

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

LARGE AIRCRAFT

BIWEEKLY 2019-07

3/18/2019 - 3/31/2019



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

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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects			
Biweekly 2019-01			
2018-22-07		Engine Alliance	GP7270, GP7272, and GP7277 model turbofan engines
2018-23-12	COR	Zodiac Aero Evacuation Systems	Fusible plugs installed on emergency evacuation equipment
2018-25-08	R 2017-22-07	Airbus SAS	A319, A320, A321 airplanes
2018-26-01	R 2018-18-01	CFM International S.A.	CFM56-7B turbofan engines
2018-26-03		The Boeing Company	757-200 series airplanes
2018-26-04		Airbus SAS	A350-941 and -1041 airplanes
2018-26-05	A 2015-19-01	The Boeing Company	777-200, 777-200LR, 777-300, 777-300ER, and 777F series airplanes
2018-26-06		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
Biweekly 2019-02			
2019-01-01		The Boeing Company	787-8 airplanes
Biweekly 2019-03			
2019-01-01	COR	The Boeing Company	787-8 airplanes
Biweekly 2019-04			
2018-23-04		Bombardier, Inc.	DHC-8-102, -103, -106, -201, -202, -301, -311, and -315 airplanes
2018-24-01		International Aero Engines	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines
2019-01-03	R 2016-18-01	The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-01-04		The Boeing Company	787 series airplanes
2019-01-05	A 2017-05-10	Airbus SAS	A330-201, A330-202, A330-203, A330-223, A330-243, A330-223F, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, and A330-343 airplanes
2019-01-06		The Boeing Company	737-100, -200, -200C, -300, -400, and -500 series airplanes
2019-01-07		Airbus SAS	A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes
2019-01-08		The Boeing Company	777-200, -200LR, -300, and -300ER series airplanes
2019-02-01	R 2018-16-07	General Electric Company	GEnx-1B54, -1B58, -1B64, -1B67, -1B70, -1B54/P1, -1B58/P1, -1B64/P1, -1B67/P1, -1B70/P1, -1B54/P2, -1B58/P2, -1B64/P2, -1B67/P2, -1B70/P2, -1B70C/P1, -1B70/72/P1, -1B70/75/P1, -1B74/75/P1, -1B75/P1, -1B70C/P2, -1B70/72/P2, -1B70/75/P2, -1B74/75/P2, -1B75/P2, -1B76/P2, -1B76A/P2, -1B78/P2, -2B67, -2B67B, and -2B67/P turbofan engines
2019-02-03		The Boeing Company	787-8, 787-9, and 787-10 airplane
2019-02-04	R 2018-22-05	Engine Alliance	GP7270, GP7272, and GP7277 turbofan engines
2019-03-01		Pratt & Whitney Division	PW4074, PW4074D, PW4077, PW4077D, PW4084D, PW4090, and PW4090-3 turbofan engines
Biweekly 2019-05			
2018-21-14		Zodiac Aerotechnics	MC10 series crew oxygen mask regulators
2018-26-07		Airbus SAS	A350-941 and -1041 airplanes
2018-26-08		Airbus SAS	Note: Was missing from BW2019-01 A320-214, A320-232, A320-233, A321-211, and A321-231 airplanes
2019-03-03	A 2016-17-03	Airbus SAS	Note: Was missing from BW2019-01 A318, A319, A320, A321 airplanes
2019-03-04	R 2018-11-16	Engine Alliance	GP7270 and GP7277 model turbofan engines
2019-03-06		The Boeing Company	737-300, -400, and -500 series airplanes
2019-03-07	R 2017-16-05	The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-03-08		Airbus SAS	A350-941 airplanes
2019-03-09		Airbus SAS	A310-304, -322, -324, and -325 airplanes

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2019-03-10	R 2017-07-05	Airbus SAS	A300 airplanes
2019-03-11		Airbus SAS	A350-941 and -1041 airplanes
2019-03-15		Airbus SAS	A330-201, -202, and -203; A330-301, -302, and -303 airplanes
2019-03-17	A 2017-25-04	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-19		Saab AB, Saab Aeronautics	SAAB 2000 airplanes
2019-03-20	A 2014-16-23 A 2016-16-09	Dassault Aviation	FALCON 7X airplanes
2019-03-21		Embraer S.A.	ERJ 190-100 STD, -100 LR, and -100 IGW; ERJ 190-200 STD, -200 LR, and -200 IGW airplanes
2019-03-23		Airbus SAS	A330, A340 airplanes
Biweekly 2019-06			
2019-03-13		Gulfstream Aerospace LP	Gulfstream G150 airplanes
2019-03-14		Dassault Aviation	FAN JET FALCON and FAN JET FALCON SERIES C, D, E, F, and G airplanes
2019-03-16	A 2006-25-06 A 97-04-08	Fokker Services B.V.	F.27 Mark 100, 200, 300, 400, 500, 600, and 700 airplanes
2019-03-18		Airbus SAS	A318, A319, A320 airplanes
2019-03-22		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11 airplanes
2019-03-24		The Boeing Company	737-400 series airplanes
2019-03-25	A 2008-02-15	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-26		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER series airplanes
2019-03-27		Dassault Aviation	Falcon 10 airplanes
2019-03-28	R 2016-07-23	Airbus SAS	A318, A319, A320, A321 airplanes
2019-03-30		Empresa Brasileira de Aeronautica S.A.	EMB-135, EMB-145 airplanes
2019-05-01	R 2017-11-06	Pratt & Whitney Division	PW2037, PW2037D, PW2037M, PW2040, PW2040D, PW2043, PW2143, PW2643, and F117-PW-100 turbofan engines
2019-05-02	R 2017-22-13	Rolls-Royce plc	RB211-Trent 970-84 and RB211-Trent 972-84 turbofan engines
2019-05-08	R 2015-12-08	Airbus SAS	A318, A319, A320, A321 airplanes
Biweekly 2019-07			
2019-05-07	R 2017-20-01	Honeywell International Inc.	TFE731-20R, -20AR, -20BR, and TFE731-40, -40AR, -40BR, and -40R turbofan engines
2019-05-09		Airbus SAS	A320-251N and -271N, and A321-253N airplanes
2019-05-10		Airbus SAS	A350-941 airplanes
2019-05-12		Bombardier, Inc.	CL-600-2C10, -2D15, -2D24, -2E25 airplanes
2019-05-13	R 2007-22-05	Airbus SAS	A300-600 and A310 series airplanes
2019-05-14	R 2012-02-18	Dassault Aviation	MYSTERE-FALCON 50 airplanes
2019-06-01	R 2018-24-01	International Aero Engines	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines
2019-06-02		Pratt & Whitney Division	PW4158 turbofan engines
2019-06-06		International Aero Engines AG	V2500-A1, V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, V2533-A5 turbofan engines
2019-06-07	R 2016-22-05	Pratt & Whitney Division	Certain PW4000 engines (see AD)



2019-05-07 Honeywell International Inc. (Type Certificate previously held by AlliedSignal Inc.): Amendment 39-19589; Docket No. FAA-2018-0719; Product Identifier 2016-NE-24-AD.

(a) Effective Date

This AD is effective April 25, 2019.

(b) Affected ADs

This AD replaces AD 2017-20-01, Amendment 39-19058 (82 FR 45173, September 28, 2017).

(c) Applicability

This AD applies to all Honeywell International Inc. (Honeywell) TFE731-20R, -20AR, -20BR, and TFE731-40, -40AR, -40BR, and -40R turbofan engines with a fan disk part number (P/N) 3060287-2 and with a serial number (S/N) listed in Table 9 of Honeywell Service Bulletin (SB) TFE731-72-5256, Revision 0, dated October 7, 2016, that do not have "T43374" marked adjacent to the fan disk P/N or S/N.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a report of two fan disks found with surface rollovers in the dovetail slot area. We are issuing this AD to prevent uncontained failure of the fan disks. The unsafe condition, if not addressed, could result in uncontained fan disk release, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

Remove the affected fan disk using the following criteria:

(1) Remove fan disks with 9,000 cycles since new (CSN) or more as of the effective date of this AD, within 100 cycles-in-service (CIS), or at the next engine shop visit, or at next access, whichever occurs first, after the effective date of this AD.

