FEDERAL AVIATION ADMINISTRATION AIRWORTHINESS DIRECTIVES

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

BIWEEKLY 2023-04

01/30/2023 - 02/12/2023



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

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SMALL AIRCRAFT					
AD No.	Information	Manufacturer	Applicability		
	Information Key: E- Emo	ergency; 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 IA, Makila IAI		
2023-01-12	D 2022 01 00	Sarran Helicopter Engines S.A.	Arriel IC, Arriel ICI, Arriel IC2		
2023-02-03 2023-02-04	R 2022-01-09	Mooney International Corporation	Stemme S 10- v 1, stemme S 12 M20C, M20D, M20E, M20F, M20G		
Biweekly 2023-04					
2023-01-04		Airbus Helicopters	AS350B,AS350BA,AS350B1,AS350B2,AS35 0B3,AS350D,AS355E,AS355F,AS355F1,AS3 55F2 AS355N AS355NP		
2023-01-07		GE Aviation Czech s.r.o.	H75-100,H75-200,H80,H80-100,H80-		
2023-01-08		Continental Aerospace Technologies GmbH	200,H85-100,H85-200 TAE 125-02-99,TAE 125-02-114		
2023-01-10		GE Aviation Czech s.r.o.	M601E-11,M601E-11A,M601E-		
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-С,

SMALL AIRCRAFT				
AD No.	Information	Manufacturer	Applicability	
	Information Key: E- Em	ergency; COR - Correction; R - Replaces, A- Affects		
			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-J,TSIO-520-JB,TSIO-520- H,TSIO-520-J,TSIO-520-JB,TSIO-520- K,TSIO-520-KB,TSIO-520-L,TSIO-520- LB,TSIO-520-W,TSIO-520-N,TSIO-520- NB,TSIO-520-U,TSIO-520-R,TSIO-520- T,TSIO-520-U,TSIO-520-UB,TSIO-520- VB,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-A,TSIOF-550- J,TSIOF-550-K,TSIOF-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	

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

[Amended]

The FAA amends §39.13 by adding the following new airworthiness directive:

2023-01-04 Airbus Helicopters: Amendment 39-22298; Docket No. FAA-2022-0987; Project Identifier MCAI-2021-01416-R.

(a) Effective Date

This airworthiness directive (AD) is effective March 8, 2023.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Airbus Helicopters Model AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350D, AS355E, AS355F1, AS355F2, AS355N, and AS355NP helicopters, certificated in any category.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 6420, Tail Rotor Head.

(e) Unsafe Condition

This AD was prompted by an occurrence reported where, during an inspection of a tail rotor head (TRH) pitch change spider, excessive play and excessive wear were detected, due to an unwanted rotating motion. The FAA is issuing this AD to detect improper installation of the pitch change spider nut (nut) and improper alignment of a black index marking. The unsafe condition, if not addressed, could result in loss of the TRH pitch change control and loss of control of the helicopter.

(f) Compliance

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

(g) Required Actions

(1) For helicopters with TRH spider pitch change unit, part number (P/N) 350A33-2030-00, 350A33-2167-00, or 350A33-2167-01 installed, within 50 hours time-in-service (TIS) after the effective date of this AD:

(i) Inspect the nut for correct installation. If the nut is missing or loose, before further flight, remove the bearing from the TRH spider pitch change unit and do the following:

(A) Inspect the TRH spider pitch change unit for corrosion. If there is any corrosion, before further flight, remove the affected part from service and replace with an airworthy part.

(B) Inspect for rotation and wear on the faces of the bushes. For the purposes of this AD, indications of rotation and wear include tearing, peening, metal pick-up, and hammering. If there is any rotation or any wear on the faces of the bushes, before further flight, remove the bushes from service and replace with airworthy bushes.

(C) Using a 5X or higher power magnifying glass visually inspect the rotating plate and the rotating plate threads for damage. For the purposes of this AD, indications of damage include wear, deformation, stripping, galling, and corrosion. If there is any damage on the rotating plate or the rotating plate threads, before further flight, remove the rotating plate from service and replace with an airworthy rotating plate.

Note 1 to paragraph (g)(1)(i):

Airbus Helicopters Mechanical Repair Manual (MRM) AS350 65-20-00-713, dated March 29, 2017, also known as Work Card 65-20-00-713 MRM, and Airbus Aircraft Maintenance Manual (AMM) AS350 65-21-00, 4-9b, dated May 16, 2019, also known as Task 65-21-00, 4-9 AMM, specify disassembly and reassembly information for the TRH pitch change unit.

