through (i)(3) of this AD.

(1) For Airbus Model A300 series airplanes: Airbus Service Bulletin A300-53-0394, dated February 14, 2014.

(2) For Airbus Model A300 B4-600, B4600R, and F4-600R series airplanes, and A300 C4-605R Variant F airplanes (collectively called Model A300-600 series airplanes): Airbus Service Bulletin A300-53-6172, dated February 14, 2014.

(3) For Airbus Model A310 series airplanes: Airbus Service Bulletin A310-53-2136, dated February 14, 2014.

**(j) Corrective Actions**

If, during any inspection required by paragraph (h) of this AD, any cracking is found, before further flight, replace the affected THS support strut(s) with serviceable struts and install clamps on each strut end, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in paragraphs (g)(1) through (g)(3) of this AD.

**(k) Clarification**

Installation of reinforcing clamps as required by paragraph (i) of this AD, and the replacement of support struts and/or the installation of clamps as required by paragraph (j) of this AD, do not constitute terminating action for the repetitive inspections required by paragraph (h) of this AD.

**(l) Reporting**

At the applicable time specified in paragraphs (l)(1) and (l)(2) of this AD: After accomplishment of any inspection required by paragraph (g) of this AD, report all inspection results to Airbus, including no findings, in accordance with the Accomplishment Instructions of the applicable service bulletins specified in paragraphs (g)(1) through (g)(3) of this AD.

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

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

**(m) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, 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 Branch, send it to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-2125; fax 425-227-1149. 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. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, 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.

(3) Reporting Requirements: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

**(n) Related Information**

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2014-0164, dated July 11, 2014, for related information. This MCAI may be found in the

AD docket on the Internet at http://www.regulations.gov/#!documentDetail;D=FAA-2015-0243-0002.

**(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 A300-53-0394, dated February 14, 2014.

(ii) Airbus Service Bulletin A300-53-0395, dated February 14, 2014.

(iii) Airbus Service Bulletin A300-53-6172, dated February 14, 2014.

(iv) Airbus Service Bulletin A300-53-6174, dated February 14, 2014.

(v) Airbus Service Bulletin A310-53-2136, dated February 14, 2014.

(vi) Airbus Service Bulletin A310-53-2137, dated February 14, 2014.

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

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on February 23, 2016.

Dionne Palermo,

Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service.

**2016-05-07 Engine Alliance:** Amendment 39-18425; Docket No. FAA-2015-3713; Directorate Identifier 2015-NE-23-AD.

**(a) Effective Date**

This AD is effective April 19, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Engine Alliance (EA) GP7270 turbofan engines with one or both of the following installed:

(1) A high-pressure compressor (HPC) rotor stage 2 to 5 spool, part number (P/N) 382-104-807-0, with a serial number (S/N) listed in EA Service Bulletin (SB) EAGP7-72-327, dated July 21, 2015; or

(2) An HPC rotor stage 7 to 9 spool, P/N 2031M90G04, 2031M90G05, or 2031M90G07, with an S/N listed in EA SB EAGP7-72-328, dated July 21, 2015.

**(d) Unsafe Condition**

This AD was prompted by reports of the installation of non-conforming honeycomb cartridges in the HPC adjacent to the HPC rotor stage 2 to 5 spool and stage 7 to 9 spool. We are issuing this AD to prevent failure of the HPC rotor stage 2 to 5 spools and stage 7 to 9 spools, which could lead to uncontained engine failure and damage to the airplane.

**(e) Compliance**

Comply with this AD within the compliance times specified, unless already done. Within 30 days after the effective date of this AD or before accumulating 2,100 engine cycles since the last disassembly of the compressor module of the engine, whichever occurs later:

(1) For engines with an HPC rotor stage 2 to 5 spool, P/N 382-104-807-0, installed with an S/N listed in EA SB EAGP7-72-327, dated July 21, 2015, do the following:

(i) Remove from service the HPC rotor stage 2 to 5 spool and replace with a part eligible for installation.

(ii) Remove from service the honeycomb cartridges on the HPC stage 5 vanes and replace with parts eligible for installation.

(2) For engines with an HPC rotor stage 7 to 9 spool, P/N 2031M90G04, 2031M90G05, or 2031M90G07 installed with an S/N listed in EA SB EAGP7-72-328, dated July 21, 2015, do the following:

(i) Remove from service the HPC rotor stage 7 to 9 spool and replace with a part eligible for installation.

(ii) Remove from service the honeycomb cartridges on the HPC stage 6, stage 7, and stage 8 vanes and replace with parts eligible for installation.

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

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

**(g) Related Information**

For more information about this AD, contact Kyle Gustafson, Aerospace Engineer, Engine & Propeller Directorate, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7183; fax: 781-238-7199; email: kyle.gustafson@faa.gov.

**(h) Material Incorporated by Reference**

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

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

(i) Engine Alliance Service Bulletin (SB) EAGP7-72-327, dated July 21, 2015.

(ii) Engine Alliance SB EAGP7-72-328, dated July 21, 2015.

(3) For Engine Alliance service information identified in this AD, contact Engine Alliance, 400 Main St., East Hartford, CT 06108, M/S 169-10, phone: 800-565-0140; email: help24@pw.utc.com; Web site: www.engineallianceportal.com.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

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

Issued in Burlington, Massachusetts, on February 26, 2016.
Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

**2016-05-12 The Boeing Company:** Amendment 39-18430; Docket No. FAA-2015-2961; Directorate Identifier 2014-NM-145-AD.

**(a) Effective Date**

This AD is effective April 22, 2016.

**(b) Affected ADs**

This AD replaces AD 2012-15-13, Amendment 39-17142 (77 FR 47267, August 8, 2012) ("AD 2012-15-13").

**(c) Applicability**

This AD applies to The Boeing Company Model 747-100B SUD, 747-300, 747-400, and 747-400D series airplanes; and Model 747-200B series airplanes having a stretched upper deck; certificated in any category; excluding airplanes that have been converted to a large cargo freighter configuration.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by reports of cracked and severed tension ties, broken fasteners, and cracks in the frame, shear web, and shear ties adjacent to tension ties for the upper deck. This AD was also prompted by an evaluation by the design approval holder, which indicated that the upper deck is subject to widespread fatigue damage. We are issuing this AD to prevent fatigue cracking of the tension ties, shear webs, and frames of the upper deck, which could result in rapid decompression and reduced structural integrity of the airplane.

**(f) Compliance**

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

**(g) Retained Repetitive Stage 1 Inspections, With No Changes**

This paragraph restates the requirements of paragraph (g) of AD 2012-15-13, with no changes. For all airplanes: Do detailed inspections for cracking or discrepancies of the fasteners in the tension ties, shear webs, and frames at body stations (STA) 1120 through 1220, and related investigative and corrective actions as applicable, by doing all actions specified in and in accordance with "Stage 1 Inspection" of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2507, dated April 21, 2005, except as provided by paragraph (k) of this AD; or Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010. As of September 12, 2012 (the effective

date of AD 2012-15-13), only Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010, may be used to do the actions required by this paragraph. Do the Stage 1 inspections at the applicable times specified in paragraphs (h) and (i) of this AD, except as provided by paragraphs (g)(1) and (g)(2) of this AD. Accomplishment of the initial Stage 2 inspection required by paragraph (j) of this AD terminates the requirements of this paragraph. Any applicable related investigative and corrective actions must be done before further flight. Doing the modification required by paragraph (p) of this AD terminates the repetitive inspection requirements of this paragraph.