(2) Remove fan disks with between 8,000 and 8,999 CSN, inclusive, as of the effective date of this AD, within 9,100 CSN or within 1,000 CIS, or at the next engine shop visit, or at next access, whichever occurs first, after the effective date of this AD.

(3) Remove fan disks with fewer than 8,000 CSN as of the effective date of this AD, before exceeding 9,000 CSN, or at the next engine shop visit, or at next access, whichever occurs first, after the effective date of this AD.

(4) Replace any removed fan disk with a part eligible for installation.

(h) Installation Prohibition

Do not install an affected fan disk, P/N 3060287-2, unless “T43374” is marked adjacent to the fan disk P/N or S/N onto any engine identified in the Applicability paragraph of this AD.

(i) Definitions

(1) For the purposes of this AD, an “engine shop visit” is defined as the removal of the tie-shaft nut from the engine.

(2) For the purposes of this AD, “access” is defined as the removal of the fan rotor assembly from the engine.

(3) For the purposes of this AD, a “part eligible for installation” is:

(i) A fan disk not listed in the Accomplishment Instructions, Table 9, in Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016; or

(ii) a fan disk listed in the Accomplishment Instructions, Table 9, in Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016, that has been inspected, reworked, and marked with “T43374” adjacent to the fan disk P/N or S/N. Guidance on returning affected parts to Honeywell for inspection and rework is found in the Accomplishment Instructions, paragraph 3.D., of Honeywell SB TFE731-72-5256, Revision 0, dated October 7, 2016.

(j) Alternative Methods of Compliance (AMOCs)

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

(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 Joseph Costa, Los Angeles ACO Branch, FAA, 3960 Paramount Boulevard, Lakewood, CA, 90712-4137; phone: 562-627-5246; fax: 562-627-5210; email: joseph.costa@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.

(3) The following service information was approved for IBR on November 2, 2017.

(i) Honeywell Service Bulletin TFE731-72-5256, Revision 0, dated October 7, 2016.

(ii) [Reserved].

(4) For Honeywell service information identified in this AD, contact Honeywell International Inc., 111 S 34th Street, Phoenix, AZ 85034-2802; phone: 800-601-3099 (Toll-Free U.S.A./Canada); 602-365-3099 (International Direct); website: www.myaerospace.com; email: engine.reliability@honeywell.com.

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

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

Issued in Burlington, Massachusetts, on March 14, 2019.

Karen M. Grant,
Acting Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2019-05-09 Airbus SAS: Amendment 39-19591; Docket No. FAA-2019-0121; Product Identifier 2019-NM-025-AD.

(a) Effective Date

This AD becomes effective April 4, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A320-251N and -271N airplanes, and Model A321-253N airplanes, certificated in any category, as identified in European Aviation Safety Agency (EASA) AD 2019-0035, dated February 15, 2019 (“EASA AD 2019-0035”).

(d) Subject

Air Transport Association (ATA) of America Code 92, Electric and electronic common installation.

(e) Reason

This AD was prompted by reports of low clearance between the electrical harness and nearby hydraulic pipes in the inboard trailing edge of the wing. We are issuing this AD to address this condition, which, if not detected and corrected, could lead to chafing of electrical harnesses in the vicinity of hydraulic pipes and could result in a potential source of ignition in the flammable fluid leakage zone, and possibly result in a fire or explosion and loss of the airplane.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2019-0035.

(h) Exceptions to EASA AD 2019-0035

- (1) For purposes of determining compliance with the requirements of this AD: Where EASA AD 2019-0035 refers to its effective date, this AD requires using the effective date of this AD.
- (2) The “Remarks” section of EASA AD 2019-0035 does not apply to this AD.

(3) Where paragraph (4) of EASA AD 2019-0035 specifies to modify the airplane in accordance with Airbus Service Bulletin A320-29-1176, this AD does not require modification of the airplane, but this AD allows that modification as an optional terminating action for the required repetitive inspections.

(4) The provisions of paragraph (6) of EASA AD 2019-0035 are allowed in the optional modification specified in paragraph (h)(3) of this AD.