(ii) Identify the position of the TRH pitch change unit (item a) and of bearing spacer (item b) by marking a 2 to 5 mm wide black paint index mark (item C) with black paint as depicted in Figure 1 of Airbus Helicopters Alert Service Bulletin (ASB) No. AS350-05.01.03, Revision 0, dated December 16, 2021 (ASB AS350-05.01.03), or Airbus Helicopters ASB No. AS355-05.00.86, Revision 0, dated December 16, 2021 (ASB AS355-05.00.86), as applicable to your model helicopter.

(iii) Within 10 hours TIS after the initial marking required by paragraph (g)(1)(ii) of this AD, and thereafter at intervals not to exceed 10 hours TIS, visually inspect the alignment of the marking. An example of a properly aligned marking is depicted in Figure 1 of ASB AS350-05.01.03 and ASB AS355-05.00.86, as applicable to your model helicopter. If the black paint index mark (item C) is misaligned, before further flight, inspect the TRH spider pitch change unit by accomplishing the actions required by paragraphs (g)(1) (i) and (ii) of this AD.

(2) As of the effective date of this AD, do not install TRH spider pitch change unit P/N 350A33-2030-00, 350A33-2167-00, or 350A33-2167-01 on any helicopter, unless you do the actions required by paragraphs (g)(1)(i) and (ii) of this AD before further flight after installation, and thereafter do the actions required by paragraph (g)(1)(iii) of this AD at the times specified in paragraph (g)(1)(iii) of this AD.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation 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 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 (i)(1) 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 local flight standards district office/certificate holding district office.

(i) Additional Information

(1) For more information about this AD, contact Stephanie Sunderbruch, Aerospace Engineer, Safety Risk Management Section, Systems Policy Branch, Policy & Innovation Division, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone (817) 222-4659; email.

(2) Airbus Helicopters Mechanical Repair Manual AS350 65-20-00-713, dated March 29, 2017, and Airbus Aircraft Maintenance Manual AS350 65-21-00, 4-9b, dated May 16, 2019, which are not incorporated by reference, contain additional information about the subject of this AD. This service information is available at the contact information specified in paragraphs (j)(3) and (4) of this AD.

(3) The subject of this AD is addressed in European Union Aviation Safety Agency (EASA) AD 2021-0282, dated December 17, 2021. You may view the EASA AD on the internet at regulations.gov in Docket No. FAA-2022-0987.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under and .

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

(i) Airbus Helicopters Alert Service Bulletin (ASB) No. AS350-05.01.03, Revision 0, dated December 16, 2021.

(ii) Airbus Helicopters ASB No. AS355-05.00.86, Revision 0, dated December 16, 2021.

(3) For Airbus Helicopters service information identified in this 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 *airbus.com/helicopters/services/technical-support.html*.

(4) You may view this service information at 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.

(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: , or go to: .

Issued on January 5, 2023.

Christina Underwood,

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

[Filed 1-31-23; 8:45 am]

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

[Amended]

The FAA amends §39.13 by adding the following new airworthiness directive:

2023-01-07 GE Aviation Czech s.r.o (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.): Amendment 39-22301; Docket No. FAA-2022-1302; Project Identifier MCAI-2022-00062-E.

(a) Effective Date

This airworthiness directive (AD) is effective February 21, 2023

(b) Affected ADs

None.

(c) Applicability

This AD applies to GE Aviation Czech s.r.o. (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.) H75-100, H75-200, H80, H80-100, H80-200, H85-100, and H85-200 model turboprop engines.

(d) Subject

Joint Aircraft System Component (JASC) Code 7200, Engine (Turbine/Turboprop).

(e) Unsafe Condition

This AD was prompted by the manufacturer revising the airworthiness limitations section (ALS) of the existing engine maintenance manual (EMM) to introduce updated coefficients for the calculation of the cyclic life and safe life for the main shaft. The FAA is issuing this AD to prevent failure of the engine. The unsafe condition, if not addressed, could result in uncontained release of a critical part, damage to the engine, and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) Within 90 days of the effective date of this AD, revise the ALS of the existing EMM and the existing approved maintenance or inspection program, as applicable, to incorporate the information in Table 1 to paragraph (g)(1) of this AD and recalculate the cycles accumulated on critical parts.

Description	Drawing	Abbreviated flight cycle coefficient		Flight mission coefficient	Equivalent cyclic life limit
	110.	A v	Ар	L	Ν
Main Shaft	M601- 1017.75	0.47	1.05	16,000	

Table 1 to Paragraph (g)(1) - Equivalent Cyclic Life (N) and Safe Life of Critical Parts

(2) After performing the action required by paragraph (g)(1) of this AD, except as provided in paragraph (h) of this AD, no alternative life limits may be approved.

(3) The action required by paragraph (g)(1) of this AD 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 \$ 43.9(a) and 91.417(a)(2)(v). The record must be maintained as required by \$ 91.417, 121.380, or 135.439.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in §39.19. In accordance with §39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (i)(2) of this AD and email to: .

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

(i) Additional Information

(1) Refer to European Union Aviation Safety Agency (EASA) AD 2022-0008, dated January 19, 2022, for related information. This EASA AD may be found in the AD docket at *regulations.gov* under Docket No. FAA-2022-1302.

(2) For more information about this AD, contact Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: .

(j) Material Incorporated by Reference

None.

Issued on January 6, 2023.

Christina Underwood,

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

[Filed 2-2-23; 8:45 am]

BILLING CODE 0099-10-D

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

[Amended]

The FAA amends §39.13 by adding the following new airworthiness directive:

2023-01-08 Continental Aerospace Technologies GmbH (Type Certificate previously held by Technify Motors GmbH and Thielert Aircraft Engines GmbH): Amendment 39-22302; Docket No. FAA-2022-1413; Project Identifier MCAI-2021-00077-E.

(a) Effective Date

This airworthiness directive (AD) is effective March 9, 2023.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Continental Aerospace Technologies GmbH (Type Certificate previously held by Technify Motors GmbH and Thielert Aircraft Engines GmbH) TAE 125-02-99 and TAE 125-02-114 model reciprocating engines with an engine serial number (S/N) identified in Models Affected, Continental Aerospace Technologies GmbH Service Bulletin (SB) CG 125-1027 P1, Revision 1, dated May 28, 2021.

(d) Subject

Joint Aircraft System Component (JASC) Code 7200, Engine (Turbine/Turboprop).

(e) Unsafe Condition

This AD was prompted by manufacturer reports of fractured main bearing studs. The FAA is issuing this AD to prevent failure of the main bearing stud. The unsafe condition, if not addressed, could result in engine inflight shutdown and forced landing, damage to the airplane, and injury to the occupants.

(f) Compliance

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

(g) Required Actions

(1) For Group 1 and Group 2 engines, before exceeding the applicable compliance time in Table 1 to paragraph (g)(1) of this AD, remove all main bearing studs from service if one or more main bearing studs with part number (P/N) 05-7211-K009801 and batch number B180703/1, B184216/1, B184216/2, or B191277/1 are installed on the engine and replace with parts eligible for installation in accordance with

Instructions, paragraphs 4.2 through 4.2.17 of Continental Aerospace Technologies GmbH Repair Instruction RI-05-0017-04, Revision 4, dated April 1, 2021 (Continental Aerospace Technologies GmbH RI-05-0017-04, Revision 4).

Table 1 to Paragraph (g)(1)-Main Bearing Stud Replacement

Group	Flight hours (FHs) since new	Compliance time
1	100 FHs or less	Before exceeding 115 FHs since new, or during the next scheduled maintenance, whichever occurs first after the effective date of this AD.
1	More than 100 FHs	Before exceeding 15 FHs from the effective date of this AD, or during the next scheduled maintenance, whichever occurs first after the effective date of this AD.
2	100 FHs or less	Before exceeding 200 FHs since new, or during the next scheduled maintenance whichever occurs first after the effective date of this AD.
2	More than 100 FHs	Before exceeding 100 FHs from the effective date of this AD, or during the next scheduled maintenance, whichever occurs first after the effective date of this AD.

Note 1 to paragraph (g)(1): FHs since new indicated in Table 1 to paragraph (g)(1) of this AD are FHs accumulated by the engine since first installation on an airplane, on the effective date of this AD.

(2) For engines not installed on an airplane as of the effective date of this AD, before further flight, remove all main bearing studs if one or more main bearing studs with P/N 05-7211-K009801 and batch number B180703/1, B184216/1, B184216/2, or B191277/1 are installed on the engine and replace with parts eligible for installation in accordance with Instructions, paragraphs 4.2 through 4.2.17 of Continental Aerospace Technologies GmbH RI-05-0017-04, Revision 4.

(h) