

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

**LARGE AIRCRAFT  
BIWEEKLY 2020-13**

*6/8/2020 - 6/21/2020*



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

## CHANGE OF ADDRESS NOTICE

Any change of address regarding the biweekly service must include the mailing label from a recent issue or your name and address printed exactly as they appear on the mailing label (including the computer number above the address).

Please allow one month for an address change.

MAIL YOUR ADDRESS CHANGE TO:

Superintendent of Documents  
Government Printing Office  
Mail List Branch SSOM  
Washington, DC 20402

Telephone: (202) 512-1806  
Facsimile: (202) 512-2250

## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects			
<b>Biweekly 2020-01</b>			
2019-23-04		The Boeing Company	727, 727-100, 727C, 727-100C, 727-200, and 727-200F
2019-23-16		The Boeing Company	737-100, -200, -200C, -300, -400, and -500
2019-24-12		De Havilland Aircraft of Canada Limited	DHC-8-401 and -402
2019-24-13		Airbus SAS	A318-111, -112, -121, and -122, A319-111, -112, -113, -114, -115, -131, -132, and -133, A320-211, -212, -214, -216, -231, -232, and -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2019-24-14		328 Support Services GmbH	328-100
2019-24-15		The Boeing Company	737-900ER
2019-24-16	R 2017-16-08	Embraer S.A	ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW, ERJ 190-200 STD, -200 LR, and -200 IGW
2019-24-18		The Boeing Company	727, 727C, 727-100, 727-100C, 727-200, and 727-200F, 757-200, -200PF, -200CB, and -300, 767-200, -300, -300F, and -400ER
2019-25-13		Engine Alliance	GP7270 and GP7277
2019-25-17		The Boeing Company	737-600, -700, -700C, -800, -900, and -900ER
<b>Biweekly 2020-02</b>			
2019-22-07		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440), CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705), Model CL-600-2D24 (Regional Jet Series 900), Model CL-600-2E25 (Regional Jet Series 1000)
2019-23-14		The Boeing Company	37-100, -200, -200C, -300, -400, and -500
2019-24-01		Airbus SAS	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, -231, -212, -213, and -232, A330-201, -202, -203, -223, -223F, -243, and -243F, A340-211, -212, -213, -311, -312, -313, -541, and -642
2019-25-10		Fokker Services B.V	F28 Mark 0070 and 0100
2019-25-11		Viking Air Limited	CL-215-1A10, CL-215-6B11 (CL-215T Variant)
2019-25-12	R 2016-18-02	The Boeing Company	777-200 and -300ER
2019-25-14		The Boeing Company	777-300ER and 777F
2019-25-15		Fokker Services B.V	F28 Mark 0100
2019-25-16	R 2017-06-08	Embraer S.A	ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; and Model ERJ 170-200 LR, -200 SU, -200 STD, and -200 LL
2019-25-18		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2019-25-19		Airbus SAS	A350-941
2020-01-11	R 2017-12-07	The Boeing Company	737-800, -900, and -900ER
2020-01-55	E	General Electric Company	GE90-110B1 and GE90-115B
<b>Biweekly 2020-03</b>			
2019-25-20		Lockheed Martin Corporation/Lockheed Martin Aeronautics Company	382, 382B, 382E, 382F, and 382G; C-130A, C-130B, C-130BL, C-130E, C-130H, C-130H-30, C-130J, C-130J-30, EC-130Q, HC-130H, KC-130H, NC-130B, NC-130, and WC-130H airplanes
2019-25-55		The Boeing Company	737-300, -400, and -700 series airplanes
2019-26-01		Airbus SAS	A350-941 and -1041 airplanes
2020-01-12	A 2017-16-12	Airbus SAS	A318, A319, A320, A321 airplanes
2020-01-13	R 2018-19-26	Dassault Aviation	MYSTERE-FALCON 200 airplanes
2020-01-14	A 2010-26-05	Airbus SAS	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes
2020-01-17		Airbus SAS	A318, A319, A320, A321 airplanes
2020-01-18	R 2006-11-11	The Boeing Company	757-200, -200PF, -200CB, and -300 series airplanes

## LARGE AIRCRAFT

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

Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects

### Biweekly 2020-04

2019-26-10		Bombardier, Inc.	CL-600-2C10, -2D15, -2D25, -2E25 airplanes
2019-26-11		Airbus SAS	A319, A320, A321 airplanes
2020-01-10		Airbus SAS	A350-941 airplanes
2020-01-15		Airbus SAS	A300, A310 airplanes
2020-01-16	A 2014-25-52	Airbus SAS	A330, A340 airplanes
2020-01-55		General Electric Company	GE90-110B1 and GE90-115B model turbofan engines
2020-02-10		De Havilland Aircraft of Canada Limited	DHC-8-400, -401, and -402 airplanes
2020-02-12	R 2017-15-04	The Boeing Company	787 series airplanes
2020-02-13	R 2019-03-14 A 2010-26-05	Dassault Aviation	FAN JET FALCON, FAN JET FALCON SERIES C, D, E, F, and G airplanes
2020-02-14		Airbus SAS	A350-941 and -1041 airplanes
2020-02-15		Bombardier, Inc.	BD-700-1A10, BD-700-1A11 airplanes
2020-02-16		The Boeing Company	737-200, -200C, -300, -400, and -500 series airplanes
2020-02-18		Gulfstream Aerospace Corporation	GVI, GVII-G500, and GVII-G600 airplanes
2020-02-19	R 2003-09-04 R1	Bombardier, Inc.	CL-600-2B19 airplanes
2020-02-20	R 2014-24-07	Airbus SAS	A318, A319, A320, A321 airplanes
2020-02-21	R 2014-03-12 R 2018-19-25 A 2010-26-05	Dassault Aviation	FALCON 2000 airplanes
2020-02-22		Airbus SAS	A300, A310 airplanes
2020-03-11		The Boeing Company	707-100 long body, -200, -100B long body, -100B short body, -300, -300B, -300C, and -400 series; and 720 and 720B series airplanes
2020-03-12		Airbus SAS	A350-941 and -1041 airplanes

### Biweekly 2020-05

2020-01-18	COR R 2006-11-11	The Boeing Company	757-200, -200PF, -200CB, and -300 series airplanes
2020-02-19	COR R 2003-09-04 R1	Bombardier, Inc.	CL-600-2B19 (Regional Jet series 100 & 440) airplanes
2020-03-10		The Boeing Company	737 series, except for 737-100, -200, -200C, -300, -400, and -500 series airplanes
2020-03-14		Airbus SAS	A350-941 and -1041 airplanes
2020-03-15		Airbus SAS	A321-211, -212, -213, -231, and -232 airplanes
2020-03-17	R 2015-24-04	Bombardier, Inc.	CL-600-2B19, -2C10, -2D15, -2D25, -2E25 airplanes
2020-03-18	R 2017-19-08	Airbus Defense and Space S.A.	C-212-CB, C-212-CC, C-212-CD, C-212-CE, and C-212-DF airplanes
2020-03-19	A 2010-26-05	Dassault Aviation	MYSTERE-FALCON 20-C5, 20-D5, 20-E5, and 20-F5 airplanes
2020-03-20		The Boeing Company	MD-11, MD-11F, 717-200, 737-8, 737-9, 737-600, -700, -700C, -800, -900, and -900ER; 747-400 and 747-400F; 757-200, -200PF, -200CB, and -300; 767-200, -300, -300F, -400ER, and -2C; 777-200, -200LR, -300, and -300ER; 777F series airplanes
2020-03-21		Bombardier, Inc.	BD-700-1A10 and BD-700-1A11 airplanes
2020-03-22		The Boeing Company	787-8 airplanes
2020-03-23		Bombardier, Inc.	CL-600-2B19
2020-03-24	A 2010-26-05	Dassault Aviation	MYSTERE-FALCON 20-C5, 20-D5, 20-E5, and 20-F5 airplanes
2020-04-01		Pratt & Whitney	PW1519G, PW1521G, PW1521GA, PW1524G, PW1525G, PW1521G-3, PW1524G-3, PW1525G-3, PW1919G, PW1921G, PW1922G, PW1923G, and PW1923G-A model turbofan engines

### Biweekly 2020-06

2020-04-10	A 2011-03-10	Airbus SAS	A330 airplanes
2020-04-11		The Boeing Company	747-400 series airplanes
2020-04-12	R 2012-22-05 R 2018-19-03	Fokker Services B.V.	F28 Mark 0070 and 0100 airplanes
2020-04-18		Airbus SAS	A330-941 airplanes

## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects			
2020-05-01		Rolls-Royce Deutschland Ltd & Co KG	Trent 1000-AE3, Trent 1000-CE3, Trent 1000-D3, Trent 1000-G3, Trent 1000-H3, Trent 1000-J3, Trent 1000-K3, Trent 1000-L3, Trent 1000-M3, Trent 1000-N3, Trent 1000-P3, Trent 1000-Q3, and Trent 1000-R3 model turbofan engines
2020-05-10		Dassault Aviation	FALCON 7X airplanes
2020-05-12		Gulfstream Aerospace Corporation	GVII-G500 and GVII-G600 airplanes
2020-05-13		Airbus Canada Limited Partnership	BD-500-1A11 airplanes
2020-05-14		Airbus SAS	A320-214, -232, -271N; A321-231 airplanes
2020-05-18		Airbus SAS	A350-941 and -1041 airplanes
2020-06-01	R 2018-25-09 R 2019-12-01	CFM International, S.A.	LEAP-1B21, -1B23, -1B25, -1B27, -1B28, -1B28B1, -1B28B2, -1B28B3, -1B28B2C, -1B28BBJ1, and -1B28BBJ2 model turbofan engines
<b>Biweekly 2020-07</b>			
2020-04-19	R 2017-15-01	The Boeing Company	777-200, -200LR, -300, -300ER, and 777F series airplanes
2020-05-13		Airbus Canada Limited Partnership	BD-500-1A11 airplanes
2020-05-14		Airbus SAS	A320-214, -232, -271N; A321-231 airplanes
2020-05-15		Airbus SAS	A319-131, -132, -133; A320-231, -232, -233; and A321-131, -231, -232 airplanes
2020-05-16		Airbus SAS	A319-115; A320-214, -216, -232, -251N, -271N; and A321-211, -231, -251N, -251NX, -253N, -271N, -271NX, -272N airplanes
2020-05-17		Airbus SAS	A318-112, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-216, A320-231, A320-232, A320-233, A320-251N, and A320-271N airplanes
2020-05-18		Airbus SAS	A350-941 and -1041 airplanes
2020-05-19		Airbus SAS	A319-112, -115, -132; and A320-214, -216, -232 -233 airplanes
2020-05-21		Yaborã Indústria Aeronáutica S.A.	ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes
2020-05-22		Yaborã Indústria Aeronáutica S.A.	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU; and ERJ 170-200 LR, -200 SU, -200 STD, -200 LL airplanes
2020-05-24	R 2010-26-01	The Boeing Company	777-200 series airplanes
2020-05-28	R 2019-11-08	International Aero Engines LLC	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1129G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM turbofan engines
2020-06-02		International Aero Engines LLC	PW1122G-JM, PW1124G1-JM, PW1124G-JM, PW1127GA-JM, PW1127G1-JM, PW1127G-JM, PW1133G-JM, PW1133GA-JM, PW1130G-JM, and PW1129G-JM turbofan engines
2020-06-14		The Boeing Company	787-8, 787-9, and 787-10 airplanes
2020-07-51	E	International Aero Engines AG	V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5 turbofan engines
<b>Biweekly 2020-08</b>			
2020-04-15		The Boeing Company	757-200, -200PF, -200CB, and -300 series; 767-200, -300, and -300F series airplanes
2020-04-16		Yaborã Indústria Aeronáutica S.A.	ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes
2020-04-17		Airbus SAS Model	A350-941 and -1041 airplanes
2020-04-20		De Havilland Aircraft of Canada Limited	DHC-8-400, -401, and -402 airplanes
2020-04-22	R 2018-19-27 R 2014-16-12 A 2010-26-05	Dassault Aviation	FALCON 2000EX airplanes
2020-05-25		The Boeing Company	757-200, -200PF, -200CB, and -300 series airplanes
2020-05-26		The Boeing Company	787-8 airplanes

## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects			
2020-05-27 2020-06-10		Bombardier, Inc. Airbus SAS	BD-700-1A10 and BD-700-1A11 airplanes A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, and -133; A320-211, -212, -214, -216, -231, -232, and -233; A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes
2020-06-15 2020-06-16	R 2017-03-02	Fokker Services B.V. Rolls-Royce Deutschland Ltd. & Co. KG	F28 Mark 0100 airplanes RB211 Trent 768-60, 772-60, and 772B-60 turbofan engines
2020-06-17	R 2011-09-06	Airbus SAS	A330-223F and -243F; A330-201, -202, -203, -223, and -243; A330-301, -302, -303, -321, -322, -323, -341, -342, and -343; A330-941; A340-211, -212, and -213; A340-311, -312, and -313; A340-541 and -642 airplanes
2020-06-18		Airbus SAS	A318-111, -112, -121, and -122; A319-111, -112, -113, -114, -115, -131, -132, -133, -151N, -153N, and -171N; A320-211, -212, -214, -216, -231, -232, -233, -251N, -252N, -253N, -271N, -272N, and -273N; A321-111, -112, -131, -211, -212, -213, -231, -232, -251N, -251NX, -252N, -252NX, -253N, -253NX, -271N, -271NX, -272N, and -272NX airplanes
2020-07-02		Pratt & Whitney	PW1519G, PW1521G, PW1521G-3, PW1521GA, PW1524G, PW1524G-3, PW1525G, and PW1525G-3 turbofan engines
2020-07-10 2020-08-01		Airbus SAS General Electric Company	A320-271N; A321-271N, -271NX, and -272N airplanes CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1 turbofan engines
<b>Biweekly 2020-09</b>			
2020-07-11		ATR–GIE Avions de Transport Regional	ATR42-200, -300, -320, and -500; ATR72-101, -102, -201, -202, -211, -212, and -212A
2020-07-12		ATR–GIE Avions de Transport Regional	ATR42-500
2020-07-13 2020-07-14		Bombardier, Inc The Boeing Company	BD-100-1A10 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
2020-07-16	R 2016-16-09 R 2019-03-20 A 2014-16-23	Dassault Aviation	FALCON 7X
2020-07-17 2020-07-18	R 2017-05-12	Saab AB, Support and Services Airbus SAS	SAAB 2000 A318-112; A319-111, -112, -115, -132, and -133; A320-214, -216, -232, and -233; A321-211, -212, -213, -231, and -232
2020-07-19		ATR–GIE Avions de Transport Regional	ATR72-101, -102, -201, -202, -211, -212, and -212A
2020-07-20	R 2004-06-01 R 2009-06-09 A 2008-17-01 R1 A 2012-01-08	Support Services GmbH	328-100
2020-07-21		Yabora Industria Aeronautica S.A.	ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU; ERJ 170-200 LR, -200 SU, -200 STD, and -200 LL; ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, -200 STD, -200 LR, and -200 IGW
2020-07-51		International Aero Engines AG	V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5
2020-08-02		Thales AVS France SAS	Global Positioning System/Satellite Based Augmentation System receivers
2020-08-03	R 2008-22-24	Rolls-Royce Deutschland Ltd & Co KG	RB211-535E4-37, RB211-535E4-B-37, RB211-535E4-C-37, and RB-211-535E4-B-75
2020-08-04		International Aero Engines LLC	PW1133G-JM, PW1133GA-JM, PW1130G-JM, PW1129G-JM, PW1127G-JM, PW1127GA-JM, PW1127G1-JM, PW1124G-JM, PW1124G1-JM, and PW1122G-JM
2020-09-03		International Aero Engines AG	V2500-A1, V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, V2531-E5, and V2533-A5

## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Information Key: E – Emergency; COR – Correction; R – Replaces, A – Affects			
<b>Biweekly 2020-10</b>			
2020-08-11		Yabora Industria Aeronautica S.A.	ERJ 190-300 and ERJ 190-400
2020-08-12		The Boeing Company	747-8 and 747-8F series
2020-08-13		Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440); CL-600-2C10 (Regional Jet Series 700, 701 & 702); CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900)
<b>Biweekly 2020-11</b>			
2020-06-19		The Boeing Company	727, 727C, 727-100, 727-100C, 727-200, and 727-200F series
2020-09-10	R 2018-25-04	Airbus Canada Limited Partnership	BD-500-1A10; BD-500-1A11
2020-09-11	R 2017-06-06 R 2019-12-10 A 2012-12-07	Fokker Services B.V.	F28 Mark 0070 and 0100
2020-09-12		De Havilland Aircraft of Canada Limited	DHC-8-400, -401, and -402 series
2020-09-13	A 2009-01-06 R1 A 2012-01-08	328 Support Services GmbH	328-300
2020-09-14	R 2020-03-12	Airbus SAS	A350-941 and -1041
2020-09-16	R 2000-17-09 R 2008-04-19 R1 R 2015-26-09 A 2018-18-05	ATR-GIE Avions de Transport Regional	ATR42-200, -300, and -320
2020-10-04		General Electric Company	GE90-110B1 and GE90-115B
2020-10-05		Rockwell Collins, Inc.	Flight Management Systems
2020-10-10	R 2016-07-28	The Boeing Company	DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87)
2020-11-04		Learjet Inc.	60
<b>Biweekly 2020-12</b>			
2020-11-11		The Boeing Company	777-200, -200LR, -300, -300ER, and 777F series
2020-12-03		Rolls-Royce Deutschland Ltd & Co KG	Trent XWB-97
<b>Biweekly 2020-13</b>			
2020-11-10		Bombardier, Inc.	BD-100-1A10
2020-11-13	R 2010-23-04	De Havilland Aircraft of Canada Limited	DHC-8-400, -401, and -402
2020-11-14		Bombardier, Inc.	BD-100-1A10
2020-12-01		Rolls-Royce Deutschland Ltd & Co KG	Trent XWB-75, XWB-79, XWB-79B, and XWB-84
2020-12-06		Gulfstream Aerospace Corporation	G-IV
2020-13-04	R 2017-09-06	General Electric Company	GENx-1B and GENx-2B



**FAA**  
**Aviation Safety**

## **AIRWORTHINESS DIRECTIVE**

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

---

**2020-11-10 Bombardier, Inc.:** Amendment 39-19914; Docket No. FAA-2019-1076; Product Identifier 2019-NM-173-AD.

**(a) Effective Date**

This AD is effective July 14, 2020.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc., Model BD-100-1A10 airplanes, certificated in any category, serial numbers 20003 through 20788 inclusive.

**(d) Subject**

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

**(e) Reason**

This AD was prompted by a report of an in-flight event where a flightcrew observed a SPOILER FAIL message and had difficulty maintaining roll control of the airplane. The FAA is issuing this AD to address uncommanded deployment of the multi-function spoiler at certain positions, which in combination with specific flap positions and airspeeds, could create an unacceptably high flightcrew workload in maintaining roll control of the airplane and could possibly lead to loss of controllability of the airplane.

**(f) Compliance**

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

**(g) Airplane Flight Manual (AFM) Revisions**

Within 30 days after the effective date of this AD: Revise the Non-Normal Procedures section of the existing AFM to incorporate the information in Section 05-23, "Flight Controls," of the applicable AFM specified in figure 1 to paragraph (g) of this AD.

**Figure 1 to paragraph (g) – Airplane flight manual**

<b>Airplane Serial Numbers</b>	<b>AFM</b>	<b>AFM Revision Number</b>	<b>AFM Revision Date</b>
20003 through 20500 inclusive	Bombardier Challenger 300 AFM, Publication No. CSP 100-1	56	July 8, 2019
20501 through 20788 inclusive	Bombardier Challenger 350 AFM, Publication No. CH 350 AFM	22	July 8, 2019

**(h) 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 instructions from a manufacturer, the instructions 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.

**(i) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2019-29, dated August 12, 2019, for related information. This MCAI may be found in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-1076.

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

**(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) Bombardier Challenger 300 Airplane Flight Manual, Publication No. CSP 100-1, Revision 56, dated July 8, 2019.

(ii) Bombardier Challenger 350 Airplane Flight Manual, Publication No. CH 350 AFM, Revision 22, dated July 8, 2019.

(3) For service information identified in this AD, contact Bombardier, Inc., 200 Côte-Vertu Road West, Dorval, Québec H4S 2A3, Canada; North America toll-free telephone 1-866-538-1247 or direct-dial telephone 1-514-855-2999; email [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); internet <https://www.bombardier.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety 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, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 28, 2020.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020-12374 Filed 6-8-20; 8:45 am]



FAA  
Aviation Safety

## AIRWORTHINESS DIRECTIVE

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

---

**2020-11-13 De Havilland Aircraft of Canada Limited (Type Certificate previously held by Bombardier, Inc.):** Amendment 39-19917; Docket No. FAA-2020-0099; Product Identifier 2019-NM-169-AD.

### (a) Effective Date

This AD is effective July 14, 2020.

### (b) Affected ADs

This AD replaces AD 2010-23-04, Amendment 39-16493 (75 FR 68174, November 5, 2010) (“AD 2010-23-04”).

### (c) Applicability

This AD applies to De Havilland Aircraft of Canada Limited (Type Certificate previously held by Bombardier, Inc.) Model DHC-8-400, -401, and -402 airplanes, certificated in any category, serial numbers 4001 and subsequent.

### (d) Subject

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

### (e) Reason

This AD was prompted by reports of cracked nacelle attachment fittings, which a preliminary investigation determined to be caused by stress corrosion. The FAA is issuing this AD to address this condition, which, if not detected and corrected, could compromise the structural integrity of the nacelle attachment fitting and possibly result in collapse of the landing gear.

### (f) Compliance

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

### (g) Retained Detailed and Conductivity Inspections and Replacement, With Revised Service Information and Revised Replacement Instructions

This paragraph restates the requirements of paragraph (g) of AD 2010-23-04, with revised service information and revised replacement instructions. For airplanes having serial numbers 4001 through 4304 inclusive, 4314, and 4315: Within 100 flight hours after November 22, 2010 (the effective date of AD 2010-23-04), do a detailed inspection for cracking, and a conductivity inspection on each of the 4 nacelle attachment fittings, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018. Repeat the detailed inspection at intervals not to exceed 300 flight hours, except as provided by paragraph (i) of this AD.

Accomplishing the replacement specified in paragraph (g)(1)(ii) or (g)(2)(ii)(B) of this AD terminates the inspections required by this paragraph.

(1) If any nacelle attachment fitting is found cracked, before further flight, do the action specified in paragraph (g)(1)(i) or (ii) of this AD. As of the effective date of this AD, only the action specified in paragraph (g)(1)(ii) of this AD may be done.

(i) Replace the fitting with a new fitting in accordance with paragraph (2) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018.

(ii) Replace the rear spar nacelle attachment fitting and associated structure with a new nacelle attachment fitting, part number (P/N) 8Z9305, and do all applicable related investigative and corrective actions, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-16 Revision D, dated August 7, 2018. Do all applicable related investigative and corrective actions before further flight.

(2) If the conductivity of any test points on any fitting is found to be greater than 45.0 percent International Annealed Copper Standard (IACS) or if the conductivity of any test points on any fitting is found to be less than 38.0 percent IACS, do the actions required by paragraphs (g)(2)(i) and (ii) of this AD.

(i) Within 24 hours after accomplishing the conductivity inspection specified in paragraph (g) of this AD, do a detailed inspection of the nacelle attachment fitting for cracking, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018, and repeat thereafter at intervals not to exceed 24 hours. If cracking is found, before further flight, replace the fitting with a new fitting in accordance with the requirements of paragraph (g)(2)(ii) of this AD. Replacement of the fitting terminates the daily detailed inspection requirements of this paragraph.

(ii) Except as required by paragraph (g)(2)(i) of this AD: Within 300 flight hours after accomplishing the conductivity inspection specified in paragraph (g) of this AD, do the action specified in paragraph (g)(2)(ii)(A) or (B) of this AD. As of the effective date of this AD, only the action specified in paragraph (g)(2)(ii)(B) of this AD may be done.

(A) Replace the fitting with a new fitting in accordance with paragraph (2) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018.

(B) Replace the rear spar nacelle attachment fitting and associated structure with a new nacelle attachment fitting, P/N 8Z9305, and do all applicable related investigative and corrective actions, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-16 Revision D, dated August 7, 2018. Do all applicable related investigative and corrective actions before further flight.

### **(h) Retained Inspections and Replacement, With Revised Service Information, Revised Affected Airplanes, and Revised Replacement Instructions**

This paragraph restates the requirements of paragraph (i) of AD 2010-23-04, with revised service information, revised affected airplanes, and revised replacement instructions. For airplanes having serial numbers 4305 through 4313 inclusive, and 4316 through 4380 inclusive, and airplanes that have replaced nacelle attachment fitting(s) with P/N 854146663: Within 1,200 flight hours after November 22, 2010 (the effective date of AD 2010-23-04), do a detailed inspection for cracking on each of the 4 nacelle attachment fittings, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018. If any nacelle attachment fitting is found cracked, before further flight, do the action specified in paragraph (h)(1) or (2) of this AD. As of the effective date of this AD, only the action specified in paragraph (h)(2) of this AD may be done. Thereafter, repeat the detailed inspection at intervals not to exceed 300 flight hours, except as provided by paragraph (i) of this AD. Accomplishing the replacement specified in paragraph (h)(2) of this AD terminates the inspections required by this paragraph.

(1) Replace the fitting with a new fitting in accordance with paragraph (2) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018.

(2) Replace the rear spar nacelle attachment fitting and associated structure with a new nacelle attachment fitting, P/N 8Z9305, and do all applicable related investigative and corrective actions, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-16 Revision D, dated August 7, 2018. Do all applicable related investigative and corrective actions before further flight.

**(i) Retained Inspection Compliance Time, With Revised Service Information**

This paragraph restates the requirements of paragraph (j) of AD 2010-23-04, with revised service information. For any fitting that is replaced in accordance with paragraph (3) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010; or paragraph (2) of Part A of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018, as specified in paragraph (g) or (h) of this AD: Within 1,200 flight hours after replacing the fitting, do a detailed inspection of that replaced fitting as specified in paragraph (g) or (h) of this AD, and repeat the detailed inspection thereafter at intervals not to exceed 300 flight hours. Accomplishing the replacement specified in paragraph (g)(1)(ii), (g)(2)(ii)(B), or (h)(2) of this AD terminates the inspections required by this paragraph.

**(j) Retained Credit for Previous Actions (Replacing the Fitting), With Revised Paragraph References**

This paragraph restates the credit provided in paragraph (k) of AD 2010-23-04, with revised paragraph references. Accomplishing the replacement of the nacelle fittings in accordance with any Bombardier service bulletin identified in figure 1 to paragraphs (j) and (k) of this AD before November 22, 2010 (the effective date of AD 2010-23-04) is also acceptable for compliance with the fitting replacements specified in paragraphs (g)(1)(i), (g)(2)(ii)(A), and (h)(1) of this AD.

**Figure 1 to paragraphs (j) and (k) – Acceptable Service Information**

<b>Bombardier Service Bulletin</b>	<b>Revision</b>	<b>Dated</b>
84-54-14	Original	April 16, 2010
84-54-14	A	April 22, 2010
84-54-14	B	June 11, 2010
84-54-14	C	June 30, 2010
84-54-14	D	July 5, 2010
84-54-14	E	August 19, 2010
84-54-14	F	August 20, 2010
84-54-14	G	September 9, 2010
84-54-14	H	September 10, 2010

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

This paragraph restates the credit provided in paragraph (l) of AD 2010-23-04, with no changes. Accomplishment of the inspections required by paragraphs (g) and (h) of this AD before November 22, 2010 (the effective date of AD 2010-23-04) in accordance with any Bombardier service bulletin identified in figure 1 to paragraphs (j) and (k) of this AD is acceptable for compliance with the corresponding actions required by paragraphs (g) and (h) of this AD.

**(l) New Requirements of This AD: Modification of the Rear Spar Fitting and Nacelle Attaching Structure**

For airplanes with nacelle attachment fitting P/N 85414663: Unless already done as specified in paragraph (g)(1)(ii), (g)(2)(ii)(B), or (h)(2) of this AD: Within 8,000 flight hours or 48 months, whichever occurs first, from the effective date of this AD, replace the rear spar nacelle attachment fitting and associated structure with a new nacelle attachment fitting, P/N 8Z9305, and do all applicable related investigative and corrective actions, in accordance with Part B of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-16, Revision D, dated August 7, 2018. Do all applicable related investigative and corrective actions before further flight.

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

(1) This paragraph provides credit for actions required by paragraphs (g) and (h) of this AD that are identified in Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010, which was incorporated by reference in AD 2010-23-04; except as provided by paragraph (p) of this AD.

(2) This paragraph provides credit for accomplishing the replacement of the rear spar fitting and nacelle attaching structure required by paragraph (l) of this AD, if those actions were performed

before the effective date of this AD using the service information specified in paragraphs (m)(2)(i) through (iii) of this AD.

(i) Bombardier Service Bulletin 84-54-16, dated April 29, 2011.

(ii) Bombardier Service Bulletin 84-54-16, Revision A, dated August 1, 2011.

(iii) Bombardier Service Bulletin 84-54-16, Revision C, dated January 31, 2017.

(3) This paragraph provides credit for accomplishing the replacement of the rear spar fitting and nacelle attaching structure required by paragraph (l) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 84-54-16, Revision B, dated October 6, 2016. Although Bombardier Service Bulletin 84-54-16, Revision B, dated October 6, 2016, incorrectly stated that airworthiness limitations (AWLs) or damage tolerance inspections (DTIs) are not affected, they are affected. Refer to the applicable AWLs for Post/Pre-Modification Summary (ModSum) 4-113697 and Bombardier Service Bulletin 84-54-16 in the existing maintenance requirements manual.

(4) This paragraph provides credit for accomplishing the action identified in Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018, that are 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 (m)(4)(i) through (iv) of this AD.

(i) Bombardier Service Bulletin 84-54-15, dated August 20, 2010.

(ii) Bombardier Service Bulletin 84-54-15, Revision A, dated October 25, 2010. (iii) Bombardier Service Bulletin 84-54-15, Revision B, dated February 2, 2017. (iv) Bombardier Service Bulletin 84-54-15, Revision C, dated August 7, 2018.

#### **(n) Terminating Action for Certain Actions in Paragraphs (g), (h), and (i) of This AD**

Accomplishing the modification of the rear spar fitting and nacelle attaching structure required by paragraph (l) of this AD terminates the repetitive inspection required by paragraphs (g), (h), and (i) of this AD for that airplane.

#### **(o) Parts Installation Limitations**

As of the effective date of this AD, no person may install a rear spar nacelle attachment fitting P/N 85414663 on any airplane.

#### **(p) Credit for Alternative to Certain Credit Actions**

For airplanes on which Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010, was accomplished before the effective date of this AD: As an alternative to applying sealant to each fitting and access panel as specified in paragraph C.(1) of the Accomplishment Instructions of Bombardier Service Bulletin 84-54-14, Revision J, dated September 17, 2010, the use of the instructions of Bombardier Modification Summary Package IS4Q5400012, Revision B, dated July 11, 2012, to apply sealant is also acceptable if accomplished before the effective date of this AD.

#### **(q) Other FAA AD Provisions**

(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.

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

(ii) AMOCs approved previously for AD 2010-23-04, are approved as AMOCs for the corresponding provisions of this AD.

(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, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or De Havilland Aircraft of Canada Limited's TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

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

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2010-30R2, dated July 30, 2019, for related information. This MCAI may be found in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0099.

(2) For more information about this AD, contact Andrea Jimenez, Aerospace Engineer, Airframe and Propulsion Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7330; 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 (s)(3) and (4) of this AD.

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

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

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

(i) Bombardier Service Bulletin 84-54-14, Revision K, dated August 7, 2018.

(ii) Bombardier Service Bulletin 84-54-16, Revision D, dated August 7, 2018.

(iii) Bombardier Modification Summary Package IS4Q5400012, Revision B, dated July 11, 2012.

(3) For service information identified in this AD, contact De Havilland Aircraft of Canada Limited, Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; email [thd@dehavilland.com](mailto:thd@dehavilland.com); internet <https://dehavilland.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety 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, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 29, 2020.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020-12379 Filed 6-8-20; 8:45 am]



**2020-11-14 Bombardier, Inc.:** Amendment 39-19918; Docket No. FAA-2019-1081; Product Identifier 2019-NM-153-AD.

**(a) Effective Date**

This AD is effective July 21, 2020.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Bombardier, Inc., Model BD-100-1A10 airplanes, certificated in any category, serial numbers 20001 through 20688 inclusive.

**(d) Subject**

Air Transport Association (ATA) of America Code 34, Navigation.

**(e) Reason**

This AD was prompted by reports of the loss of all air data system information provided to the flightcrew, which was caused by icing at high altitudes. The FAA is issuing this AD to address the loss of all air data system information provided to the flightcrew. If not addressed, this condition may adversely affect continued safe flight and landing.

**(f) Compliance**

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

**(g) Revision of the Airplane Flight Manual (AFM)**

Within 30 days after the effective date of this AD: Revise the Emergency Procedures–Avionics (section 03-17) of the existing AFM to include the information in the “Unreliable Airspeed” procedure of the applicable AFM specified in figure 1 to paragraph (g) of this AD, and revise the Normal Procedures–After Take-off (section 04-04) of the existing AFM to include the information in the “Go-Around” procedure of the applicable AFM specified in figure 1 to paragraph (g) of this AD.

**Figure 1 to paragraph (g) – AFM revisions**

<b>Airplane Serial Numbers</b>	<b>AFM</b>	<b>AFM Revision</b>	<b>Issue Date</b>
Serial numbers 20001 through 20500 inclusive	Bombardier Challenger 300 AFM, Publication No. CSP 100-1	Revision 56	July 8, 2019
Serial numbers 20501 through 20688 inclusive	Bombardier Challenger 350 AFM, Publication No. CH 350 AFM	Revision 22	July 8, 2019

**(h) 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 instructions from a manufacturer, the instructions 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.

**(i) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian AD CF-2019-24, dated July 5, 2019, for related information. This MCAI may be found in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-1081.

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

**(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) Bombardier Challenger 300 Airplane Flight Manual, Publication No. CSP 100-1, Revision 56, dated July 8, 2019.

(ii) Bombardier Challenger 350 Airplane Flight Manual, Publication No. CH 350 AFM, Revision 22, dated July 8, 2019.

(3) For service information identified in this AD, contact Bombardier, Inc., 200 Côte-Vertu Road West, Dorval, Québec H4S 2A3, Canada; North America toll-free telephone 1-866-538-1247 or

direct-dial telephone 1-514-855-2999; email [ac.yul@aero.bombardier.com](mailto:ac.yul@aero.bombardier.com); internet <https://www.bombardier.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety 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, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on June 5, 2020.

Gaetano A. Sciortino,  
Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020-12867 Filed 6-15-20; 8:45 am]



**FAA**  
**Aviation Safety**

## **AIRWORTHINESS DIRECTIVE**

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

---

**2020-12-01 Rolls-Royce Deutschland Ltd & Co KG (Type Certificate previously held by Rolls-Royce plc):** Amendment 39-21135; Docket No. FAA-2019-1109; Project Identifier MCAI-2019-00115-E.

**(a) Effective Date**

This AD is effective July 13, 2020.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Rolls-Royce Deutschland Ltd. & Co KG (RRD) (Type Certificate previously held by Rolls-Royce plc) Trent XWB-75, XWB-79, XWB-79B, and XWB-84 model turbofan engines.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7120, Engine Mount Section.

**(e) Unsafe Condition**

This AD was prompted by analysis by the manufacturer of the low-pressure compressor (LPC) outlet guide vane (OGV) assembly and LPC OGV outer mount ring assembly. The analysis predicted that when the front engine mount is in the fail-safe condition, the most highly stressed LPC OGV outer mount ring assembly has a life that could be substantially less than one shop visit interval. The FAA is issuing this AD to prevent failure of the front engine mount support structure. The unsafe condition, if not addressed, could result in engine separation, reduced control of the airplane, and loss of the airplane.

**(f) Compliance**

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

**(g) Required Actions**

(1) For affected RRD Trent XWB turbofan engines with 1,700 flight cycles since new (FCSN) or greater as of the effective date of this AD:

(i) Within 300 flight cycles (FCs) after the effective date of this AD, perform a fluorescent penetrant inspection (FPI) of the LPC OGV outer mount ring assembly.

(ii) Use Accomplishment Instructions, paragraph 3.A. or 3.B., as applicable, of Rolls-Royce plc (RR) Alert Non-Modification Service Bulletin (NMSB) Trent XWB 72-AK188, Revision 2, dated December 17, 2019, to perform the FPI of the LPC OGV outer mount ring assembly.

(iii) Thereafter, perform repetitive FPIs of the LPC OGV outer mount ring assembly within 1,000 FCs after the previous inspection.

(2) For affected RRD Trent XWB turbofan engines with fewer than 1,700 FCSN as of the effective date of this AD:

(i) Before exceeding 2,000 FCSN after the effective date of this AD, perform an FPI of the LPC OGV outer mount ring assembly.

(ii) Use Accomplishment Instructions, paragraph 3.A. or 3.B., as applicable, of RR Alert NMSB Trent XWB 72-AK188, Revision 2, dated December 17, 2019, to perform the FPI of LPC OGV outer mount ring assembly.

(iii) Thereafter, perform repetitive FPIs of the LPC OGV outer mount ring assembly within 1,000 FCs after the previous inspection.

(3) If, during any FPI required by paragraph (g)(1) or (2) of this AD, an LPC OGV outer mount ring assembly discrepancy is detected, as defined in the Accomplishment Instructions, paragraph 3.A. or 3.B., of RR Alert NMSB Trent XWB 72-AK188, Revision 2, dated December 17, 2019, repeat the FPI within the interval specified in Accomplishment Instructions, paragraph 3.A. or 3.B., of RR Alert NMSB Trent XWB 72-AK188, Revision 2, dated December 17, 2019.

(4) If, during any FPI required by paragraphs (g)(1) through (3) of this AD, an LPC OGV outer mount ring assembly is rejected as a result of the FPI, as defined in the Accomplishment Instructions, paragraph 3.A. or 3.B., of RR Alert NMSB Trent XWB 72-AK188, Revision 2, dated December 17, 2019:

(i) Before further flight, replace the LPC OGV outer mount ring assembly with a part eligible for installation.

(ii) [Reserved]

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

For the purpose of this AD, “a part eligible for installation” is a new LPC OGV outer mount ring assembly that has not been previously installed on an engine.

#### **(i) No Reporting Requirement**

The reporting requirements in the Accomplishment Instructions, paragraph 3, of RR Alert NMSB Trent XWB 72-AK188, Revision 2, dated December 17, 2019, are not required by this AD.

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

You may take credit for the initial and repetitive FPIs that are required by paragraphs (g)(1) through (3) of this AD if you performed the FPIs before the effective date of this AD using RR Alert NMSB Trent XWB 72-AK188, Revision 1, dated September 20, 2019, or Initial Issue, dated August 13, 2019.

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

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

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

**(l) Related Information**

(1) For more information about this AD, contact Stephen Elwin, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7236; fax: 781-238-7199; email: Stephen.L.Elwin@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2019-0234, dated September 19, 2019, for more information. You may examine the EASA AD in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-1109.

**(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) Rolls-Royce plc (RR) Alert Non-Modification Service Bulletin Trent XWB 72-AK188, Revision 2, dated December 17, 2019.

(ii) [Reserved]

(3) For RR service information identified in this AD, contact Rolls-Royce Deutschland Ltd & Co KG, Eschenweg 11, 15827 Blankenfelde-Mahlow, Germany; phone: +49 (0) 33 708 6 0; email: <https://www.rolls-royce.com/contact-us.aspx>.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety 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, email: [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 27, 2020.

Gaetano A. Sciortino,

Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020-12346 Filed 6-5-20; 8:45 am]



**2020-12-06 Gulfstream Aerospace Corporation:** Amendment 39-21141; Docket No. FAA-2019-1060; Product Identifier 2018-CE-020-AD.

**(a) Effective Date**

This AD is effective July 20, 2020.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Gulfstream Aerospace Corporation Model G-IV airplanes, certificated in any category.

**(d) Subject**

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

**(e) Unsafe Condition**

This AD was prompted by reports of un-commanded nose wheel steering turns. The FAA is issuing this AD to prevent moisture from entering the nose steering wheel servo valve, which could freeze and cause an un-commanded nose wheel steering position during touchdown. The unsafe condition, if not addressed, could result in a lateral runway departure.

**(f) Compliance**

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

**(g) Airplane Flight Manual Revisions**

Within 30 days after the effective date of this AD, revise your airplane flight manual (AFM) by incorporating the revision applicable to your airplane configuration as listed in paragraphs (g)(1) through (3) of this AD:

- (1) Gulfstream IV Airplane Flight Manual, Gulfstream Aerospace Document Number GAC-AC-GIV-OPS-0001, Revision 52, dated October 30, 2017;
- (2) Gulfstream G300 Airplane Flight Manual, Gulfstream Aerospace Document Number GAC-AC-G300-OPS-0001, Revision 20, dated October 30, 2017; or
- (3) Gulfstream G400 Airplane Flight Manual, Gulfstream Aerospace Document Number FAC-AC-G400-OPS-0001, Revision 20, dated October 30, 2017.

**(h) Replace the Nose Wheel Steering Servo Valve Manifold**

Within 36 months after the effective date of this AD, replace the nose wheel steering servo valve manifold with nose wheel steering servo valve manifold part number 5100-11 or 5105-5 in accordance with the Accomplishment Instructions of the customer bulletin that applies to your airplane configuration as listed in paragraphs (h)(1) through (3) of this AD, except you are not required to comply with step H:

- (1) Gulfstream IV Customer Bulletin Number 244, dated March 12, 2018;
- (2) Gulfstream G300 Customer Bulletin 244, dated March 12, 2018; or
- (3) Gulfstream G400 Customer Bulletin 244, dated March 12, 2018.

**(i) Records Inspection and Report of Results**

(1) Between 12 months and 24 months after the replacement of the nose wheel steering valve manifold assembly required in paragraph (h) of this AD, inspect all aircraft records for entries of an un-commanded nose wheel steering turn.

(2) Within 10 days after the records inspection required in paragraph (i)(1) of this AD, report the results of the inspection, regardless of whether the inspection found any entries, to the FAA by either email: 9-ASO&-ATLCOS-Reporting@faa.gov; or by mail: Attn: Continued Operational Safety, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337. The report must include as much of the information listed in paragraphs (i)(2)(i) through (vii) of this AD as is known about the event:

- (i) Date of records inspection;
- (ii) Date and time of all un-commanded occurrences (if any);
- (iii) Airplane serial number;
- (iv) Weather and runway conditions at the time of each occurrence;
- (v) Copy of the pilot's report of the occurrence (if available);
- (vi) Maintenance entry of the root cause of the un-commanded deflection (if available); and
- (vii) Any other information pertinent to the occurrence.

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

(1) The Manager, Atlanta ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) 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 Alex Armas, Aerospace Engineer, Atlanta ACO Branch, FAA, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5538; fax: (404) 474-5605; email: alex.armas@faa.gov.

**(l) Material Incorporated by Reference**

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

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

(i) Gulfstream IV Customer Bulletin Number 244, dated March 12, 2018.

(ii) Gulfstream G300 Customer Bulletin Number 244, dated March 12, 2018.

(iii) Gulfstream G400 Customer Bulletin Number 244, dated March 12, 2018.

(iv) Gulfstream IV Airplane Flight Manual, Gulfstream Aerospace Document Number GAC-AC-GIV-OPS-0001, Revision 52, dated October 30, 2017.

(v) Gulfstream G300 Airplane Flight Manual, Gulfstream Aerospace Document Number GAC-AC-G300-OPS-0001, Revision 20, dated October 30, 2017.

(vi) Gulfstream G400 Airplane Flight Manual, Gulfstream Aerospace Document Number FAC-AC-G400-OPS-0001, Revision 20, dated October 30, 2017.

(3) For service information identified in this AD, contact Gulfstream Aerospace Corporation, P.O. Box 2206, Savannah, Georgia 31402-2206; telephone: (800) 810-4853; fax 912-965-3520; email: [pubs@gulfstream.com](mailto:pubs@gulfstream.com); internet: <https://www.gulfstream.com/customer-support>.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on June 2, 2020.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020-12812 Filed 6-12-20; 8:45 am]



**2020-13-04 General Electric Company:** Amendment 39-21149; Docket No. FAA-2019-0683; Project Identifier AD-2020-00149-E.

**(a) Effective Date**

This AD is effective July 24, 2020.

**(b) Affected ADs**

This AD replaces AD 2017-09-06, Amendment 39-18868 (82 FR 21111, May 5, 2017).

**(c) Applicability**

This AD applies to all General Electric Company (GE) GENx-1B and GENx-2B model turbofan engines.

**(d) Subject**

Joint Aircraft System Component (JASC) Code 7600, Engine Controls.

**(e) Unsafe Condition**

This AD was prompted by reports of GENx-1B and GENx-2B model turbofan engines experiencing power loss in ice crystal icing conditions. The FAA is issuing this AD to prevent engine failure. The unsafe condition, if not addressed, could result in loss of thrust control and damage to the airplane.

**(f) Compliance**

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

**(g) Required Actions**

(1) Within 120 days after the effective date of this AD, install electronic engine control (EEC) software that is eligible for installation.

(2) At the next engine shop visit after June 9, 2017 (the effective date of AD 2017-09-06), or before further flight, whichever occurs later, remove from service all GE GENx-2B67, -2B67B, and -2B67/P fan hub stator assembly booster outlet guide vanes (BOGV), part number (P/N) B1316-00720, and replace with a part eligible for installation.

**(h) Definition**

(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 which do not constitute an engine shop visit:

(i) Separation of engine flanges solely for the purposes of transportation without subsequent maintenance does not constitute an engine shop visit.

(ii) Separation of engine flanges solely for the purpose of replacing the fan or propulsor without subsequent maintenance does not constitute an engine shop visit.

(2) For the purpose of this AD, EEC software that is eligible for installation is:

(i) For GE GENx-1B model turbofan engines, EEC software that is version B200 or later.

(ii) For GENx-2B model turbofan engines, EEC software that is version C090 or later.

(3) For the purpose of this AD, a part eligible for installation is a fan hub stator assembly BOGV which:

(i) Is not P/N B1316-00720; or,

(ii) Was previously a P/N B1316-00720, but has been repaired and modified into P/N B1316-07637.

**(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 Mehdi Lamnyi, Aerospace Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7743; fax: (781) 238-7199; email: Mehdi.Lamnyi@faa.gov.

**(k) Material Incorporated by Reference**

None.

Issued on June 12, 2020.

Lance T. Gant,

Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2020-13126 Filed 6-18-20; 8:45 am]