(i) No Reporting Requirement

Although certain service information referenced in EASA AD 2019-0035 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

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

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

(3) Required for Compliance (RC): For any service information referenced in EASA AD 2019-0035 that contains RC procedures and tests: Except as required by paragraph (j)(2) of this AD, RC procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(k) Related Information

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

(l) Material Incorporated by Reference

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

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

(i) European Aviation Safety Agency (EASA) AD 2019-0035, dated February 15, 2019.

(ii) [Reserved]

(3) For EASA AD 2019-0035, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 6017; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this EASA AD at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. EASA AD 2019-0035 may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0121.

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

Issued in Des Moines, Washington, on March 11, 2019.

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



2019-05-10 Airbus SAS: Amendment 39-19592; Docket No. FAA-2019-0122; Product Identifier 2018-NM-164-AD.

(a) Effective Date

This AD becomes effective April 8, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A350-941 airplanes, certificated in any category, manufacturer serial numbers as identified in Airbus Service Bulletin A350-27-P022, Revision 00, dated June 6, 2018.

(d) Subject

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

(e) Reason

This AD was prompted by a report of un-torqued nuts on certain slat and flap shaft junctions of the wings. We are issuing this AD to address two or more missing or incorrectly torqued nuts on a junction of certain slat and flap shafts, concurrent failure of an alternate flap shaft, and consequent uncommanded slat or flap movement, which could result in loss of control of the airplane.

(f) Compliance

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

(g) One-Time Inspection and Corrective Action

Within 3 months after the effective date of this AD: Do a one-time detailed inspection (including a torque check on any affected nut) on each junction of flap torque-shaft 2 and slat torque-shafts 2 and 4 of the right and left hand wing for discrepancies (including missing torque marking on any nut, any untorqued nut, or any missing bolt), and do all applicable corrective actions in accordance with the Accomplishment Instructions of Airbus Service Bulletin A350-27-P022, Revision 00, dated June 6, 2018. Do all applicable corrective actions at the applicable times specified in paragraph 1.E., "Compliance," of Airbus Service Bulletin A350-27-P022, Revision 00, dated June 6, 2018.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

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

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

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

(i) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0244, dated November 13, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0122.

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

(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 this AD specifies otherwise.

(i) Airbus Service Bulletin A350-27-P022, Revision 00, dated June 6, 2018.

(ii) [Reserved]

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

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

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

Issued in Des Moines, Washington, on March 13, 2019.
Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-05-12 Bombardier, Inc.: Amendment 39-19594; Docket No. FAA-2018-0634; Product Identifier 2018-NM-050-AD.

(a) Effective Date

This AD is effective May 3, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the Bombardier, Inc., airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category.

(1) Model CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes, serial numbers 10003 through 10345 inclusive.

(2) Model CL-600-2D15 (Regional Jet Series 705) airplanes and Model CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15429 inclusive.

(3) Model CL-600-2E25 (Regional Jet Series 1000) airplanes, serial numbers 19001 through 19052 inclusive.

(d) Subject

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

(e) Reason

This AD was prompted by reports of a fractured main landing gear (MLG) orifice support tube (OST). We are issuing this AD to address a fractured MLG OST, which can lead to structural damage to the airplane and collapse of the MLG.

(f) Compliance

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

(g) Replacement

Within the compliance times specified in figure 1 to paragraph (g) of this AD: Replace each MLG OST, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-32-058, Revision A, dated November 7, 2018.

Figure 1 to paragraph (g) of this AD — Compliance Times

Airplane Models	Compliance Time
CL-600-2C10 (Regional Jet Series 700, 701 & 702) airplanes	Within 21,000 flight cycles from the effective date of this AD, or before accumulating 40,000 total flight cycles on an MLG shock strut assembly since new, whichever occurs first
CL-600-2D15 (Regional Jet Series 705) airplanes and CL-600-2D24 (Regional Jet Series 900) airplanes equipped with an MLG shock strut assembly(s) that have accumulated fewer than 23,100 total flight cycles as of the effective date of this AD	Within 20,000 flight cycles from the effective date of this AD, or before accumulating 29,100 total flight cycles on an MLG shock strut assembly since new, whichever occurs first
CL-600-2D15 (Regional Jet Series 705) airplanes and CL-600-2D24 (Regional Jet Series 900) airplanes equipped with an MLG shock strut assembly(s) that have accumulated 23,100 total flight cycles or more as of the effective date of this AD	Within 6,000 flight cycles from the effective date of this AD
CL-600-2E25 (Regional Jet Series 1000) airplanes	Before accumulating 20,000 total flight cycles on an MLG shock strut assembly since new

(h) Maintenance or Inspection Program Revision

Within 90 days after the effective date of this AD, revise the existing maintenance or inspection program, as applicable, to incorporate Bombardier CRJ700/900/1000 Airworthiness Limitations Temporary Revision ALI-0593, dated December 18, 2017. The initial compliance time for accomplishing the actions is at the applicable time specified in Bombardier CRJ700/900/1000 Airworthiness Limitations Temporary Revision ALI-0593, dated December 18, 2017; or within 90 days after the effective date of this AD; whichever occurs later.

(i) No Alternative Actions or Intervals

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

(j) Credit for Previous Actions

This paragraph provides credit for the actions specified in paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 670BA-32-058, dated September 26, 2016.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight

Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

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

(l) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2018-02, dated January 16, 2018, for related information. This MCAI may be found in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0634.

(2) For more information about this AD, contact Aziz Ahmed, Aerospace Engineer, Airframe and Mechanical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7329; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

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

(m) Material Incorporated by Reference

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

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

(i) Bombardier Service Bulletin 670BA-32-058, Revision A, dated November 7, 2018.

(ii) Bombardier CRJ700/900/1000 Airworthiness Limitations Temporary Revision ALI-0593, dated December 18, 2017.

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

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

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

Issued in Des Moines, Washington, on March 20, 2019.

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



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

2019-05-13 Airbus SAS: Amendment 39-19595; Docket No. FAA-2018-1009; Product Identifier 2018-NM-147-AD.

(a) Effective Date

This AD is effective March 21, 2019.

(b) Affected ADs

This AD removes AD 2007-22-05, Amendment 39-15241 (72 FR 60236, October 24, 2007) and AD 2013-13-13, Amendment 39-17501 (79 FR 48957, August 19, 2014).

(c) Applicability

This AD applies to Model A300-600 and A310 series airplanes.

(d) Related Information

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

Issued in Des Moines, Washington, on March 13, 2019.
Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



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

2019-05-14 Dassault Aviation: Amendment 39-19596; Docket No. FAA-2018-1010; Product Identifier 2018-NM-148-AD.

(a) Effective Date

This AD becomes effective March 28, 2019.

(b) Affected ADs

This AD removes AD 2012-02-18, Amendment 39-16941 (77 FR 12175, February 29, 2012).

(c) Applicability

This AD applies to Dassault Aviation Model MYSTERE-FALCON 50 airplanes, all serial numbers, certificated in any category.

(d) Related Information

For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226.

Issued in Des Moines, Washington, on March 18, 2019.
Michael Kaszycki,
Acting Director, System Oversight Division,
Aircraft Certification Service.



2019-060-01 International Aero Engines: Amendment 39-19599; Docket No. FAA-2018-0735; Product Identifier 2018-NE-26-AD.

(a) Effective Date

This AD is effective April 10, 2019.

(b) Affected ADs

This AD replaces AD 2018-24-01, Amendment 39-19505 (84 FR 2715, February 8, 2019).

(c) Applicability

This AD applies to International Aero Engines (IAE) PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines with a low-pressure turbine (LPT) 3rd-stage disk with a serial number (S/N) listed in Figure 1 to paragraph (g) of this AD or an LPT 1st-stage disk with an S/N listed in Figure 2 to paragraph (g) of this AD, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by a report of manufacturing defects found on delivered LPT 1st- and 3rd-stage disks. We are issuing this AD to prevent failure of the LPT 1st- or 3rd-stage disk. The unsafe condition, if not addressed, could result in uncontained LPT 1st- or 3rd-stage disk release, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

Remove from service the LPT 1st- and 3rd-stage disk within 30 days after the effective date of this AD, or as identified in paragraphs (g)(1) or (2) of this AD, whichever occurs later, and replace with a part eligible for installation.

(1) Remove the LPT 3rd-stage disk with an S/N listed in Figure 1 to paragraph (g) of this AD at the next piece-part exposure, not to exceed 4,800 cycles since new (CSN).

Figure 1 to Paragraph (g) of this AD – S/Ns of LPT 3rd-stage disk

 LLDLAJ4516

 LLDLAJ4498

 LLDLAJ4518

 LLDLAJ4499

 LLDLAJ4505

 LLDLAJ4511

 LLDLAJ4512

 LLDLAJ4484

 LLDLAJ4594

 LLDLAJ4595

 LLDLAJ4482

 LLDLAJ4500

(2) Remove the LPT 1st-stage disk with an S/N listed in Figure 2 to paragraph (g) of this AD at the next piece-part exposure, not to exceed 2,240 CSN.

Figure 2 to Paragraph (g) of this AD – S/Ns of LPT 1st-stage disk

 LLDLAJ6110

 LLDLAJ6111

 LLDLAJ6114

 LLDLAJ6115

(h) Alternative Methods of Compliance (AMOCs)

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

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

(i) Related Information

For more information about this AD, contact Kevin M. Clark, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone: 781-238-7088; fax: 781-238-7199; email: kevin.m.clark@faa.gov.

(j) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on March 19, 2019.
Karen M. Grant,
Acting Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2019-06-02 Pratt & Whitney Division: Amendment 39-19600; Docket No. FAA-2018-0924; Product Identifier 2018-NE-34-AD.

(a) Effective Date

This AD is effective April 30, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Pratt & Whitney Division PW4158 turbofan engines designated by a-3 on the Engine Data Plate and with the following engine serial numbers: 728534 to 728555; 728557 to 728585; 728587 to 728591; 728593; 728598; 729808 to 729824; or 729826 to 729864.

(d) Subject

Joint Aircraft System Component (JASC) Code 7310, Engine Fuel Distribution.

(e) Unsafe Condition

This AD was prompted by several reports of high cycle fatigue (HCF) cracks found in the fuel nozzle supply manifold tube at the braze joint interface. We are issuing this AD to prevent failure of the fuel nozzles. The unsafe condition, if not addressed, could result in engine fire, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

No later than the next engine shop visit after the effective date of this AD, do the following:

(1) Remove any of the 24 fuel nozzles, part number (P/N) 51J235 or 51J344, and replace with P/N 51J397.

(2) Replace the fuel nozzle manifold supply assemblies and install new brackets and clamps on the fuel supply manifolds in accordance with the “For Engines Installed on Aircraft” or “For Engines Not Installed on Aircraft” sections, as applicable, of the Accomplishment Instructions in Pratt & Whitney Service Bulletin (SB) PW4ENG 73-224, dated November 8, 2017.

(h) Definitions

For the purpose of this AD, an “engine shop visit” is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine case flanges, except for the following situations, which do not constitute an engine shop visit:

- (1) Separation of engine flanges solely for the purposes of transportation of the engine without subsequent maintenance.
- (2) Separation of engine flanges solely for the purposes of replacing the fan or propulsor without subsequent maintenance.

(i) Alternative Methods of Compliance (AMOCs)

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

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

(j) Related Information

For more information about this AD, contact Scott Hopper, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7154; fax: 781-238-7199; email: scott.hopper@faa.gov.

(k) Material Incorporated by Reference

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

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

(i) Pratt & Whitney Service Bulletin PW4ENG 73-224, dated November 8, 2017.

(ii) [Reserved]

(3) For Pratt & Whitney service information identified in this AD, contact Pratt & Whitney, 400 Main Street, East Hartford, CT 06108; phone: 860-565-8770; fax: 860-565-4503.

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

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

Issued in Burlington, Massachusetts, on March 19, 2019.
Karen M. Grant,
Acting Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2019-06-06 International Aero Engines AG: Amendment 39-19604; Docket No. FAA-2019-0151; Product Identifier 2019-NE-04-AD.

(a) Effective Date

This AD is effective April 12, 2019.

(b) Affected ADs

None.

(c) Applicability

This AD applies to International Aero Engines AG (IAE) V2500-A1, V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, V2533-A5 turbofan engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7240, Turbine Engine Combustion Section.

(e) Unsafe Condition

This AD was prompted by a crack found at the diffuser case M-flange during overhaul inspection. We are issuing this AD to prevent failure of the diffuser case. The unsafe condition, if not addressed, could result in uncontained diffuser case rupture, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) For diffuser cases with a rear outer flange that is equal to or greater than 20,000 cycles since new (CSN) on the effective date of this AD, perform an initial borescope inspection (BSI) of zones 1, 2, and 3 of the diffuser case M-flange before accumulating the BSI Within (Cycles) listed in Table 1 to paragraph (g)(1) of this AD. Use the Accomplishment Instructions, paragraphs 2.A. through 2.G. for the appropriate engine model, of IAE Alert Non-Modification Service Bulletin (NMSB) V2500-ENG-72-A0706, dated February 14, 2019, to perform the inspection.

Table 1 to paragraph (g)(1) of this AD – M-flange cycle inspection limits

CSLFPI (cycles since last fluorescent penetrant inspection) on the rear outer flange	BSI Within (Cycles)
30,000 and greater	250
20,000 to 29,999	500
15,000 to 19,999	1,000
1 to 14,999	1,300
0	2,100

(2) For diffuser cases with a rear outer flange that have fewer than 20,000 CSN on the effective date of this AD, perform an initial BSI of zones 1, 2, and 3 of the diffuser case M-flange within 21,300 CSN, in accordance with the Accomplishment Instructions, paragraphs 2.A. through 2.G. for the appropriate engine model, of IAE Alert NMSB V2500-ENG-72-A0706, dated February 14, 2019.

(3) If no cracks are found, perform a repetitive BSI not to exceed every 2,100 cycles since the previous BSI.

(4) If cracks are found, remove the diffuser case and replace with a part eligible for installation or repeat the BSI within the intervals in either Table 2: Fly on Limits or Table 4: Fly on Limits, as appropriate for the affected the engine model, of IAE Alert NMSB V2500-ENG-72-A0706, dated February 14, 2019.

(h) Credit for Previous Actions

You may take credit for the actions that are required by paragraph (g)(1) and (2) of this AD, if you performed those actions before the effective date of this AD using IAE V2500 Special Instruction (SI) No. 350F-18, Rev. 1, dated December 17, 2018; IAE V2500 SI No. 356F-18, Rev. 1, dated January 9, 2019; IAE V2500 SI No. 372F-18, dated January 8, 2019; or IAE V2500 Special SI No. 04F-19, dated January 14, 2019.

(i) Alternative Methods of Compliance (AMOCs)

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

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

(j) Related Information

For more information about this AD, contact Barbara Caufield, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7146; fax: 781-238-7199; email: barbara.caufield@faa.gov.

(k) Material Incorporated by Reference

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

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

(i) International Aero Engines (IAE) Alert Non-Modification Service Bulletin V2500-ENG-72-A0706, dated February 14, 2019.

(ii) [Reserved]

(3) For IAE service information identified in this AD, contact International Aero Engines AG, 400 Main Street, East Hartford, CT, 06118; phone: 800-565-0140; email: help24@pw.utc.com; internet: <http://fleetcare.pw.utc.com>.

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

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

Issued in Burlington, Massachusetts, on March 22, 2019.

Karen M. Grant,
Acting Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2019-06-07 Pratt & Whitney Division: Amendment 39-19605; Docket No. FAA-2018-0920; Product Identifier 2016-NE-09-AD.

(a) Effective Date

This AD is effective May 2, 2019.

(b) Affected ADs

This AD replaces AD 2016-22-05, Amendment 39-18694 (81 FR 75686, November 1, 2016).

(c) Applicability

This AD applies to Pratt & Whitney Division (PW):

- (1) PW4164, PW4168, and PW4168A model turbofan engines that have fuel nozzles, part number (P/N) 51J345, installed, and that have any of the following installed: Talon IIB combustion chamber per Pratt & Whitney Service Bulletin (SB) PW4G-100-72-214, dated December 15, 2011; ring case configuration (RCC) high-pressure compressor (HPC) per Pratt & Whitney SB PW4G-100-72-219, Revision No. 1, dated October 5, 2011, or original issue; or the outer combustion chamber assembly waspaloy nuts per Pratt & Whitney SB PW4G-100-72-253, dated November 24, 2014;
- (2) PW4168A model engines with Talon IIA outer combustion chamber assembly, P/N 51J100 or 51J382, and fuel nozzles, P/N 51J345, installed;
- (3) PW4168A-1D and PW4170 model engines with engine serial numbers P735001 through P735190, inclusive, and fuel nozzles, P/N 51J345, installed;
- (4) PW4164-1D, PW4168-1D, PW4168A-1D, and PW4170 model turbofan engines that have installed the RCC HPC per Pratt & Whitney SB PW4G-100-72-220, Revision No. 4, dated September 30, 2011, or earlier revision, and have fuel nozzles, P/N 51J345, installed; and
- (5) PW4164, PW4164-1D, PW4168, PW4168-1D, PW4168A, PW4168A-1D, and PW4170 model turbofan engines with fuel nozzle, P/N 51J398, installed, that have not installed the replacement fuel nozzle supply manifold assemblies, and new brackets and clamps on the fuel nozzle supply manifold assemblies per Pratt & Whitney SB PW4G-100-73-48, Revision No. 1, dated April 24, 2018.

(d) Subject

Joint Aircraft System Component (JASC) Code 7310, Engine Fuel Distribution.

(e) Unsafe Condition

This AD was prompted by several instances of fuel leaks on PW engines with the Talon IIB combustion chamber configuration installed. We are issuing this AD to prevent failure of the fuel nozzles. The unsafe condition, if not addressed, could result in engine fire and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) Within 800 flight hours (FHs) after December 6, 2016 (the effective date of AD 2016-22-05), or before further flight, whichever occurs later, and after that within every 800 FHs accumulated on the fuel nozzles, perform the following:

(i) Inspect all fuel nozzles, P/N 51J345, in accordance with Part A of Pratt & Whitney Alert Service Bulletin (ASB) PW4G-100-A73-45, dated February 16, 2016.

(ii) For any fuel nozzle that fails the inspection, before further flight, remove and replace with a part that is eligible for installation.

(2) At the next shop visit or within 24 months after the effective date of this AD, whichever occurs first, remove all fuel nozzles, P/N 51J345, in accordance with Part A, of Pratt & Whitney ASB PW4G-100-A73-47, dated March 10, 2017, and replace with parts eligible for installation.

(3) At the next shop visit or within 60 months after the effective date of this AD, whichever comes first, replace the fuel nozzle supply manifold assemblies and install the new brackets and clamps on the fuel nozzle supply manifold assembly in accordance with Accomplishment Instructions, “For Engines Installed on Aircraft” or “For Engines Not Installed on Aircraft,” of Pratt & Whitney SB PW4G-100-73-48, Revision No. 1, dated April 24, 2018.

(h) Definitions

(1) For the purpose of this AD, an “engine shop visit” is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine case flanges, except for the following situations, which do not constitute an engine shop visit:

(i) Separation of engine flanges solely for the purposes of transportation of the engine without subsequent maintenance.

(ii) Separation of engine flanges solely for the purpose of replacing the fan or propulsor without subsequent engine maintenance.

(2) For the purpose of this AD, a part that is “eligible for installation” is a fuel nozzle with a P/N other than 51J345 that is FAA-approved for installation.

(i) Terminating Action

Installation of the eligible fuel nozzles constitutes terminating action for the repetitive inspection requirements of paragraph (g)(1) of this AD.

(j) Alternative Methods of Compliance (AMOCs)

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

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

(k) Related Information

For more information about this AD, contact Scott Hopper, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7154; fax: 781-238-7199; email: scott.hopper@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.

(3) The following service information was approved for IBR on May 2, 2019.

(i) Pratt & Whitney Alert Service Bulletin (ASB) PW4G-100-A73-47, dated March 10, 2017; and

(ii) Pratt & Whitney Service Bulletin PW4G-100-73-48, Revision No. 1, dated April 24, 2018.

(4) The following service information was approved for IBR on December 6, 2016.

(i) Pratt & Whitney ASB PW4G-100-A73-45, dated February 16, 2016.

(ii) [Reserved]

(5) For Pratt & Whitney service information identified in this AD, contact Pratt & Whitney Division, 400 Main St., East Hartford, CT 06108; phone: 860-565-8770; fax: 860-565-4503.

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

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

Issued in Burlington, Massachusetts, on March 22, 2019.

Karen M. Grant,
Acting Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.