FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES

SMALL AIRCRAFT, ROTORCRAFT, GLIDERS
BALLOONS, AIRSHIPS, AND UAS

BIWEEKLY 2023-14

06/19/2023 - 07/02/2023

Federal Aviation Administration
Continued Operational Safety Policy Section, AIR-141
P.O. Box 25082
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SMALL AIRCRAFT

AD No.	Information	Manufacturer	Applicability

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

Biweekly 2023-01

2022-26-01		GE Aviation Czech s.r.o.	M601D-11,M601E-11,M601E-11A,M601E-11AS,M601E-11S,M601F,H75-100,H75-200,H80,H80-100,H80-200,H85-100,H85-200
2022-27-03		Leonardo S.p.a.	AB139,AW139
2022-27-08		Bell Textron Canada Limited	407

Biweekly 2023-02

2022-27-09		Airbus Helicopters	EC130T2
2023-01-02		Leonardo S.p.a.	A109,A109A,A109A II,A109C,A109E,A109K2,A109S,AW109SP

Biweekly 2023-03

2023-01-07		GE Aviation Czech s.r.o.	H75-100,H75-200,H80,H80-100,H80-200,H85-100,H85-200
2023-01-11		Safran Helicopter Engines S.A.	Makila 1A,Makila 1A1
2023-01-12		Safran Helicopter Engines S.A.	Arriel 1C,Arriel 1C1,Arriel 1C2
2023-02-03	R 2022-01-09	Stemme AG	Stemme S 10-VT,Stemme S 12
2023-02-04		Mooney International Corporation	M20C,M20D,M20E,M20F,M20G

Biweekly 2023-04

2023-01-04		Airbus Helicopters	AS350B,AS350BA,AS350B1,AS350B2,AS350B3,AS350D,AS355E,AS355F,AS355F1,AS355F2,AS355N,AS355NP
2023-01-07		GE Aviation Czech s.r.o.	H75-100,H75-200,H80,H80-100,H80-200,H85-100,H85-200
2023-01-08		Continental Aerospace Technologies GmbH	TAE 125-02-99,TAE 125-02-114
2023-01-10		GE Aviation Czech s.r.o.	M601E-11,M601E-11A,M601E-11AS,M601E-11S,M601F
2023-02-12		Continental Aerospace Technologies Inc.	GTSIO-520-C,GTSIO-520-D,GTSIO-520-E,GTSIO-520-F,GTSIO-520-H,GTSIO-520-K,GTSIO-520-L,GTSIO-520-M,GTSIO-520-N,IO-470-A,IO-470-C,IO-470-D,IO-470-E,IO-470-F,IO-470-G,IO-470-H,IO-470-J,IO-470-K,IO-470-L,IO-470-LO,IO-470-M,IO-470-N,IO-470-P,IO-470-R,IO-470-S,IO-470-T,IO-470-U,IO-470-V,IO-470-VO,IO-520-A,IO-520-B,IO-520-BA,IO-520-BB,IO-520-C,IO-520-CB,IO-520-D,IO-520-E,IO-520-F,IO-520-J,IO-520-K,IO-520-L,IO-520-M,IO-520-MB,IO-520-N,IO-520-NB,IO-520-P,IO-550-A,IO-550-B,IO-550-C,IO-550-D,IO-550-E,IO-550-F,IO-550-G,IO-550-L,IO-550-N,IO-550-P,IO-550-R,IOF-550-B,IOF-550-C,IOF-550-D,IOF-550-E,IOF-550-F,IOF-550-L,IOF-550-P,IOF-550-R,LIO-470-A,LIO-520-P,LTSIO-520-AE,O-470-A,O-470-E,O-470-G,O-470-G-CI,O-470-H,O-470-J,O-470-K,O-470-K-CI,O-470-L,O-470-L-CI,O-470-M,O-470-M-CI,O-470-N,O-470-P,O-470-R,O-470-S,O-470-T,O-470-U,TSIO-470-B,TSIO-470-C,

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			TSIO-470-D,TSIO-520-A,TSIO-520-AE,TSIO-520-AF,TSIO-520-B,TSIO-520-BB,TSIO-520-BE,TSIO-520-C,TSIO-520-CE,TSIO-520-D,TSIO-520-DB,TSIO-520-E,TSIO-520-EB,TSIO-520-G,TSIO-520-H,TSIO-520-J,TSIO-520-JB,TSIO-520-K,TSIO-520-KB,TSIO-520-L,TSIO-520-LB,TSIO-520-M,TSIO-520-N,TSIO-520-NB,TSIO-520-P,TSIO-520-R,TSIO-520-T,TSIO-520-U,TSIO-520-UB,TSIO-520-VB,TSIO-520-WB,TSIO-550-A,TSIO-550-B,TSIO-550-C,TSIO-550-E,TSIO-550-G,TSIO-550-K,TSIOF-550-D,TSIOF-550-J,TSIOF-550-K,TSIOL-550-A,TSIOL-550-C
2023-03-01		Airbus Helicopters Deutschland GmbH	BO-105A,BO-105C,BO-105S,BO-105LS A-1,BO-105LS A-3,MBB-BK 117 A-1,MBB-BK 117 A-3,MBB-BK 117 A-4,MBB-BK 117 B-1,MBB-BK 117 B-2,MBB-BK 117 C-1,MBB-BK 117 C-2,MBB-BK 117 D-2
2023-03-10		Schempp-Hirth Flugzeugbau GmbH	Duo-Discus,Duo Discus T
Biweekly 2023-05			
2023-01-07		GE Aviation Czech s.r.o.	H75-100,H75-200,H80,H80-100,H80-200,H85-100,H85-200
2023-02-17		Textron Aviation Inc.	210N,210R,P210N,P210R,T210N,T210R,177,177A,177B,177RG,F177RG
2023-03-02		Pratt & Whitney Canada Corp.	PT6E-67XP
2023-03-03		Leonardo S.p.a.	AB139,AW139
2023-03-12	R 2004-04-09	Pratt & Whitney Canada Corp.	JT15D-1,JT15D-1A,JT15D-1B
2023-03-13		Airbus Helicopters	AS355E,AS355F,AS355F1,AS355F2,AS355N
2023-04-08		Continental Aerospace Technologies, Inc. (Continental®)	GTSIO-520-C,GTSIO-520-D,GTSIO-520-H,GTSIO-520-K,GTSIO-520-L,GTSIO-520-M,GTSIO-520-N,GTSIO-520-S,IO-360-A,IO-360-AB,IO-360-AF,IO-360-C,IO-360-CB,IO-360-D,IO-360-DB,IO-360-E,IO-360-ES,IO-360-G,IO-360-GB,IO-360-H,IO-360-HB,IO-360-J,IO-360-JB,IO-360-K,IO-360-KB,IO-470-D,IO-470-E,IO-470-G,IO-470-H,IO-470-J,IO-470-K,IO-470-L,IO-470-M,IO-470-N,IO-470-P,IO-470-R,IO-470-S,IO-470-T,IO-470-U,IO-470-V,IO-470-VO,IO-520-A,IO-520-B,IO-520-BA,IO-520-BB,IO-520-C,IO-520-CB,IO-520-D,IO-520-E,IO-520-F,IO-520-J,IO-520-K,IO-520-L,IO-520-M,IO-520-MB,IO-550-A,IO-550-B,IO-550-C,IO-550-D,IO-550-E,IO-550-F,IO-550-G,IO-550-L,IO-550-N,IO-550-P,IO-550-R,LTSIO-360-E,LTSIO-360-EB,LTSIO-360-KB,LTSIO-360-RB,LTSIO-520-AE,O-470-A,O-470-B,O-470-E,O-470-G,O-470-H,O-470-J,O-470-K,O-470-L,O-470-M,O-470-N,O-470-R,O-470-S,O-470-T,O-470-U,TSIO-360-A,TSIO-360-AB,TSIO-360-B,TSIO-360-BB,TSIO-360-C,TSIO-360-CB,TSIO-360-D,TSIO-360-DB,

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			TSIO-360-E,TSIO-360-EB,TSIO-360-G,TSIO-360-GB,TSIO-360-H,TSIO-360-HB,TSIO-360-JB,TSIO-360-KB,TSIO-360-LB,TSIO-360-MB,TSIO-360-RB,TSIO-360-SB,TSIO-520-A,TSIO-520-AE,TSIO-520-AF,TSIO-520-B,TSIO-520-BB,TSIO-520-BE,TSIO-520-C,TSIO-520-CE,TSIO-520-D,TSIO-520-DB,TSIO-520-E,TSIO-520-EB,TSIO-520-G,TSIO-520-H,TSIO-520-J,TSIO-520-JB,TSIO-520-K,TSIO-520-KB,TSIO-520-L,TSIO-520-LB,TSIO-520-M,TSIO-520-NB,TSIO-520-P,TSIO-520-R,TSIO-520-T,TSIO-520-UB,TSIO-520-VB,TSIO-520-WB,TSIO-550-A,TSIO-550-B,TSIO-550-C,TSIO-550-E,TSIO-550-G,TSIO-550-K,TSIO-550-N,TSIOF-550-K,TSIOL-550-A,TSIOL-550-B,TSIOL-550-C
Biweekly 2023-06			
2023-03-14		Schempp-Hirth Flugzeugbau GmbH	Duo-Discus,Duo Discus T
2023-03-22	R 2015-09-04 R1	DG Flugzeugbau GmbH,Schempp-Hirth Flugzeugbau GmbH	DG-1000T,Duo Discus T
2023-04-20		Cirrus Design Corporation	SF50
Biweekly 2023-07			
2023-05-03	R 2022-14-14	Alexander Schleicher GmbH & Co. Segelflugzeugbau	ASW -15,ASW-15B
2023-05-09		Airbus Helicopters Deutschland GmbH	EC135P3,EC135T3,MBB-BK 117 D-2,MBB-BK 117 D-3
2023-05-16	R 2023-04-08	Continental Aerospace Technologies Inc.	GTSIO-520-C,GTSIO-520-D,GTSIO-520-H,GTSIO-520-K,GTSIO-520-L,GTSIO-520-M,GTSIO-520-N,GTSIO-520-S,IO-360-A,IO-360-AB,IO-360-AF,IO-360-C,IO-360-CB,IO-360-D,IO-360-DB,IO-360-E,IO-360-ES,IO-360-G,IO-360-GB,IO-360-H,IO-360-HB,IO-360-J,IO-360-JB,IO-360-K,IO-360-KB,IO-470-A,IO-470-C,IO-470-D,IO-470-E,IO-470-F,IO-470-G,IO-470-H,IO-470-J,IO-470-K,IO-470-L,IO-470-LO,IO-470-M,IO-470-N,IO-470-P,IO-470-R,IO-470-S,IO-470-T,IO-470-U,IO-470-V,IO-470-VO,IO-520-A,IO-520-B,IO-520-BA,IO-520-BB,IO-520-C,IO-520-CB,IO-520-D,IO-520-E,IO-520-F,IO-520-J,IO-520-K,IO-520-L,IO-520-M,IO-520-MB,IO-550-A,IO-550-B,IO-550-C,IO-550-D,IO-550-E,IO-550-F,IO-550-G,IO-550-L,IO-550-N,IO-550-P,IO-550-R,LTSIO-360-E,LTSIO-360-EB,LTSIO-360-KB,LTSIO-360-RB,LTSIO-520-AE,O-470-A,O-470-B,O-470-E,O-470-G,O-470-H,O-470-J,O-470-K,O-470-L,O-470-M,O-470-N,O-470-R,O-470-S,O-470-T,O-470-U,TSIO-360-A,TSIO-360-AB,TSIO-360-B,TSIO-360-BB,TSIO-360-C,TSIO-360-CB,TSIO-360-D,TSIO-360-DB,TSIO-360-E,TSIO-360-EB,TSIO-360-F,TSIO-360-FB,TSIO-360-G,TSIO-360-

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			GB,TSIO-360-H,TSIO-360-HB,TSIO-360-JB,TSIO-360-KB,TSIO-360-LB,TSIO-360-MB,TSIO-360-RB,TSIO-360-SB,TSIO-520-A,TSIO-520-AE,TSIO-520-AF,TSIO-520-B,TSIO-520-BB,TSIO-520-BE,TSIO-520-C,TSIO-520-CE,TSIO-520-D,TSIO-520-DB,TSIO-520-E,TSIO-520-EB,TSIO-520-G,TSIO-520-H,TSIO-520-J,TSIO-520-JB,TSIO-520-K,TSIO-520-KB,TSIO-520-L,TSIO-520-LB,TSIO-520-M,TSIO-520-NB,TSIO-520-P,TSIO-520-R,TSIO-520-T,TSIO-520-UB,TSIO-520-VB,TSIO-520-WB,TSIO-550-A,TSIO-550-B,TSIO-550-C,TSIO-550-E,TSIO-550-G,TSIO-550-K,TSIO-550-N,TSIOF-550-K,TSIOL-550-A,TSIOL-550-B,TSIOL-550-C
2023-06-11		Viking Air Limited	DHC-2 Mk.I
Biweekly 2023-08			
2023-07-51	E	Leonardo S.p.a.	AB139,AW139
Biweekly 2023-09			
2023-06-05		Bell Textron Canada Limited	206A,206A-1 (OH-58A),206B,206B-1,206L,206L-1,206L-3,206L-4
2023-07-08		Pilatus Aircraft Ltd.	PC-12/47E
Biweekly 2023-10			
2023-06-14		Pratt & Whitney Canada Corp.	PW308A,PW308C
2023-07-03		Leonardo S.p.a.	AB412,AB412 EP
Biweekly 2023-11			
2023-08-06	A 2020-20-08	Airbus Helicopters	AS332C,AS332C1,AS332L,AS332L1,AS332L2,EC225LP
2023-08-07		Allied Ag Cat Productions Inc.	G-164A,G-164B
Biweekly 2023-12			
2023-09-07	R 2022–02–01	Sikorsky Aircraft Corporation	S-92A
2023-09-12		Pilatus Aircraft Ltd.	PC-12,PC-12/45,PC-12/47,PC-12/47E
2023-10-02	R 2021–23–12	The Boeing Company,Airbus SAS,Bombardier Inc.,Embraer S.A.,Gulfstream Aerospace Corporation,Gulfstream Aerospace LP,Textron Aviation Inc.,Pilatus Aircraft Limited,Fokker Services B.V.,Saab AB Support and Services,De Havilland Aircraft of Canada Limited,Airbus Canada Limited Partnership,ATR - GIE Avions de Transport Régional,MHI RJ Aviation ULC,BAE Systems (Operations) Limited,Lockheed Martin Corporation,Lockheed Martin Aeronautics Company,Viking Air Limited,Dassault Aviation	18,23,35,36,50,58,60,65,70,76,77,95,99,100,111,120,140,150,152,170,172,175,177,180,182,185,188,190,195,200,206,207,208,210,300,314,320,321,335,336,337,340,382,390,400,401,402,404,406,408,411,414,421,425,441,500,501,510,525,550,551,552,560,650,680,700,750,1900,2000,4000,1049-54,1049B-55 (Navy R7V-1),1049C-55,1049D-55,1049E-55,1049F-55 (USAF C-121C),1049H-82,1049G-82,1125 Westwind Astra,1329-23A,1329-23E,1329-25,1329-23D,150A,150B,150C,150D,150E,150F,150G,150H,150J,150K,150M,150L,

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170A,170B,172A,172B,172C,172D,172E,172G,172F (USAF T-41A),172H (USAF T-41A),172I,172K,172L,172M,172N,172P,172Q,172R,172RG,172S,175A,175B,175C,177A,177B,180A,180B,180C,180D,180F,180E,180G,180H,180J,180K,182A,182B,182C,182D,182E,182F,182G,182H,182J,182K,182L,182M,182N,182P,182Q,182R,182S,182T,185A,185B,185C,185D,185E,188A,188B,188C,18D,18S (Army C-45C),1900C,1900C (C-12J),1900D,195B,19A,200C,200CT,200T,206H,207A,210-5 (205),210-5A (205A),210A,210B,210C,210D,210E,210F,210G,210H,210J,210K,210L,210M,210N,210R,300LW,320-1,320A,320B,320C,320D,320E,320F,337A,337B,337C,337D,337E,337F,337G,337H,340A,35-33,35-A33,35-B33,35-C33,35-C33A,35R,382B,382E,382G,382J,382F,3N,3NM,400A,400T,401A,401B,402A,402B,402C,411A,414A,421A,421B,421C,49-46,525A,525B,525C,560XL,56TC,58A,58P,58PA,58TCA,58TC,649-79,649A-79,65-80,65-88,65-90,65-A80,65-A80-8800,65-A90,65-A90-1,65-A90-2,65-A90-3,65-A90-4,65-B80,680A,707-100 Long Body,707-100B Long Body,707-200,707-300 Series,707-300C Series,707-400 Series,707-100B Short Body,707-300B Series,717-200,720 Series,727 Series,727-100C Series,727-200 Series,727-200F Series,727-100 Series,727C Series,737-100 Series,737-200 Series,737-200C Series,737-300 Series,737-400 Series,737-500 Series,737-600 Series,737-700 Series,737-700C Series,737-800 Series,737-900 Series,737-900ER Series,737-8200,737-8,737-9,747-100 Series,747-100B Series,747-100B SUD Series,747-200B Series,747-200C Series,747-200F Series,747-300 Series,747-400 Series,747-400D Series,747-400F Series,747SP Series,747SR Series,747-8 Series,747-8F Series,749-79,749A-79,75 (Army PT-13),757-200 Series,757-200CB Series,757-200PF Series,757-300 Series,767-2C Series,767-200 Series,767-300 Series,767-300F Series,767-400ER Series,777-200 Series,777-200LR Series,777-300 Series,777-300ER Series,777F Series,787-8,787-9,787-10,80-A,95-55,95-A55,95-B55,95-B55A,95-B55B,95-C55,95-C55A,99A,A100,A100-1 (U-21J),A100A,A100C,A150K,A150L,A150M,A152,A185E,A185F,A188,A188B,A188A,A18A,A18D,A200 (C-12A),A200 (C-

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12C),A200C (UC-12B),A200CT (C-12D),A200CT (C-12F),A200CT (FWC-12D),A200CT (RC-12D),A200CT (RC-12G),A200CT (RC-12H),A200CT (RC-12K),A200CT (RC-12P),A200CT (RC-12Q),A23,A23-19,A23A,A23-24,A24,A24R,A300 B2-1A,A300 B2-1C,A300 B2-203,A300 B2K-3C,A300 B4-2C,A300 B4-103,A300 B4-203,A300 B4-601,A300 B4-603,A300 B4-605R,A300 B4-620,A300 B4-622,A300 B4-622R,A300 C4-605R Variant F,A300 F4-605R,A300 F4-622R,A310-203,A310-204,A310-221,A310-222,A310-304,A310-322,A310-324,A310-325,A-314,A318-111,A318-112,A318-121,A318-122,A319-111,A319-112,A319-113,A319-114,A319-115,A319-131,A319-132,A319-133,A319-151N,A319-153N,A319-171N,A320-211,A320-212,A320-214,A320-216,A320-231,A320-232,A320-233,A320-251N,A320-252N,A320-253N,A320-271N,A320-272N,A320-273N,A321-111,A321-112,A321-131,A321-211,A321-212,A321-213,A321-231,A321-232,A321-251N,A321-251NX,A321-252N,A321-252NX,A321-253N,A321-253NX,A321-271N,A321-271NX,A321-272N,A321-272NX,A330-201,A330-202,A330-203,A330-223,A330-223F,A330-243,A330-243F,A330-301,A330-302,A330-303,A330-321,A330-322,A330-323,A330-341,A330-342,A330-343,A330-841,A330-941,A340-211,A340-212,A340-213,A340-311,A340-312,A340-313,A340-541,A340-642,A35,A350-941,A350-1041,A36,A36TC,A380-841,A380-842,A380-861,A45 (Military T-34A; B-45),A56TC,A65,A65-8200,A75 (Army PT-13A; -13B; -13C),A75J1 (Army PT-18),A75L3,A75L300,A75N1 (Army PT-17; -17A; Navy N2S-1; -4),A99,A99A,Army AT-11,Astra SPX,AT-6 (SNJ-2),AT-6A (SNJ-3),AT-6B,AT-6C (SNJ-4),AT-6D (SNJ-5),AT-6F (SNJ-6),ATR42-200,ATR42-300,ATR42-320,ATR42-500,ATR72-101,ATR72-102,ATR72-201,ATR72-202,ATR72-211,ATR72-212,ATR72-212A,Avro 146-RJ70A,Avro 146-RJ85A,Avro 146-RJ100A,B100,B19,B200,B200C,B200C (C-12F),B200C (C-12R),B200C (UC-12F),B200C (UC-12M),B200CGT,B200CT,B200GT,B200T,B23,B24R,B300,B300C,B300C (MC-12W),B300C (UC-12W),B35,B36TC,B50,B60,B75 (Navy N2S-5),B95,B95A,B99,BAC 1-11 400 Series,BAC 1-11 200 Series,BAe 146-100A,BAe 146-200A,BAe 146-300A,BAe.125 Series 800A,BAe.125 Series 800A (C-29A),BAe.125 Series 800A

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(U-125),BAe.125 Series 800B,BAe.125 Series 1000A,BAe.125 Series 1000B,BC-1A,BD-500-1A10,BD-500-1A11,BD-700-1A10,BD-700-1A11,BD-700-2A12,Beagle B.121 Series 1,Beagle B.121 Series 2,Beagle B.121 Series 3,BH.125 Series 400A,BH.125 Series 600A,C23,C24R,C35,C-45G,C-45H,C50,C54-DC,C54A-DC,C54B-DC,C54D-DC,C54G-DC,C54E-DC,C90,C90A,C90GT,C90GTi,C99,CL-215-1A10,CL-215-6B11 (CL-215T Variant),CL-215-6B11 (CL-415 Variant),CL-44J,CL-600-1A11 (CL-600),CL-600-2A12 (CL-601),CL-600-2B16 (CL-601-3A),CL-600-2B16 (CL-601-3R),CL-600-2B16 (CL-604),CL-600-2B19 (Regional Jet Series 100),CL-600-2B19 (Regional Jet Series 440),CL-600-2C10 (Regional Jet Series 700),CL-600-2C10 (Regional Jet Series 701),CL-600-2C10 (Regional Jet Series 702),CL-600-2C11 (Regional Jet Series 550),CL-600-2D15 (Regional Jet Series 705),CL-600-2D24 (Regional Jet Series 900),CL-600-2E25 (Regional Jet Series 1000),D18C,D18S,D35,D45 (Military T-34B),D50,D50A,D50B,D50C,D50E,D50E-5990,D55,D55A,D75N1 (Army PT-27),D95A,DC-10-10,DC-10-10F,DC-10-15,DC-10-30,DC-10-30F (KC-10A KDC-10),DC-10-40F,DC-10-40,DC3A-S1C3G,DC3A-S1CG,DC3A-S4C4G,DC3A-SC3G,DC3A-SCG,DC3C-R-1830-90C,DC3C-S1C3G,DC3C-SC3G,DC3C-S4C4G,DC3D-R-1830-90C,DC3-G102,DC3-G102A,DC3-G103A,DC3-G202A,DC-4,DC-6B,DC-7B,DC-7C,DC-6,DC-6A,DC-7,DC-8-11,DC-8-12,DC-8-21,DC-8-31,DC-8-32,DC-8-33,DC-8-41,DC-8-42,DC-8-43,DC-8-51,DC-8-52,DC-8-53,DC-8-55,DC-8-61,DC-8-61F,DC-8-62,DC-8-62F,DC-8-63,DC-8-63F,DC-8-71,DC-8-71F,DC-8-72,DC-8-72F,DC-8-73,DC-8-73F,DC-8F-54,DC-8F-55,DC-9-11,DC-9-12,DC-9-13,DC-9-14,DC-9-15,DC-9-15F,DC-9-21,DC-9-31,DC-9-32,DC-9-32 (VC-9C),DC-9-32F,DC-9-32F (C-9A),DC-9-32F (C-9B),DC-9-33F,DC-9-34,DC-9-34F,DC-9-41,DC-9-51,DC-9-81 (MD-81),DC-9-82 (MD-82),DC-9-83 (MD-83),DC-9-87 (MD-87),DH.125 Series 1A,DH.125 Series 1A-522,DH.125 Series 1A/R-522,DH.125 Series 1A/S-522,DH.125 Series 3A,DH.125 Series 3A/R,DH.125 Series 3A/RA,DH.125 Series 400A,DHC-2 Mk.I,DHC-2 Mk.II,DHC-2 Mk.III,DHC-4,DHC-4A,DHC-6-1,DHC-6-100,DHC-6-200,DHC-6-300,DHC-6-400,DHC-7-1,DHC-7-100,DHC-7-101,DHC-7-102,DHC-7-103,E17B (Army

SMALL AIRCRAFT

AD No.	Information	Manufacturer	Applicability

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UC-43D),E17L,E18S,E18S-9700,E310H,E310J,E33,E33A,E33C,E35,E50,E55,E55A,E75 (Army PT-13D; Navy N2S-5; PT-13D/N2S-5),E75N1 (Army PT-13D; Navy N2S-5; PT-13D/N2S-5),E90,E95,EMB-110P1,EMB-110P2,EMB-120,EMB-120FC,EMB-120QC,EMB-120RT,EMB-120ER,EMB-135,EMB-135BJ (Legacy 600),EMB-135BJ (Legacy 650),EMB-135BJ,EMB-135ER,EMB-135KE,EMB-135KL,EMB-135LR,EMB-145EP,EMB-145ER,EMB-145LR,EMB-145MP,EMB-145MR,EMB-145XR,EMB-500,EMB-505,EMB-545,EMB-550,ERJ 170-100 LR,ERJ 170-100 SE,ERJ 170-100 STD,ERJ 170-100 SU,ERJ 170-200 LL,ERJ 170-200 LR,ERJ 170-200 STD,ERJ 170-200 SU,ERJ 190-100 ECJ,ERJ 190-100 IGW,ERJ 190-100 LR,ERJ 190-100 STD,ERJ 190-200 IGW,ERJ 190-200 LR,ERJ 190-200 STD,ERJ 190-300,ERJ 190-400,F150F,F150G,F150H,F150J,F150K,F150L,F150M,F152,F172D,F172E,F172F,F172G,F172H,F172K,F172L,F172M,F172N,F172P,F17D (UC-43C),F27 Mark 050,F27 Mark 100,F27 Mark 200,F27 Mark 300,F27 Mark 400,F27 Mark 500,F27 Mark 600,F27 Mark 700,F28 Mark 0070,F28 Mark 0100,F28 Mark 1000,F28 Mark 2000,F28 Mark 3000,F28 Mark 4000,F33,F33A,F33C,F337E,F337F,F337G,F337H,F35,F50,FA150K,FA150L,FA150M,FA152,Falcon 7X,Falcon 900EX,FALCON 2000,FALCON 2000EX,Falcon 10,Fan Jet Falcon,Fan Jet Falcon Series C,Fan Jet Falcon Series D,Fan Jet Falcon Series E,Fan Jet Falcon Series F,Fan Jet Falcon Series G,FP172D,FR172E,FR172F,FR172G,FR172H,FR172J,FR172K,FRA150L,FRA150M,FT337E,FT337F,FT337GP,FT337HP,G-1159,G-1159A,G-1159B,G18S,G33,G50,G58,G-IV,GIV-X,Gulfstream 100,Gulfstream 200,GV,GV-SP,GVI,GVII-G500,GVII-G600,H18,H35,H50,H90,Hawker 750,Hawker 800,Hawker 800 (U-125A),Hawker 800XP,Hawker 850XP,Hawker 900XP,Hawker 1000,HS 748 Series 2A,HS 748 Series 2B,HS.125 Series 1B,HS.125 Series 1B-522,HS.125 Series 1B/R-522,HS.125 Series 1B/S-522,HS.125 Series 3B,HS.125 Series 3B/R,HS.125 Series 3B/RA,HS.125 Series 3B/RB,HS.125 Series 3B/RC,HS.125 Series 400A,HS.125 Series 400B,HS.125 Series 400B/1,HS.125 Series 401B,HS.125 Series 403A(C),HS.125 Series 403B,HS.125 Series 600A,HS.125 Series 600B,HS.125 Series 600B/1,HS.125 Series

SMALL AIRCRAFT

AD No.	Information	Manufacturer	Applicability

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

			600B/2,HS.125 Series 600B/3,HS.125 Series 700A,HS.125 Series 700B,HS.125 Series F3B,HS.125 Series F3B/RA,HS.125 Series F400B,HS.125 Series F403B,HS.125 Series F600B,IB75A,J35,JRB-6,K35,L-1011-385-1,L-1011-385-1-14,L-1011-385-1-15,L-1011-385-3,LC40-550FG,LC40-550G,LC41-550FG,M19A,M337B,M35,MD-10-10F,MD-10-30F,MD-11,MD-11F,MD-88,MD-90-30,MU-300-10,MU-300,Mystere-Falcon 20 - C5,Mystere-Falcon 20 - D5,Mystere-Falcon 20 - E5,Mystere-Falcon 20 - F5,Mystere-Falcon 50,Mystere-Falcon 200,Mystere-Falcon 900,N35,Navy R6D-1,Navy R6D-1Z,P172D,P206,P206A,P206B,P206C,P206D,P206E,P210N,P210R,P337H,P35,R172E,R172F,R172G,R172H,R172J,R172K,R182,R4D-8,R4D-8Z,RC-45J,S18A,S18D,S35,SA18A,SA18D,SA-307B,SA-307B-1,SAAB 340B,340A (SAAB SF340A),SAAB 2000,SC-7 Skyvan Series 2,SC-7 Skyvan Series 3,SD17S,SD3-30,SD3-60,SD3-60 SHERPA,SD3-SHERPA,Super DC-3,T182,T182T,T188C,T206H,T207,T207A,T210F,T210G,T210H,T210J,T210K,T210L,T210M,T210N,T210R,T240,T310P,T310Q,T310R,T337B,T337C,T337D,T337E,T337F,T337G,T337H,T337H-SP,T-6G,TC-45G,TC-45H,TC-45J,TP206A,TP206B,TP206C,TP206D,TP206E,TR182,TU206A,TU206B,TU206C,TU206D,TU206E,TU206F,TU206G,U206,U206A,U206B,U206C,U206D,U206E,U206F,U206G,UC-45J,USAF C-118A,V35,V35A,V35B,12-B,140A,149-46,1649A-98,177RG,18A,195A,203-B,208B,247-D (Army C-73),300-50A-01 (USAF C-141A),3TM,402-2,45 (Military YT-34),720B Series,80-A1,99A (FACH),A60,ATP,B18S (Army F-2),B75N1 (Navy N2S-3),B90,BD-100-1A10 (Challenger 300),C18S,CL-44D4,D17A (Army UC-43F),D17R (Army UC-43A),D17S,DHC-3,Electra 10-E,F177RG,F90,FR182,G-159,G17S,G35,G36,Galaxy,Gulfstream G150,Gulfstream G280,HU-16D,J50,Jetstream Model 4101,LC42-550FG,NA-260,Navy SNB-1,O-47B,PC-24,S-307,S550,SE17B,SF17D,SNJ-7,Super Universal,T303,T-34C,TR-1
2023-10-05	R 2023–07–51	Leonardo S.p.a.	AB139,AW139
2023-11-03		Honda Aircraft Company LLC	HA-420
Biweekly 2023-13			
2023-09-09		Aerostar Aircraft Corporation,B-N Group Ltd.,Commander Aircraft	PA-60-600 (Aerostar 600),PA-60-601 (Aerostar 601),PA-60-601P (Aerostar

SMALL AIRCRAFT

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		Corporation,Cirrus Design Corporation,Continental Aerospace Technologies Inc.,Costruzioni Aeronautiche Tecnam S.P.A.,Daher Aerospace,Diamond Aircraft Industries Inc,The Enstrom Helicopter Corporation,Helio Aircraft LLC,Helio Alaska Inc.,The King's Engineering Fellowship,Lycoming Engines,Maule Aerospace Technology Inc.,Merlyn Products Inc,Mooney International Corporation,Piper Aircraft Inc.,Revo Incorporated,Scotts-Bell 47 Inc,Siam Hiller Holdings Inc.,SST FLUGTECHNIK GmbH,Textron Aviation Inc.,Triton Aerospace LLC,Twin Commander Aircraft LLC,Vulcanair S.p.A.	601P),PA-60-602P (Aerostar 602P),PA-60-700P (Aerostar 700P),BN-2,BN-2A,BN-2A-6,BN-2A-8,BN-2A-9,112TC,112TCA,114TC,SR22,SR22T,LTSIO-360-E,LTSIO-360-EB,LTSIO-360-KB,LTSIO-360-RB,TSIO-360-E,TSIO-360-EB,TSIO-360-F,TSIO-360-FB,TSIO-360-KB,TSIO-360-LB,TSIO-360-MB,TSIO-360-RB,TSIO-360-SB,TSIO-520-BE,TSIO-520-L,TSIO-520-LB,TSIO-520-T,TSIO-520-WB,TSIO-550-A,TSIO-550-B,TSIO-550-C,TSIO-550-E,TSIO-550-G,TSIO-550-J,TSIO-550-K,TSIO-550-N,TSIOF-550-D,TSIOF-550-J,IO-520-B,IO-520-BA,IO-520-BB,IO-520-D,IO-550-B,IO-550-E,IO-550-N,P2012 Traveller,TB 21,DA 40,F-28C,F-28C-2,F-28C-2R,F-28F,F-28F-R,280C,280F,280FX,500,H-295 (USAF U10D),H-395 (USAF L-28A or U-10B),4500-300,4500-300 Series II,IO-540-AA1A5,IO-540-AG1A5,IO-540-S1A5,TIO-540-AE2A,TIO-540-AH1A,LTIO-540-J2BD,TO-360-C1A6D,TO-360-E1A6D,LTO-360-A1A6D,LTO-360-E1A6D,TIO-540-J2BD,M-5-210TC,IO-540-MX1,M20J,M20K,M20M,M20TN,M20V,PA-23,PA-23-160,PA-23-235,PA-23-250,PA-23-250 (Navy UO-1),PA-E23-250,PA-24-250,PA-24-260,PA-24-400,PA-28-201T,PA-28R-201T,PA-28RT-201T,PA-30,PA-31,PA-31-325,PA-31-350,PA-31P,PA-31P-350,PA-32-260,PA-32R-300,PA-32RT-300T,PA-32R-301 (SP),PA-32-301T,PA-32R-301T,PA-34-200,PA-34-200T,PA-34-220T,PA-39,PA-44-180T,PA-46-310P,PA-46-350P,Lake LA-4,Lake LA-4A,Lake LA-4-200,Lake 250,47G-3B,47G-3B-1,47G-3B-2,47G-3B-2A,UH-12L,UH-12L4,EA 400-500,35-33,35-A33,35-B33,35-C33,35-C33A,E33,E33A,E33C,F33,F33A,F33C,H35,J35,K35,M35,N35,P35,S35,V35,V35A,V35B,36,A36,A36TC,B36TC,D55,E55,56TC,A56TC,58,G58,60,A60,B60,95,95-C55,B95,B95A,D95A,E95,185,185A,185B,185C,185D,185E,A185E,A185F,A188,A188A,A188B,T182,T182T,TR182,T188C,206,P206A,P206,P206B,P206C,P206D,P206E,T206H,TP206A,TP206B,TP206C,TP206D,TP206E,TU206A,TU206B,TU206C,TU206D,TU206E,TU206F,TU206G,U206,U206A,U206B,U206C,U206D,U206E,U206F,U206G,T207,T207A,210,210A,210B,210C,210-5 (205),210-5A (205A),P210N,T210G,T210H,T210J,T210K,T210L,T210M,T210N,T240,T303,310,310B,310C,310D,310E,310F,310G,310H,310I,310J,T310P,T310Q,T310R,320,320A,320B,320C,320D,320E,320F,320-

SMALL AIRCRAFT

AD No.	Information	Manufacturer	Applicability

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

			1,321,335,340,340A,LC40-550FG,LC41-550FG,LC42-550FG,FT337E,FT337F,FT337GP,FT337HP,P337H,T337B,T337C,T337D,T337E,T337F,T337G,T337H,T337H-SP,401,401A,401B,402,402A,402B,402C,404,411,411A,414,414A,421,421A,421B,421C,A500,500-A,500-B,500-S,500-U,560-A,560-E,685,P.68C-TC,P.68TC Observer,EA-400
2023-11-05	R 2021-10-28	Pilatus Aircraft Ltd.	PC-24
2023-11-12		DAHER AEROSPACE	TBM 700
Biweekly 2023-14			
2023-11-07	R 2021-23-13	Airbus Helicopters,Airbus Helicopters Deutschland GmbH,Air Space Design and Manufacturing LLC,Bell Textron Canada Limited,Bell Textron Inc.,Brantly International Inc.,Centerpointe Aerospace Inc.,Columbia Helicopters Inc.,The Enstrom Helicopter Corporation,Erickson Air-Crane Incorporated DBA Erickson Air-Crane,Erickson Incorporated DBA Erickson Air-Crane,Hélicoptères Guimbal,Siam Hiller Holdings Inc.,Kaman Aerospace Corporation,Leonardo S.p.a.,MD Helicopters Inc.,PZL-Swidnik S.A.,Robinson Helicopter Company,Schweizer RSG LLC,Scotts-Bell 47 Inc,Sikorsky Aircraft Corporation	47,206,210,212,222,230,234,280,305,369,407,412,427,429,430,480,505,1100,107-II,204B,205A,205A-1,205B,206A,206A-1,206A-1 (OH-58A),206B,206B-1,206L,206L-1,206L-3,206L-4,222B,222U,269A,269A-1,269B,269C,269C-1,269D,280C,280F,280FX,369A,369D,369E,369F,369FF,369H,369HE,369HM,369HS,412CF,412EP,47B,47B3,47D,47D1,47E,47G,47G-2,47G-2A,47G-2A-1,47G-3,47G-3B,47G-3B-1,47G-3B-2,47G-3B-2A,47G-4,47G-4A,47G-5,47G-5A,47H-1,47J,47J-2,47J-2A,47K,480B,500N,600N,A109,A109A,A109 A II,A109C,A109E,A109K2,A109S,A119,AB139,AB412,AB412 EP,AS332C,AS332C1,AS332L,AS332L1,AS332L2,AS350B,AS350B1,AS350B2,AS350B3,AS350BA,AS350C,AS350D,AS350D1,AS355E,AS355F,AS355F1,AS355F2,AS355N,AS355NP,AS-365N2,AS-365N3,AW109SP,AW119 MKII,AW139,AW169,AW189,B-2,B-2A,B-2B,BO-105A,BO-105C,BO-105LS A-1,BO-105LS A-3,BO-105S,CABRI G2,CH-47D,CH-54A,EC 155B,EC120B,EC130B4,EC130T2,EC155B1,EC225LP,F-28,F-28A,F-28C,F-28C-2,F-28C-2R,F-28F,F-28F-R,FH-1100,K-190A,K-240,K-600,MBB-BK 117 A-1,MBB-BK 117 A-3,MBB-BK 117 A-4,MBB-BK 117 B-1,MBB-BK 117 B-2,MBB-BK 117 C-1,MBB-BK 117 C-2,MBB-BK 117 D-2,MBB-BK 117 D-3,MD900,OH-13E,OH-13H,PZL W-3A,R22,R22 ALPHA,R22 BETA,R22 MARINER,R44,R44 II,R66,S-51,S-52,S-55,S-55B,S-55C,S-58A,S-58B,S-58BT,S-58C,S-58D,S-58DT,S-58E,S-58ET,S-58F,S-58FT,S-58G,S-58H,S-58HT,S-58J,S-58JT,S-61A,S-61D,S-61E,S-61L,S-61N,S-61NM,S-61R,S-61V,S62A,S-64A,S-64E,S-64F,S-70,S-70A,S-70C,S-70C(M),S-70C(M1),S-70M,S-76A,S-76B,S-76C,S-76D,S-92A,SA 3180-Alouette Astazou,SA 318B-Alouette

SMALL AIRCRAFT

AD No.	Information	Manufacturer	Applicability

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

			Astazou,SA 318C-Alouette Astazou,SA.315B Alouette III,SA.316B Alouette III,SA.316C Alouette III,SA.319B Alouette III,SA330J,SA341G,SA342J,SA-365C,SA-365C1,SA-365C2,SA-365N,SA-365N1,SA-366G1,SE 313B-Alouette II,SE 3130-Alouette II,SE.3160 Alouette III,TH-1L,TH-28,UH-12,UH-12A,UH-12B,UH-12C,UH-12E,UH-12E-L,UH-12L,UH-12L4,UH-1E,UH-1L,K-225
2023-13-51	E	Airbus Helicopters	SA341G,SA342J

PART 39-AIRWORTHINESS DIRECTIVES

The authority citation for part 39 continues to read as follows:

[Amended]

The FAA amends §39.13 by:

Removing Airworthiness Directive (AD) 2021–23–13, Amendment 39–21811 (, December 9, 2021), and

Adding the following new AD:

2023–11–07Various Helicopters: Amendment 39–22453; Docket No. FAA–2023–0668; Project Identifier AD–2023–00199–R.

(a) Effective Date

This airworthiness directive (AD) is effective June 22, 2023.

(b) Affected ADs

This AD replaces AD 2021–23–13, Amendment 39–21811 (, December 9, 2021) (AD 2021–23–13).

(c) Applicability

This AD applies to all helicopters, certificated in any category, equipped with a radio (also known as radar) altimeter. These radio altimeters are installed on various helicopter models including, but not limited to, the helicopters for which the design approval holder is identified in paragraphs (c)(1) through (20) of this AD.

(1) Airbus Helicopters

(2) Airbus Helicopters Deutschland GmbH

(3) Air Space Design and Manufacturing, LLC

(4) Bell Textron Canada Limited

(5) Bell Textron Inc.

(6) Brantly International, Inc.

(7) Centerpointe Aerospace Inc.

(8) Columbia Helicopters, Inc.

(9) The Enstrom Helicopter Corporation

(10) Erickson Air-Crane Incorporated, DBA Erickson Air-Crane

(11) Helicopteres Guimbal

(12) Siam Hiller Holdings, Inc.

(13) Kaman Aerospace Corporation

(14) Leonardo S.p.a.

(15) MD Helicopters Inc.

(16) PZL Swidnik S.A.

(17) Robinson Helicopter Company

(18) Schweizer RSG LLC

(19) Scotts-Bell 47 Inc.

(20) Sikorsky Aircraft Corporation

(d) Subject

Air Transport Association (ATA) of America Code 3444, Ground Proximity System.

(e) Unsafe Condition

This AD was prompted by a determination that radio altimeters cannot be relied upon to perform their intended function if they experience interference from wireless broadband operations in the 3.7–3.98 GHz frequency band (5G C-Band). The FAA is issuing this AD because radio altimeter anomalies that are undetected by the automation or pilot, particularly close to the ground, could lead to loss of continued safe flight and landing.

(f) Compliance

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

(g) Definitions

(1) For purposes of this AD, a “radio altimeter tolerant rotorcraft” is one for which the radio altimeter, as installed, demonstrates the tolerances specified in paragraphs (g)(1)(i) and (ii) of this AD, using a method approved by the FAA. No actions are required by this AD for radio altimeter tolerant rotorcraft.

(i) Tolerance to radio altimeter interference, for the fundamental emissions (3.7–3.8 GHz), at or above the power spectral density (PSD) curve threshold specified in figure 1 to paragraph (g)(1)(i) of this AD.

Figure 1 to paragraph (g)(1)(i)- *Fundamental Effective Isotropic PSD at Outside Interface of Rotorcraft Antenna*

(ii) Tolerance to radio altimeter interference, for the spurious emissions (4.2–4.4 GHz), at or above the PSD curve threshold specified in figure 2 to paragraph (g)(1)(ii) of this AD.

Figure 2 to paragraph (g)(1)(ii): *Spurious Effective Isotropic PSD at Outside Interface of Rotorcraft Antenna*

(2) For purposes of this AD, a “non-radio altimeter tolerant rotorcraft” is one for which the radio altimeter, as installed, does not demonstrate the tolerances specified in paragraphs (g)(1)(i) and (ii) of this AD.

(h) Retained Rotorcraft Flight Manual (RFM) Revision for Non-Radio Altimeter Tolerant Rotorcraft

For non-radio altimeter tolerant rotorcraft: On or before January 4, 2022, revise the Limitations Section of the existing RFM for your helicopter by incorporating the limitations specified in figure 3 to paragraph (h) of this AD. This may be done by inserting a copy of this AD into the existing RFM for your helicopter. The action required by this paragraph may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with through and . The record must be maintained as required by or .

Figure 3 to paragraph (h)- *RFM Revision*

(i) RFM Revision for Non-Radio Altimeter Tolerant Rotorcraft

For non-radio altimeter tolerant rotorcraft, do the actions specified in paragraphs (i)(1) and (2) of this AD.

(1) On or before June 30, 2023, revise the Limitations Section of the existing RFM for your helicopter by including the information specified in figure 4 to paragraph (i) of this AD. This may be done by inserting a copy of this AD into the existing RFM for your helicopter. The action required by this paragraph may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with through and . The record must be maintained as required by or . Incorporating the RFM revision required by this paragraph terminates the RFM revision required by paragraph (h) of this AD.

(2) Before further flight after incorporating the limitations specified in figure 4 to paragraph (i) of this AD, remove the RFM revision required by paragraph (h) of this AD.

Figure 4 to paragraph (i)- *RFM Revision for Non-Radio Altimeter Tolerant Rotorcraft*

(j) Terminating Action for RFM Limitations

(1) Modifying the rotorcraft from a non-radio altimeter tolerant rotorcraft to a radio altimeter tolerant rotorcraft terminates the limitations in paragraph (i) of this AD for that rotorcraft.

(2) After modifying the rotorcraft to a radio altimeter tolerant rotorcraft, the limitations specified by paragraph (i) of this AD may be removed from the RFM.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Operational Safety Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in . In accordance with , send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the Operational Safety Branch, send it to the attention of the person identified in paragraph (l) of this AD. Information may be emailed to: .

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(3) AMOCs approved for AD 2021–23–13 are approved as AMOCs for the requirements specified in paragraph (h) of this AD until June 30, 2023.

(l) Related Information

For more information about this AD, contact David Swartz, Continued Operational Safety Technical Advisor, COS Program Management Section, Operational Safety Branch, FAA; phone: 817–222–5390; email: .

(m) Material Incorporated by Reference

None.

Issued on June 15, 2023.

Michael Linegang, Acting Director,

Compliance & Airworthiness Division, Aircraft Certification Service.

Footnotes

1. A copy of the letter from AT&T, Verizon, T-Mobile, and UScellular dated March 31, 2023, documenting their voluntary commitments to transmit within mitigated parameters is in Docket No. FAA–2023–0668 and can be found on the FCC's website at: .

2. FCC Report and Order (R&O) FCC 20–22 in the Matter of Expanding Flexible Use of the 3.7–4.2 GHz Band, adopted February 28, 2020, and released March 3, 2020. This document is available in Docket No. FAA–2023–0668, and at .

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FAA
Aviation Safety

EMERGENCY AIRWORTHINESS DIRECTIVE
www.faa.gov/aircraft/safety/alerts/

DATE: June 27, 2023
AD #: 2023-13-51

This superseding Emergency Airworthiness Directive (AD) 2023-13-51 is sent to owners and operators of Airbus Helicopters Model SA341G and SA342J helicopters.

Background

The FAA issued AD 2022-19-08, Amendment 39-22177 (87 FR 56865, September 16, 2022) (AD 2022-19-08), for Airbus Helicopters Model SA341G and SA342J helicopters. AD 2022-19-08 was prompted by a report of manufacturing defects on multiple tail rotor blades (TRBs). AD 2022-19-08 required visually inspecting certain part-numbered TRBs for the presence of a linear indication; and depending on the inspection results, fluorescent penetrant inspecting the TRB and further corrective actions if necessary. AD 2022-19-08 also prohibited installing an affected TRB unless certain requirements have been met, as specified in European Union Aviation Safety Agency (EASA) Emergency AD 2022-0169-E, dated August 12, 2022 (EASA AD 2022-0169-E). The FAA issued AD 2022-19-08 to detect linear indications on a TRB, which could result in an in-flight TRB loss, unbalance or damage to the tail or other parts of the helicopter, and subsequent loss of control of the helicopter.

EASA, which is the Technical Agent for the Member States of the European Union, issued EASA AD 2022-0169-E to correct an unsafe condition for Airbus Helicopters Model SA 341 G and SA 342 J (Gazelle) helicopters, all serial numbers. EASA advised that an additional sample of TRBs from different manufacturing batches were visually inspected and further analysis revealed visual linear indications on approximately 75% of the TRBs inspected. EASA further advised that the visual linear indications were positioned at the aerofoil connection radius and perpendicular to the grain flow direction. EASA advised that follow-up dye penetrant inspections confirmed up to 20% of the TRBs were found to be affected and have a high risk for crack propagation. Additionally, EASA advised that the investigation of the root cause of the unsafe condition was still on-going; therefore EASA considered EASA AD 2022-0169-E an immediate protective measure and stated that further action may follow.

Actions Since AD 2022-19-08 was Issued

Since the FAA issued AD 2022-19-08, EASA superseded EASA AD 2022-0169-E with EASA Emergency AD 2023-0128-E, dated June 26, 2023 (EASA AD 2023-0128-E). EASA advises that after EASA AD 2022-0169-E was issued, it was determined that affected parts that have accumulated more than 500 flight hours (FH) since new are also affected. In addition, the defined compliance time for the visual inspection of the root area of each affected part was determined to be too strict. Consequently, Airbus Helicopters revised its service information accordingly. Superseding EASA AD 2023-0128-E retains most of the requirements of EASA AD 2022-0169-E, adds an inspection of affected parts that accumulated more than 500 FH since new, and amends the compliance time for the visual inspection of affected parts. Additionally, EASA advises that EASA AD 2023-0128-E is (still) considered an interim measure and that further AD action may follow. See EASA AD 2023-0128-E for additional background information.

Related Service Information

EASA AD 2023-0128-E requires, before any cleaning of the TRB, using a lamp (1000 lux) to visually inspect the root area of each affected TRB for the presence of any linear indication; and cleaning certain areas of each TRB and repeating the visual inspection of the TRB for a linear indication. Depending on the inspection results, EASA AD 2023-0128-E requires performing a dye penetrant inspection of the root area of a TRB, and if a linear indication is detected, replacing the affected TRB with a serviceable part. Finally, EASA AD 2023-0128-E prohibits installing an affected TRB on any helicopter after its effective date.

Other Related Service Information

The FAA reviewed Airbus Helicopters Emergency Alert Service Bulletin (EASB) No. SA341-65.71 for Model SA341G helicopters and non FAA-type certificated military Model SA341B, C, D, E, F, and H helicopters; and EASB No. SA342-65.71 for Model SA342J helicopters and non FAA-type certified military Model SA342K, L, L1, M, M1, and MA helicopters, each Revision 2 and dated June 19, 2023 (co-published as one document). This service information specifies procedures for visually checking the TRB for presence of a linear indication; cleaning the TRB with a lint free rag and solvent and repeating the visual check; performing a fluorescent penetrant inspection if a linear indication is detected; removing and replacing any affected TRB if necessary; and recording compliance with the service information.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA, its technical representative, has notified the FAA about the unsafe condition described in its emergency AD. The FAA is issuing this emergency AD after evaluating all known relevant information and determining that the unsafe condition described previously is likely to exist or develop on other helicopters of the same type designs.

Emergency AD Requirements

This emergency AD requires accomplishing the actions specified in EASA AD 2023-0128-E, described previously, which is incorporated by reference, except for any differences identified as exceptions in the regulatory text of this emergency AD and except as discussed under "Differences Between this Emergency AD and EASA AD 2023-0128-E."

Explanation of Required Compliance Information

In the FAA's ongoing efforts to improve the efficiency of the AD process, the FAA developed a process to use some civil aviation authority (CAA) ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has been coordinating this process with manufacturers and CAAs. As a result, EASA AD 2023-0128-E is incorporated by reference in this FAA emergency AD. This emergency AD, therefore, requires compliance with EASA AD 2023-0128-E in its entirety through that incorporation, except for any differences identified as exceptions in the regulatory text of this emergency AD. Using common terms that are the same as the heading of a particular section in EASA AD 2023-0128-E does not mean that operators need comply only with that section. For example, where the emergency AD requirement refers to "all required actions and compliance times," compliance with this emergency

AD requirement is not limited to the section titled "Required Action(s) and Compliance Time(s)" in EASA AD 2023-0128-E.

Differences Between This Emergency AD and EASA AD 2023-0128-E

Although EASA AD 2023-0128-E does not define the phrase "a linear indication," service information referenced in EASA AD 2023-0128-E defines this phrase as an indication for which the longest dimension is at least three times longer than the smallest one. This emergency AD defines a linear indication as any linear indication perpendicular to the grain direction of the blade that is detected regardless of size. Where EASA AD 2023-0128-E requires performing a dye penetrant inspection, this emergency AD requires a fluorescent penetrant inspection performed by a Level II or Level III inspector certified in the FAA-acceptable standards for nondestructive inspection personnel.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 et seq.) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for "good cause," finds that those procedures are "impracticable, unnecessary, or contrary to the public interest." Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this emergency AD to all known U.S. owners and operators of these helicopters. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule because the affected part is critical to the control of a helicopter. In addition, failure of an affected part can cause the part to depart from the helicopter, thereby causing damage to the helicopter and subsequent loss of control of the helicopter. Also, the FAA has no information pertaining to how quickly the condition may propagate to failure. Investigation is still on-going to determine the root cause of the defect and the number of parts affected by the same condition. In light of this, the initial visual inspection must be accomplished within 10 hours time-in-service. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forego notice and comment.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Presentation of the Actual Emergency Airworthiness Directive

The FAA is issuing this emergency airworthiness directive under 49 U.S.C. 106(g), 40113, and 44701 according to the authority delegated to me by the Administrator.

2023-13-51 Airbus Helicopters: Project Identifier MCAI-2023-00784-R.

(a) Effective Date

This emergency airworthiness directive (AD) is effective upon receipt.

(b) Affected ADs

This emergency AD replaces AD 2022-19-08, Amendment 39-22177 (87 FR 56865, September 16, 2022) (AD 2022-19-08).

(c) Applicability

This emergency AD applies to all Airbus Helicopters Model SA341G and SA342J helicopters, certificated in any category.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6410, Tail Rotor Blades.

(e) Unsafe Condition

This emergency AD was prompted by a report of manufacturing defects on multiple tail rotor blades (TRBs) and a subsequent determination that TRBs that have accumulated 500 or more hours time-in-service (TIS), and which were not included in AD 2022-19-08, are also affected by the unsafe condition and must perform the required corrective actions. The FAA is issuing this emergency AD to detect linear indications on a TRB. The unsafe condition, if not addressed, could result in an in-flight TRB loss, unbalance or damage to the tail or other parts of the helicopter, and subsequent loss of control of the helicopter.

(f) Compliance

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

(g) Requirements

Except as specified in paragraphs (h) and (i) of this emergency AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency Emergency AD 2023-0128-E, dated June 26, 2023 (EASA AD 2023-0128-E).

(h) Exceptions to EASA AD 2023-0128-E

(1) Where EASA AD 2023-0128-E requires compliance in terms of flight hours, this emergency AD requires using hours TIS.

(2) Where EASA AD 2023-0128-E refers to its effective date, this emergency AD requires using the effective date of this emergency AD.

(3) Where EASA AD 2023-0128-E refers to the effective date of EASA AD 2022-0169-E

(dated August 12, 2022), this emergency AD requires using October 3, 2022 (the effective date of AD 2022-19-08).

(4) Where paragraph (2) of EASA AD 2023-0128-E states, "linear indication," for the purposes of this emergency AD, a linear indication is any linear indication perpendicular to the grain direction of the blade that is detected regardless of size.

(5) Where paragraph (2) of EASA AD 2023-0128-E states to "accomplish a dye penetrant inspection of the root area of that discrepant part in accordance with the instructions of the ASB," for this emergency AD replace that text with "perform a fluorescent penetrant inspection (FPI) of the root area of each affected part that has any linear indication (perpendicular to the grain direction of the blade and regardless of size), in accordance with the Accomplishment Instructions, paragraph 3.B.3. of the ASB. This FPI must be accomplished by a Level II or Level III inspector certified in the FAA-acceptable standards for nondestructive inspection personnel."

Note 1 to paragraph (h)(5): Advisory Circular 65-31B contains examples of FAA-acceptable Level II and Level III qualification standards criteria for inspection personnel doing nondestructive test inspections.

(6) Where paragraph (3) of EASA AD 2023-0128-E specifies to replace any affected part having a confirmed linear indication with a serviceable part; instead, for this emergency AD, if as a result of the action required by paragraph (2) of EASA AD 2023-0128-E, there is any linear indication (perpendicular to the grain direction of the blade and regardless of size), before further flight, remove the affected TRB from service and replace it with a serviceable part as defined in EASA AD 2023-0128-E.

(7) Where the service information referenced in EASA AD 2023-0128-E specifies to discard the TRB if a linear indication is detected, this emergency AD requires, before further flight, removing that part from service.

(8) Where the service information referenced in EASA AD 2023-0128-E specifies to use tooling, this emergency AD allows the use of equivalent tooling.

(9) This emergency AD does not adopt the "Remarks" section of EASA AD 2023-0128-E.

(i) No Reporting Requirement

Although the service information referenced in EASA AD 2023-0128-E specifies to submit certain information to the manufacturer, this emergency AD does not include that requirement.

(j) Credit for Previous Actions

This paragraph provides credit for actions required by paragraph (g) of this emergency AD, if those actions were performed before the effective date of this emergency AD using AD 2022-19-08.

(k) Special Flight Permits

A special flight permit may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the visual inspection or FPI can be performed, provided no passengers are onboard. Special flight permits are prohibited if a linear indication has been detected by an FPI or a visible crack has been detected on a TRB.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this emergency 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 International Validation Branch, send it to the attention of the person identified in paragraph (m)(1) of this emergency AD. Information may be emailed to: 9-AVS-AIR-730-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.

(m) Related Information

(1) For more information about this emergency AD, contact Dan McCully, Aviation Safety Engineer, International Validation Branch, FAA, 1600 Stewart Ave., Suite 410, Westbury, NY 11590; telephone (404) 474–5548; email william.mccully@faa.gov.

(2) For EASA AD 2023-0128-E, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find the EASA material on the EASA website at https://ad.easa.europa.eu.

(3) For Airbus Helicopters service information identified in this emergency AD, contact Airbus Helicopters, 2701 North Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html. You may view this referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

Issued on June 27, 2023.

Michael Linegang, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.