(1) Where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2507, dated April 21, 2005, specifies a compliance time relative to "the original issue date on this service bulletin," this AD requires compliance before the specified compliance time after April 26, 2006 (the effective date of AD 2006-06-11, Amendment 39-14520 (71 FR 14367, March 22, 2006)).

(2) For any airplane that reaches the applicable compliance time for the initial Stage 2 inspection (as specified in Table 1, Compliance Recommendations, under paragraph 1.E., of Boeing Alert Service Bulletin 747-53A2507, dated April 21, 2005) before reaching the applicable compliance time for the initial Stage 1 inspection: Accomplishment of the initial Stage 2 inspection terminates the Stage 1 inspections.

**(h) Retained Compliance Time for Initial Stage 1 Inspection, With No Changes**

This paragraph restates the requirements of paragraph (h) of AD 2012-15-13, with no changes. Do the initial Stage 1 inspection at the earlier of the times specified in paragraphs (h)(1) and (h)(2) of this AD.

(1) Inspect at the earlier of the times specified in paragraphs (h)(1)(i) and (h)(1)(ii) of this AD.

(i) At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2507, dated April 21, 2005.

(ii) Before the accumulation of 10,000 total flight cycles, or within 250 flight cycles after November 28, 2007 (the effective date of AD 2007-23-18, Amendment 39-15266 (72 FR 65655, November 23, 2007)), whichever occurs later.

(2) Inspect at the later of the times specified in paragraphs (h)(2)(i) and (h)(2)(ii) of this AD.

(i) Before the accumulation of 12,000 total flight cycles.

(ii) Within 50 flight cycles or 20 days, whichever occurs first, after November 28, 2007 (the effective date of AD 2007-23-18, Amendment 39-15266 (72 FR 65655, November 23, 2007)).

**(i) Retained Compliance Times for Repetitive Stage 1 Inspections, With No Changes**

This paragraph restates the requirements of paragraph (i) of AD 2012-15-13, with no changes. Repeat the Stage 1 inspection specified in paragraph (g) of this AD at the time specified in paragraph (i)(1) or (i)(2) of this AD, as applicable. Repeat the inspection thereafter at intervals not to exceed 250 flight cycles, until the initial Stage 2 inspection required by paragraph (j) of this AD has been done.

(1) For airplanes on which the initial Stage 1 inspection has not been accomplished as of November 28, 2007 (the effective date of AD 2007-23-18, Amendment 39-15266 (72 FR 65655, November 23, 2007)): Do the next inspection before the accumulation of 10,000 total flight cycles, or within 250 flight cycles after the initial Stage 1 inspection done in accordance with paragraph (g) of this AD, whichever occurs later.

(2) For airplanes on which the initial Stage 1 inspection has been accomplished as of November 28, 2007 (the effective date of AD 2007-23-18, Amendment 39-15266 (72 FR 65655, November 23, 2007)): Do the next inspection at the applicable time specified in paragraph (i)(2)(i) or (i)(2)(ii) of this AD.

(i) For airplanes that have accumulated fewer than 12,000 total flight cycles as of November 28, 2007 (the effective date of AD 2007-23-18, Amendment 39-15266 (72 FR 65655, November 23,

2007)): Do the next inspection before the accumulation of 10,000 total flight cycles, or within 250 flight cycles after November 28, 2007, whichever occurs later.

(ii) For airplanes that have accumulated 12,000 total flight cycles or more as of November 28, 2007 (the effective date of AD 2007-23-18, Amendment 39-15266 (72 FR 65655, November 23, 2007)): Do the next inspection at the later of the times specified in paragraphs (i)(2)(ii)(A) and (i)(2)(ii)(B) of this AD.

(A) Within 250 flight cycles after accomplishment of the initial Stage 1 inspection.

(B) Within 50 flight cycles or 20 days, whichever occurs first, after November 28, 2007 (the effective date of AD 2007-23-18, Amendment 39-15266 (72 FR 65655, November 23, 2007)).

**(j) Retained Repetitive Stage 2 Inspections, With No Changes**

This paragraph restates the requirements of paragraph (j) of AD 2012-15-13, with no changes. For all airplanes: Do detailed and high frequency eddy current inspections for cracking or discrepancies of the fasteners in the tension ties, shear webs, and frames at STAs 1120 through 1220, and related investigative and corrective actions as applicable, by doing all actions specified in and in accordance with "Stage 2 Inspection" of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2507, dated April 21, 2005; or Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010; except as provided by paragraph (k) of this AD. Do the initial inspections at the earlier of the times specified in paragraphs (j)(1) and (j)(2) of this AD. Repeat the Stage 2 inspection thereafter at the applicable times specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2507, dated April 21, 2005; or Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010. As of September 12, 2012 (the effective date of AD 2012-15-13), only Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010, may be used. Any applicable related investigative and corrective actions must be done before further flight. Accomplishment of the initial Stage 2 inspection ends the repetitive Stage 1 inspections. Doing the modification required by paragraph (p) of this AD terminates the repetitive inspection requirements of this paragraph.

(1) Before the accumulation of 16,000 total flight cycles, or within 1,000 flight cycles after November 28, 2007 (the effective date of AD 2007-23-18, Amendment 39-15266 (72 FR 65655, November 23, 2007)), whichever occurs later.

(2) Before the accumulation of 10,000 total flight cycles, or within 1,000 flight cycles after September 12, 2012 (the effective date of AD 2012-15-13, Amendment 39-17142 (77 FR 47267, August 8, 2012)), whichever occurs later.

**(k) Retained Exception to Corrective Action Instructions, With No Changes**

This paragraph restates the requirements of paragraph (k) of AD 2012-15-13, with no changes. If any discrepancy, including but not limited to any crack, broken fastener, loose fastener, or missing fastener is found during any inspection required by paragraph (g), (h), (i), or (j) of this AD, and Boeing Alert Service Bulletin 747-53A2507, dated April 21, 2005; or Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010; specifies to contact Boeing for appropriate action: Before further flight, repair the discrepancy using a method approved in accordance with the procedures specified in paragraph (t) of this AD.

**(l) Retained Stage 2 Inspection: Work at STA 1140, With No Changes**

This paragraph restates the requirements of paragraph (l) of AD 2012-15-13, with no changes. For all airplanes: Except as provided by paragraph (o) of this AD, at the time specified in paragraph 1.E, "Compliance," of Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010, do an open hole high frequency eddy current (HFEC) inspection for cracking in the forward and aft tension tie channels at 12 fastener locations inboard of the aluminum straps at STA 1140, and

before further flight do all applicable repairs. Do all actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010. Repeat the inspections thereafter at the time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010. Doing the modification required by paragraph (p) of this AD terminates the inspection requirements in this paragraph.

**(m) Retained One-Time Inspection for Incorrectly Installed Angles, With No Changes**

This paragraph restates the requirements of paragraph (m) of AD 2012-15-13, with no changes. For Group 1, Configuration 1, airplanes as identified in Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010: Except as provided by paragraph (o) of this AD, at the time specified in paragraph 1.E, "Compliance," of Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010, do a detailed inspection to determine if the angle is installed correctly, and before further flight re-install all angles that were installed incorrectly. Do all actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010.

**(n) Retained One-Time Inspection for Cracks in Frames at Previous Tension Tie Locations, With No Changes**

This paragraph restates the requirements of paragraph (n) of AD 2012-15-13, with no changes. For Group 1, Configuration 2, airplanes; and Groups 2 and 3 airplanes; as identified in Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010: Except as provided by paragraph (o) of this AD, at the time specified in paragraph 1.E, "Compliance," of Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010, do an open hole HFEC inspection for cracks at the fastener locations (STAs 1120, 1160, 1200, and 1220) where the tension tie previously attached to the frame prior to modification to the Boeing Special Freighter or Boeing Converted Freighter configuration, and before further flight do all applicable repairs. Do all actions in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010. Doing the modification required by paragraph (p) of this AD terminates the one-time inspection requirements in this paragraph.

**(o) Retained Exception to Boeing Alert Service Bulletin 747-53A2507, Revision 1, Dated January 14, 2010, With No Changes**

This paragraph restates the requirements of paragraph (o) of AD 2012-15-13, with no changes. Where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010, specifies a compliance time relative to "the Revision 1 date of this service bulletin," this AD requires compliance within the specified compliance time after September 12, 2012 (the effective date of AD 2012-15-13).

**(p) Retained Modification and Post-Modification Repetitive Inspections, With Revised Service Information and a New Exception**

This paragraph restates the requirements of paragraph (p) of AD 2012-15-13, with revised service information and a new exception. Except as provided by paragraphs (p)(1), (p)(2), and (p)(3) of this AD: At the applicable times specified in paragraph 1.E, "Compliance," of Boeing Service Bulletin 747-53A2559, Revision 1, dated August 4, 2011, modify the frame-to-tension-tie joints at STAs 1120 through 1220; do all related investigative and applicable corrective actions; do the repetitive post-modification detailed inspections for cracking of the tension tie and frame structure and all applicable corrective actions; and do the additional modification. Do all actions in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2559, Revision 1, dated

August 4, 2011; or Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014. Modifying the frame-to-tension-tie joints at STAs 1120 through 1220 terminates the repetitive inspection requirements of paragraphs (g) and (j) of this AD, the inspection requirements of paragraph (l) of this AD, and the one-time inspection requirement of paragraph (n) of this AD. As of the effective date of this AD, only Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014, may be used to accomplish the actions specified in this paragraph.

(1) Where paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2559, Revision 1, dated August 4, 2011, specifies a compliance time relative to "the original issue date of this service bulletin," this AD requires compliance within the specified compliance time after September 12, 2012 (the effective date of AD 2012-15-13).

(2) Where Boeing Service Bulletin 747-53A2559, Revision 1, dated August 4, 2011; or Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014; specifies to contact Boeing for repair instructions or additional modification requirements: Before further flight, repair the cracking or do the additional actions using a method approved in accordance with the procedures specified in paragraph (t) of this AD.

(3) For Group 3 through 5, Configuration 1 airplanes identified in Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014: Operators may accomplish the actions required by paragraph (p) of this AD within the applicable compliance times specified in paragraph 1.E., "Compliance" of Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014.

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

This paragraph restates the credit provided by paragraph (q) of AD 2012-15-13, with no changes. This paragraph provides credit for the corresponding actions required by paragraph (p) of this AD, if those actions were done before September 12, 2012 (the effective date of AD 2012-15-13), using Boeing Alert Service Bulletin 747-53A2559, dated January 8, 2009, which is not incorporated by reference in this AD.

**(r) New Repetitive Post-Modification Eddy Current Inspections**

Do an eddy current inspection of all areas of the modified tension ties for cracking, in accordance with Part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014. Do the inspection at the time specified in Table 2 of paragraph 1.E, "Compliance," of Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014, except where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014, specifies a compliance time relative to "the Revision 2 date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD. If any crack is found, before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (t) of this AD. If no crack is found, repeat the inspection thereafter at the intervals specified in paragraph 1.E, "Compliance," of Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014.

**(s) New One-Time Surface HFEC Inspections**

Do a surface HFEC inspection of the tension tie center section, for cracking in the forward and aft tension tie channels between STAs 1120 through 1220, in accordance with Part 4 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014. Do the inspection at the applicable time specified in Table 1 or Table 3 of paragraph 1.E, "Compliance," of Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014, except where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014, specifies a compliance time relative to "the Revision 2 date of this service bulletin," this AD requires compliance within the specified compliance time after the effective

date of this AD. If any crack is found, before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (t) of this AD.

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

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in paragraph (u)(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, alteration, or modification 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 to make those findings. For a repair method to be approved, the repair method, modification deviation, or alteration deviation must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

(4) AMOCs approved previously for AD 2012-15-13, are approved as AMOCs for the corresponding provisions of this AD.

**(u) Related Information**

(1) For more information about this AD, contact Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6432; fax: 425-917-6590; email: bill.ashforth@faa.gov.

(2) Service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (v)(6) and (v)(7) of this AD.

**(v) Material Incorporated by Reference**

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

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

(3) The following service information was approved for IBR on April 22, 2016.

(i) Boeing Alert Service Bulletin 747-53A2559, Revision 2, dated May 13, 2014.

(ii) Reserved.

(4) The following service information was approved for IBR on September 12, 2012 (77 FR 47267, August 8, 2012).

(i) Boeing Alert Service Bulletin 747-53A2507, Revision 1, dated January 14, 2010.

(ii) Boeing Service Bulletin 747-53A2559, Revision 1, dated August 4, 2011.

(5) The following service information was approved for IBR on November 28, 2007 (72 FR 65655, November 23, 2007).

(i) Boeing Alert Service Bulletin 747-53A2507, dated April 21, 2005.

(ii) Reserved.

(6) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com.

(7) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(8) 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 Renton, Washington, on February 29, 2016.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

**2016-06-02 The Boeing Company:** Amendment 39-18433; Docket No. FAA-2016-4222; Directorate Identifier 2016-NM-017-AD.

**(a) Effective Date**

This AD is effective March 29, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

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

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a report of cracking in the center section of the horizontal stabilizer. We are issuing this AD to detect and correct cracking of the rear spar center section of the horizontal stabilizer that could lead to departure of the horizontal stabilizer from the airplane.

**(f) Compliance**

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

**(g) Actions for the Rear Spar Upper Chord Horizontal Flange of the Horizontal Stabilizer Center Section**

At the applicable times specified in table 1 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, except as required by paragraphs (j)(1), (j)(2), and (j)(3) of this AD: Do the actions required by paragraph (g)(1) or (g)(2) of this AD; and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, except as required by paragraph (j)(4) of this AD. Do all applicable related investigative and corrective actions at the applicable times specified in tables 5, 6, 7, and 8 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016. For airplanes on which "Option 1" of "CONDITION 15: SURFACE HFEC INSPECTION OF THE CHORD AROUND THE GUSSETS–NO CRACK FOUND" is done as specified in the Accomplishment Instructions of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, repeat the inspection specified in paragraph

(g)(2) of this AD thereafter at the applicable times specified in table 8 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016.

(1) Do an inspection to identify the fasteners common to the rear spar upper chord upper gusset of the horizontal stabilizer center section.

(2) Do a surface high frequency eddy current (HFEC) inspection of the rear spar upper chord around the two inboard gusset plates common to the thrust and auxiliary beams for any crack.

**(h) Repetitive Inspections of the Vertical Flange of the Rear Spar Upper Chord on the Horizontal Stabilizer Center Section**

At the applicable times specified in table 2 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, except as required by paragraphs (j)(1) and (j)(2) of this AD: Do a surface HFEC inspection of the vertical flange of the rear spar upper chord; and do all applicable corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, except as required by paragraph (j)(4) of this AD. Do all applicable corrective actions before further flight. Repeat the inspection of the vertical flange of the rear spar upper chord thereafter at the time specified in table 2 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016.

**(i) Repetitive Inspections of the Vertical Flange Stiffener Fasteners of the Rear Spar Upper Chord on the Horizontal Stabilizer Center Section**

At the applicable times specified in table 3 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, except as required by paragraphs (j)(1) and (j)(2) of this AD: Do the actions required by paragraph (i)(1) or (i)(2) of this AD; and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, except as required by paragraph (j)(4) of this AD. Do all applicable related investigative and corrective actions at the applicable times specified in tables 3 and 4 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016. Repeat the inspection specified in paragraph (i)(2) of this AD thereafter at the applicable times specified in tables 3 and 4 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016.

(1) Do an open hole HFEC inspection of the vertical flange at the stiffeners of the rear spar upper chord on the horizontal stabilizer center section for any crack.

(2) Do a surface HFEC inspection of the vertical flange around the stiffeners of the rear spar upper chord on the horizontal stabilizer center section for any crack.

**(j) Exceptions to Service Information**

(1) Where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, specifies a compliance time "after the original issue date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, refers to condition or compliance time in "horizontal stabilizer center section flight cycles" or "center section flight cycles," this AD requires compliance for those conditions or compliance time in terms of airplane flight cycles.

(3) The Condition column of table 1 in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016, refers to "horizontal stabilizer center section flight cycles." This AD, however, applies to the airplanes with the specified airplane total flight cycles as of the effective date of this AD.

(4) Where Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016; specifies to contact Boeing for appropriate action: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

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

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in paragraph (l) 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, 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 (j)(4) of this AD: For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (k)(4)(i) and (k)(4)(ii) of this AD apply.

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

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

**(l) Related Information**

For more information about this AD, contact Payman Soltani, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5313; fax: 562-627-5210; email: Payman.Soltani@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) Boeing Alert Service Bulletin 737-55A1100, dated January 26, 2016.

(ii) Reserved.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on March 3, 2016.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

**2016-06-03 Airbus:** Amendment 39-18434. Docket No. FAA-2015-2963; Directorate Identifier 2015-NM-016-AD.

**(a) Effective Date**

This AD becomes effective April 22, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the Airbus airplanes, certificated in any category, identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, all manufacturer serial numbers.

(1) Model A319-131, -132, and -133 airplanes.

(2) Model A320-232 and -233 airplanes.

(3) Model A321-131, -231, and -232 airplanes.

**(d) Subject**

Air Transport Association (ATA) of America Code 71, Power Plant.

**(e) Reason**

This AD was prompted by reports of forward engine mount attachment pins that were manufactured from discrepant raw material. We are issuing this AD to prevent failure of a forward engine mount attachment pin, possible loss of an engine in-flight, and consequent reduced controllability of the airplane.

**(f) Compliance**

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

**(g) Identification of Part Numbers for Forward Engine Mount and Attachment Pins**

Except as provided by paragraph (i) of this AD, at the earliest of the times specified in paragraphs (g)(1) through (g)(4) of this AD: For each engine, identify the part number of the forward engine mount, and the part number and serial number of the attachment pin for that forward engine mount, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-71-1064, Revision 01, dated April 1, 2015; and Goodrich Aerostructures Service Bulletin V2500-NAC-71-0323, Revision 01, dated January 28, 2015. A review of airplane maintenance records is acceptable in lieu of this identification if the part number of the forward engine mount, and the part number and serial number of the attachment pin for that forward engine mount, can be conclusively determined from that review. If any part number of the forward engine mount, or part number or

serial number of the attachment pins for the forward engine mount, cannot be identified: At the earliest of the times specified in paragraphs (g)(1) through (g)(4) of this AD, contact the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA), for identification information.

(1) Within 24 months after the effective date of this AD.

(2) At the next engine removal after the effective date of this AD.

(3) Within 7,500 flight hours after the effective date of this AD.

(4) Within 5,000 flight cycles after the effective date of this AD.

**(h) Corrective Actions**

If, during any identification required by paragraph (g) of this AD, a forward engine mount having part number (P/N) 745-2010-503 is found, and the attachment pin has P/N 740-2022-501 with any serial number that is included in figure 1 to paragraphs (h) and (j) of this AD: At the earliest of the times specified in paragraphs (g)(1) through (g)(4) of this AD, replace the affected attachment pin with a serviceable part having a part number other than P/N 740-2022-501, and having a serial number that is not identified in figure 1 to paragraphs (h) and (j) of this AD, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-71-1064, Revision 01, dated April 1, 2015; and Goodrich Aerostructures Service Bulletin V2500-NAC-71-0323, Revision 01, dated January 28, 2015.

**Figure 1 to Paragraphs (h) and (j) of This AD–Part Numbers and Serial Numbers of Affected Forward Engine Mounts and Attachment Pins**

| Serial Numbers | |
|---|---|
| **Attachment Pin (P/N 740-2022-501)** | **Forward Engine Mount (P/N 745-2010-503)** |
| 1396SC | 13665001 |
| 1391SC | 13655001 |
| 1412SC | 13689001 |
| 1402SC | 13669001 |
| 1409SC | 13683001 |
| 1416SC | 13697001 |
| 1418SC | 13701001 |
| 1417SC | 13699001 |
| 1414SC | 13693001 |
| 1415SC | 13695001 |
| 1420SC | 13705001 |
| 1421SC | 13707001 |
| 1422SC | 13709001 |
| 1436SC | 13737001 |
| 1438SC | 13741001 |
| 1452SC | 13769001 |
| 1456SC | 13777001 |
| 1397SC | 13667001 |
| 1432SC | 13729001 |
| 1405SC | 13675001 |
| 1411SC | 13687001 |

| | |
|---|---|
| 1389SC | 13651001 |
| 1392SC | 13657001 |
| 1382SC | 13637001 |
| 1384SC | 13641001 |
| 1407SC | 13679001 |
| 1408SC | 13681001 |
| 1395SC | 13663001 |
| 1406SC | 13677001 |
| 1383SC | 13639001 |
| 1404SC | 13673001 |
| 1393SC | 13659001 |
| 1413SC | 13691001 |
| 1386SC | 13645001 |
| 1388SC | 13649001 |
| 1390SC | 13653001 |
| 1410SC | 13685001 |
| 1423SC | 13711001 |
| 1424SC | 13713001 |
| 1403SC | 13671001 |
| 1419SC | 13703001 |
| 1385SC | 13643001 |
| 1387SC | 13647001 |
| 1431SC | 13727001 |
| 1433SC | 13731001 |
| 1425SC | 13715001 |
| 1428SC | 13721001 |
| 1429SC | 13723001 |
| 1430SC | 13725001 |
| 1427SC | 13719001 |
| 1434SC | 13733001 |
| 1442SC | 13749001 |
| 1394SC | 13661001 |
| 1441SC | 13747001 |
| 1426SC | 13717001 |
| 1437SC | 13739001 |
| 1439SC | 13743001 |
| 1443SC | 13751001 |
| 1448SC | 13761001 |
| 1435SC | 13735001 |
| 1440SC | 13745001 |
| 1454SC | 13773001 |
| 1455SC | 13775001 |
| 1451SC | 13767001 |
| 1453SC | 13771001 |
| 1444SC | 13753001 |

| | |
|---|---|
| 1450SC | 13765001 |
| 1461SC | 13787001 |
| 1469SC | 13817001 |
| 1480SC | 13839001 |
| 1481SC | 13841001 |
| 1446SC | 13757001 |
| 1449SC | 13763001 |
| 1467SC | 13813001 |
| 1445SC | 13755001 |
| 1462SC | 13789001 |
| 1464SC | 13793001 |
| 1466SC | 13811001 |
| 1470SC | 13819001 |
| 1459SC | 13783001 |
| 1463SC | 13791001 |
| 1475SC | 13829001 |
| 1458SC | 13781001 |
| 1477SC | 13833001 |
| 1474SC | 13827001 |
| 1478SC | 13835001 |
| 1479SC | 13837001 |
| 1472SC | 13823001 |

**(i) Exception to Paragraph (g) of This AD**

For airplanes with manufacturer serial numbers not identified in figure 2 to paragraph (i) of this AD: If it can be conclusively determined that an engine has not been replaced after March 1, 2011 (the date of manufacture of the first airplane with affected engine mounts), the airplane is not affected by the requirements of paragraphs (g) and (h) of this AD.

**Figure 2 to Paragraph (i) of This AD–Airplane Manufacturer Serial Nos.**

| Airplane Manufacturer Serial Nos. |
|---|
| 4593 |
| 4602 |
| 4620 |
| 4637 |
| 4638 |
| 4642 |
| 4643 |
| 4644 |
| 4660 |
| 4677 |
| 4690 |
| 4696 |
| 4700 |

| |
|---|
| 4701 |
| 4703 |
| 4706 |
| 4707 |
| 4710 |
| 4716 |
| 4719 |
| 4725 |
| 4726 |
| 4731 |
| 4736 |
| 4737 |
| 4741 |
| 4746 |
| 4751 |
| 4752 |
| 4753 |
| 4754 |
| 4755 |
| 4757 |
| 4761 |
| 4762 |
| 4772 |
| 4773 |
| 4774 |
| 4775 |
| 4779 |
| 4782 |
| 4783 |
| 4784 |
| 4786 |
| 4788 |
| 4790 |
| 4791 |
| 4798 |
| 4804 |
| 4813 |

**(j) Parts Installation Prohibition**

As of the effective date of this AD, no person may install on any airplane any engine mount attachment pin having P/N 740-2022-501 with a serial number identified in figure 1 to paragraphs (h) and (j) of this AD.

**(k) Special Flight Permits**

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

**(l) 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 the effective date of this AD using the service information specified in paragraphs (l)(1) and (l)(2) of this AD.

(1) Airbus Service Bulletin A320-71-1064, dated November 5, 2014, which is not incorporated by reference in this AD.

(2) Goodrich Aerostructures Service Bulletin V2500-NAC-71-0323, dated September 18, 2014, 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 Branch, ANM-116, Transport Airplane Directorate, 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 Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. 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. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, 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): 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 Airworthiness Directive 2015-0004, dated January 13, 2015, 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-2015-2963.

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

(3) Goodrich Aerostructures service information identified in this AD that is not incorporated by reference is available at the addresses specified in paragraphs (o)(4) and (o)(5) 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 A320-71-1064, Revision 01, dated April 1, 2015.

(ii) Goodrich Aerostructures Service Bulletin V2500-NAC-71-0323, Revision 01, dated January 28, 2015.

(3) For Airbus 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) For Goodrich Aerostructures service information identified in this AD, contact UTC Aerospace Systems, ATTN: Christopher Newth–
V2500 A1/A5 Project Engineer, Aftermarket–Aerostructures; 850 Lagoon Drive, Chula Vista, CA; telephone 619-498-7505; email christopher.newth@utas.utc.com.

(5) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

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

Issued in Renton, Washington, on March 7, 2016.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

**2016-06-04 The Boeing Company:** Amendment 39-18435 ; Docket No. FAA-2015-0495; Directorate Identifier 2014-NM-172-AD.

**(a) Effective Date**

This AD is effective April 22, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

(1) This AD applies to The Boeing Company Model 737-300, -400, and -500 series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014.

(2) Installation of Supplemental Type Certificate (STC) ST01219SE (http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/be866b732f6cf31086257b9700692796/$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 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by reports of fatigue cracking at certain fastener locations in the window corners of the window belt area. We are issuing this AD to detect and correct fatigue cracking around the fastener locations that could cause multiple window corner skin cracks, which could result in 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) Inspections**

At the applicable time specified in tables 1 and 2 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, except as required by paragraph (j)(1) of this AD: Do external surface high frequency eddy current (HFEC) inspections for cracking of the skin at the 12 fastener locations at the upper forward and lower aft corners of each window between station (STA) 360 and STA 540 and at the upper aft and lower forward corners of each window

between STA 727 and STA 908, left-side and right-side of the fuselage, at and between stringers S-11 and S-13; and all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, except as required by paragraphs (j)(2), (j)(3), (j)(4), and (j)(5) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspections at the applicable times specified in tables 1 and 2 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014. Accomplishing the preventive modification specified in paragraph (h) of this AD terminates the repetitive inspections required by this paragraph at the modified location only.

(1) The inspections required by the introductory text of paragraph (g) of this AD may be terminated in areas with repairs installed prior to the effective date of this AD, provided the repairs are reinforcing and address the cracking issue identified in this AD, and installation was approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) via FAA Form 8100-9.

(2) For Group 1 airplanes identified in Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014: Window corner crack repairs terminate the inspection required by the introductory text of paragraph (g) of this AD in the repaired area only. The repair, including all applicable related investigative and corrective actions, must be done in accordance with Part 6 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, except as required by paragraphs (j)(2), (j)(3), (j)(4), and (j)(5) of this AD.

**(h) Preventive Modification**

Accomplishment of a preventive modification in the fastener locations in the window corners of the window belt area between STA 360 and STA 540 and between STA 727 and STA 908, left-side and right-side of the fuselage, at and between stringers S-11 and S-13, terminates the inspections required by paragraph (g) of this AD at the modified location only. The modification, including all applicable related investigative and corrective actions, must be done in accordance with Part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, except as required by paragraphs (j)(2), (j)(3), (j)(4), and (j)(5) of this AD.

**(i) Repetitive Inspections, Replacements, and Corrective Actions**

For airplanes having any condition identified in Table 4 or Table 5 of paragraph l.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014: At the applicable times specified in Table 4 and Table 5 of paragraph l.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, do a window frame replacement or an internal detailed inspection for cracks of the window forging around the fastener collars, as applicable, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, except as required by paragraphs (j)(2), (j)(3), (j)(4), and (j)(5) of this AD. Repeat the inspections at the applicable times specified in table 4 and table 5 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014.

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

(1) Where Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, specifies a compliance time "after the original issue date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, specifies to contact Boeing for repair instructions: Before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (l) of this AD. Although Boeing Alert Service

Bulletin 737-53A1328, dated July 22, 2014, specifies to contact Boeing for repair instructions, and specifies that action as Required for Compliance (RC), this AD requires repair as specified in this paragraph.

(3) Where note (e) of Figure 5 of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, specifies to "Refer to Paragraph 3.B., Work Instructions, Table 2 for edge margin requirements," operators must comply with Table 3 of paragraph 3.B., "Work Instructions," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, for edge margin requirements.

(4) Where the notes for fastener codes A and B in figures 9, 10, 11, and 12 of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, refer to "Paragraph 3.B., Work Instructions, Table 2" for edge margin requirements, operators must comply with Table 3 of paragraph 3.B., "Work Instructions," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, for edge margin requirements.

(5) Where note (e) of figures 6, 7, and 8 and step 1.a.(1) of Part 5 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, specifies to "Refer to Paragraph 3.B., Work Instructions, Table 3 for edge margin requirements," operators must comply with Table 3 of paragraph 3.B., "Work Instructions," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, for edge margin requirements.

**(k) Post-Repair Inspections/Post-Modification Inspections**

Table 3 and Table 8 of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014, specify post-modification airworthiness limitation inspections in compliance to 14 CFR 25.571(a)(3) at the modified locations, which support compliance with 14 CFR 121.1109(c)(2) or 129.109(b)(2). As airworthiness limitations, these inspections are required by maintenance and operational rules. It is therefore unnecessary to mandate them in this AD. Deviations from these inspections require FAA approval, but do not require an alternative method of compliance.

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

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in paragraph (m) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-Requests@faa.gov.

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

(3) Except as required by paragraph (j)(2) of this AD: For service information that contains steps that are labeled as RC, the provisions of paragraphs (l)(3)(i) and (l)(3)(ii) of this AD apply.

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

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

(4) 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 ODA that has been authorized by the Manager, Los Angeles ACO, 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.

**(m) Related Information**

For more information about this AD, contact Jennifer Tsakoumakis, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Blvd., Lakewood, CA 90712-4137; phone: 562-627-5264; fax: 562-627-5210; email: jennifer.tsakoumakis@faa.gov.

**(n) Material Incorporated by Reference**

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

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

(i) Boeing Alert Service Bulletin 737-53A1328, dated July 22, 2014.

(ii) Reserved.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on March 7, 2016.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

**2016-06-05 The Boeing Company:** Amendment 39-18436; Docket No. FAA-2015-2459; Directorate Identifier 2015-NM-002-AD.

**(a) Effective Date**

This AD is effective April 22, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 777-200, -200LR, -300, -300ER, and -777F series airplanes, certificated in any category, as identified in Boeing Special Attention Service Bulletin 777-54-0035, dated October 30, 2014.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by reports of fire and smoke at the engine aft pylon area resulting from fuel leakage caused by a damaged O-ring in the fuel coupling attached to the wing front spar. We are issuing this AD to prevent fire and smoke at the engine aft pylon area in the event of a fuel leak, which could cause personal injury during ground operations. A fire spreading back and up to the aft fairing pylon can result in an uncontrolled fire in the strut and ignite the fuel tank.

**(f) Compliance**

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

**(g) Sealant Application**

Within 1,875 days after the effective date of this AD, apply sealant to fill the gap between the lower wing panels adjacent to the strut aft vapor barrier, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 777-54-0035, dated October 30, 2014.

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

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the

person identified in paragraph (i)(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) For service information that contains steps that are labeled as Required for Compliance (RC), the provisions of paragraphs (h)(3)(i) and (h)(3)(ii) apply.

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

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

(4) An AMOC that provides an acceptable level of safety may be used for any repair 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, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

**(i) Related Information**

(1) For more information about this AD, contact Kevin Nguyen, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6501; fax: 425-917-6590; email: kevin.nguyen@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

**(j) Material Incorporated by Reference**

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

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

(i) Boeing Special Attention Service Bulletin 777-54-0035, dated October 30, 2014.

(ii) Reserved.

(3) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com.

(4) You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on March 9, 2016.
Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.

**2016-06-06 Quest Aircraft Design, LLC:** Amendment 39-18437; Docket No. FAA-2015-5318; Directorate Identifier 2015-CE-035-AD.

**(a) Effective Date**

This AD is effective April 22, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Quest Aircraft Design, LLC Model KODIAK 100 airplanes, all serial numbers 100-0001 through 100-0149, that are certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2730; Elevator Control System.

**(e) Unsafe Condition**

This AD was prompted by a report of limited control yoke movement due to cushion edging jammed in the elevator control anti-rotation guide slot. We are issuing this AD to prevent failure of the elevator control system, which could result in loss of control.

**(f) Compliance**

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

**(g) Inspect Cushion Edging**

Before further flight April 22, 2016 (after the effective date of this AD) and repetitively thereafter at intervals not to exceed 50 hours time-in-service until the terminating action specified in paragraph (i) of this AD is done, inspect the cushion edging, part number (P/N) M22529/2-3R-25, located on each side of the elevator control anti-rotation guide slot, P/N 100-619-0008, for the pilot and co-pilot control yoke assemblies, following section 5.1 Cushion Edging Inspection of Quest Aircraft Company Field Service Instruction, Elevator Control System–Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated, as specified in Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014; and Quest Aircraft Company KODIAK 100 Mandatory Service Bulletin SB14-07, Revision 01, dated November 23, 2015.

**(h) Replace Cushion Edging**

If damage or wear is found during any inspection required in paragraph (g) of this AD, before further flight, replace the cushion edging following section 5.3 of Quest Aircraft Company Field Service Instruction, Elevator Control System–Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated, as specified in Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014; and Quest Aircraft Company KODIAK 100 Mandatory Service Bulletin SB14-07, Revision 01, dated November 23, 2015.

**(i) Install Wear Pads (Terminating Action for the Repetitive Inspections)**

Within 1 year after April 22, 2016 (the effective date of this AD), remove the cushion edging, P/N M22529/2-3R-25, installed on the elevator control anti-rotation guide, and install wear pads, P/N 100-619-0037, on the elevator bearing assembly link arm following section 5. Instructions, including all subsections, of Quest Aircraft Field Service Instruction, Yoke Anti-Rotation Guide Wear Pad Upgrade, Report No. FSI-108, Revision 00, not dated, as specified in Quest Aircraft KODIAK 100 Recommended Service Bulletin SB15-01, dated March 26, 2015. Installing all four wear pads on the pilot and co-pilot arms of the elevator bearing assemblies terminates the repetitive inspections required in paragraph (g) of this AD.

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

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

**(k) Related Information**

For more information about this AD, contact David Herron, Aerospace Engineer, Seattle ACO, FAA, 1601 Lind Avenue SW., Renton, Washington 98057; phone: (425) 917-6469; fax: (425) 917-6591; email: david.herron@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) Quest Aircraft Company KODIAK 100 Mandatory Service Bulletin SB14-07, Revision 01, dated November 23, 2015.

(ii) Quest Aircraft KODIAK Mandatory Service Bulletin SB14-07, dated August 26, 2014.

(iii) Quest Aircraft Company Field Service Instruction, Elevator Control System–Cushion Edging Inspection, Report No. FSI-105, Revision 00, not dated.

(iv) Quest Aircraft KODIAK 100 Recommended Service Bulletin SB15-01, dated March 26, 2015.

(v) Quest Aircraft Field Service Instruction, Yoke Anti-Rotation Guide Wear Pad Upgrade, Report No. FSI-108, Revision 00, not dated.

(3) For Quest Aircraft Design, LLC service information identified in this AD, contact Quest Aircraft Design, LLC, 1200 Turbine Drive, Sandpoint, Idaho 83864; telephone: (208) 263-1111; toll free: (866) 263-1112; email: CustomerService@QuestAircraft.com; Internet: www.questaircraft.com.

(4) You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148. In addition, you can access this service information on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-5318.

(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 March 10, 2016.

Pat Mullen,

Acting Manager, Small Airplane Directorate,

Aircraft Certification Service.

**2016-06-07 The Boeing Company:** Amendment 39-18438; Docket No. FAA-2014-0774; Directorate Identifier 2013-NM-154-AD.

**(a) Effective Date**

This AD is effective April 22, 2016.

**(b) Affected ADs**

This AD replaces AD 2006-22-15, Amendment 39-14812 (71 FR 64884, November 6, 2006) ("AD 2006-22-15").

**(c) Applicability**

This AD applies to all The Boeing Company Model 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, certificated in any category.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by multiple reports of cracking in the nose wheel well (NWW) top panel and side panel webs and stiffeners. We are issuing this AD to prevent fatigue cracking of the NWW side and top panels, which could result in a NWW depressurization event severe enough to reduce the structural integrity of the fuselage.

**(f) Compliance**

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

**(g) Repetitive Inspections and Corrective Actions With New Compliance Times**

Except as specified in paragraphs (h)(1) and (h)(2) of this AD, at the applicable time specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013: Do the actions specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, and do all applicable related investigative and corrective actions; in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013, except as specified in paragraph (h)(3) of this AD. Do all applicable related investigative and corrective actions before further flight. Repeat the inspections specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD thereafter at the applicable intervals specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013. The repetitive interval for the inspection of Area 2 specified in table 1 in paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-

53A2465, Revision 5, dated July 11, 2013, is 1,000 flight cycles. In table 2 and table 3 in paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013, the date "January 27, 2005," is the effective date of AD 2004-25-23, Amendment 39-13911 (69 FR 76839, December 23, 2004); and the date "May 10, 2005," is the effective date of AD 2005-09-02, Amendment 39-14070 (70 FR 21141, April 25, 2005; corrected May 25, 2005 (70 FR 29940)).

(1) Do an external detailed inspection for cracks of the top and sidewall panel webs of the NWW (specified as Area 1 and Area 2 in Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013).

(2) Do internal detailed and surface high frequency eddy current (HFEC) inspections for cracks of the sidewall panel and top panel stiffeners of the NWW (specified as Area 3 in Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013).

(3) Do an external detailed and ultrasonic testing (UT) inspection for cracks of the top and sidewall panel webs of the NWW (specified as Area 1 and Area 2 in Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013).

**(h) Exceptions to Boeing Service Bulletin 747-53A2465, Revision 5, Dated July 11, 2013**

(1) Table 1 in paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013, applies to airplanes with less than 15,000 total flight cycles "as of the Revision 5 date of this service bulletin." For this AD, however, table 1 applies to airplanes with the specified total flight cycles as of the effective date of this AD.

(2) Table 1 in paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013, specifies a compliance time of "13,000 total flight-cycles," or "within 1,000 flight cycles after the Revision 5 date of this service bulletin," whichever occurs later. This AD requires compliance before the accumulation of 10,000 total flight cycles or within 1,000 flight cycles after the effective date of this AD, whichever occurs later.

(3) If any cracking or damage is found during any inspection required by paragraph (g) of this AD, and Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013, specifies to contact Boeing for appropriate action: Before further flight, repair the cracking or damage using a method approved in accordance with the procedures specified in paragraph (p) of this AD.

**(i) NWW Modification**

For airplanes identified in Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013: At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013, replace the left-side, right-side, and top panels of the NWW, as applicable, with new panels, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013. As of the effective date of this AD, concurrently with doing the replacement specified in Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013, do a detailed inspection for any cracks or damage (including, but not limited to, dents and corrosion) in all attaching structural elements that are common to the removed top panel and side panels, as applicable, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013. If any crack or damage is found, before further flight, repair the cracking or damage using a method approved in accordance with the procedures specified in paragraph (p) of this AD. In paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013, the date "December 11, 2006," is the effective date of AD 2006-22-15.

**(j) Repetitive Post-Modification Inspections**

For airplanes on which the replacement specified in paragraph (i) of this AD has been done: Except as required by paragraph (k) of this AD, at the applicable time specified in paragraph 1.E.,

"Compliance," of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013, do the actions specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD. If any crack is found: Before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (p) of this AD. Repeat the inspections specified in paragraphs (j)(1), (j)(2), and (j)(3) of this AD thereafter at the applicable intervals specified in paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013.

(1) Do an external detailed inspection for cracks in the side panel webs, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013.

(2) Do an internal detailed inspection and high frequency eddy current (HFEC) inspection for cracks in the top and side panel stiffeners, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013.

(3) Do an external detailed inspection for cracks in the top panel web, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013.

**(k) Exception to Boeing Service Bulletin 747-53A2562, Revision 3, Dated July 11, 2013**

Where paragraph 1.E., "Compliance," of Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013, specifies a compliance time relative to the "Revision 3 date of this service bulletin," this AD requires compliance within the specified compliance time after the effective date of this AD.

**(l) NWW Modification for Certain Airplanes**

For airplanes identified in Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012: At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012, replace the left side, right side, and top panels of the NWW, as applicable, with new panels, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012. Concurrently with doing the replacement specified in this paragraph, do a detailed inspection for cracks of the attaching structural elements that are common to the removed top, left side, and right side panels of the NWW, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012. If any crack is found, before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (p) of this AD.

**(m) Repetitive Post-Modification Inspections for Certain Airplanes**

For airplanes on which the replacement specified in paragraph (l) of this AD has been done: At the applicable time specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012, do the actions specified in paragraphs (m)(1), (m)(2), and (m)(3) of this AD. If any crack is found: Before further flight, repair the cracking using a method approved in accordance with the procedures specified in paragraph (p) of this AD. Repeat the inspections specified in paragraphs (m)(1), (m)(2), and (m)(3) of this AD thereafter at the applicable intervals specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012.

(1) Do an external detailed inspection for cracks in the side panel webs, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012.

(2) Do an internal detailed inspection and HFEC inspection for cracks in the top and side panel stiffeners, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012.

(3) Do an external detailed inspection for cracks in the top panel web, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2808, dated November 30, 2012.

**(n) Terminating Action for Certain Repetitive Inspections**

Replacing the left side, right side, and top panels of the NWW with new panels as specified in paragraph (i) or (l) of this AD terminates the repetitive inspections required by paragraph (g) of this AD.

**(o) Credit for Previous Actions**

(1) This paragraph restates the credit given in paragraph (k) of AD 2006-22-15.

(i) This paragraph provides credit for the actions required by paragraph (g)(1) of this AD, if those actions were performed before January 27, 2005 (the effective date of AD 2004-25-23, Amendment 39-13911 (69 FR 76839, December 23, 2004)), using Boeing Alert Service Bulletin 747-53A2465, dated April 5, 2001, which is not incorporated by reference in this AD.

(ii) This paragraph provides credit for actions required by paragraphs (g)(1) and (g)(2) of this AD, if those actions were performed before December 11, 2006 (the effective date of AD 2006-22-15), using a service bulletin identified in paragraph (o)(1)(ii)(A), (o)(1)(ii)(B), or (o)(1)(ii)(C) of this AD, which are not incorporated by reference in this AD.

(A) Boeing Alert Service Bulletin 747-53A2465, Revision 1, dated October 16, 2003.

(B) Boeing Alert Service Bulletin 747-53A2465, Revision 2, dated November 11, 2004.

(C) Boeing Alert Service Bulletin 747-53A2465, Revision 3, dated December 23, 2004.

(2) This paragraph provides credit for the actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Alert Service Bulletin 747-53A2465, Revision 4, dated February 24, 2005, which is not incorporated by reference in this AD.

(3) This paragraph provides credit for the actions required by paragraphs (i) and (j) of this AD, if those actions were performed before the effective date of this AD using the service information identified in paragraph (o)(3)(i) or (o)(3)(ii) of this AD.

(i) Boeing Service Bulletin 747-53A2562, Revision 1, dated July 28, 2005, which was incorporated by reference in AD 2006-22-15.

(ii) Boeing Service Bulletin 747-53A2562, Revision 2, dated May 31, 2007, which is not incorporated by reference in this AD.

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

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in paragraph (q)(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, 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) AMOC actions approved previously for AD 2006-22-15 are approved as AMOCs for the corresponding actions of this AD. The compliance times in AMOCs approved previously for AD 2006-22-15 are not approved for the corresponding actions and compliance times in this AD, if this AD specifies an earlier compliance time than that specified in AD 2006-22-15. Compliance times in AMOCs approved previously for AD 2006-22-15 that meet the requirements of this AD are acceptable.

**(q) Related Information**

(1) For more information about this AD, contact Bill Ashforth, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6432; fax: 425-917-6590; email: Bill.Ashforth@faa.gov.

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

**(r) 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 747-53A2808, dated November 30, 2012.

(ii) Boeing Service Bulletin 747-53A2465, Revision 5, dated July 11, 2013.

(iii) Boeing Service Bulletin 747-53A2562, Revision 3, dated July 11, 2013.

(3) For Boeing service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P.O. Box 3707, MC 2H-65, Seattle, WA 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; Internet https://www.myboeingfleet.com.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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 Renton, Washington, on March 9, 2016.

Michael Kaszycki,

Acting Manager, Transport Airplane Directorate,

Aircraft Certification Service.

**2016-06-08 The Boeing Company:** Amendment 39-18439; Docket No. FAA-2016-4227; Directorate Identifier 2016-NM-025-AD.

**(a) Effective Date**

This AD is effective March 18, 2016.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to The Boeing Company Model 787-8 and 787-9 airplanes, certificated in any category, powered by General Electric (GE) GEnx engines.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by a recent engine fan blade rub event that caused an in-flight non-restartable power loss. We are issuing this AD to prevent reduced fan tip clearance, which could result in engine damage and a possible in-flight non-restartable power loss of one or both engines.

**(f) Compliance**

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

**(g) Revision of Airplane Flight Manual (AFM): Certificate Limitations**

Within 7 days after the effective date of this AD, revise the Certificate Limitations chapter of the applicable Boeing 787 AFM to include the statement provided in figure 1 to paragraph (g) of this AD. This may be done by inserting a copy of this AD into the AFM.

**Figure 1 to Paragraph (g) of This AD**

**Engine Operational Limits**

*Cold Weather Operations Fan Ice Removal*

In order to avoid possible fan damage and engine failure, when in icing conditions above 12,500 feet MSL, the flight crew must comply with the Cold Weather Operations Additional Fan Ice Removal procedure contained in the Operating Procedures chapter of this manual.

**(h) AFM Revision: Operating Procedures**

Within 7 days after the effective date of this AD, revise the Operating Procedures chapter of the Boeing 787 AFM to include the statement provided in figure 2 to paragraph (h) of this AD. This may be done by inserting a copy of this AD into the AFM.

**Figure 2 to Paragraph (h) of This AD**

**Cold Weather Operations**

**Additional Fan Ice Removal Procedure**

This procedure is required when in icing conditions above 12,500 feet MSL, by the Engine Operational Limits Cold Weather Operations Fan Ice Removal limitation contained in the Certificate Limitations chapter of this manual. The language below shall not be modified.

During flight in icing conditions (EAI EICAS indication showing) with N1 settings below 85%, or when fan icing is suspected due to high engine vibration, the fan blades must be cleared of any ice. Do the following procedure every 5 minutes on both engines, one engine at a time: Increase to a minimum of 85% N1 momentarily, then resume normal operation.

**(i) Rework**

For airplanes with two engines with engine serial numbers listed in paragraph 1.A., "Effectivity," of GE GEnx-1B Service Bulletin 72-0309 R00, dated March 11, 2016: On or before March 25, 2016, rework the fan stator module assembly of one of the engines, in accordance with paragraphs 3.A.(1)(b), 3.B., or 3.C. of the Accomplishment Instructions of GE GEnx-1B Service Bulletin 72-0309 R00, dated March 11, 2016.

**(j) Parts Installation Limitation**

As of March 25, 2016, no person may operate an airplane that has two engines with engine serial numbers listed in paragraph 1.A., "Effectivity," of GE GEnx-1B Service Bulletin 72-0309 R00, dated March 11, 2016, unless at least one engine has been reworked in accordance with paragraph 3.A.(1)(b), 3.B., or 3.C. of the Accomplishment Instructions of GE GEnx-1B Service Bulletin 72-0309 R00, dated March 11, 2016.

**(k) Reporting Provisions**

Although GE GEnx Service Bulletin GEnx-1B 72-0309 R00, dated March 11, 2016, specifies reporting certain tip clearance measurements to GE, this AD does not require any report.

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

(1) The Manager, Seattle Aircraft Certification Office (ACO), 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 ACO, send it to the attention of the person identified in paragraph (m) 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, 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.

**(m) Related Information**

For more information about this AD, contact Sue Lucier, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle ACO, 1601 Lind Avenue SW., Renton, WA 98057-3356; phone: 425-917-6438; fax: 425-917-6590; email: Suzanne.Lucier@faa.gov.

**(n) Material Incorporated by Reference**

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

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

(i) GE GEnx-1B Service Bulletin 72-0309 R00, dated March 11, 2016.

(ii) Reserved.

(3) For service information identified in this AD, contact General Electric Company, GE Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215; phone: 513-552-3272; email: geae.aoc@ge.com.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(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.

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Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.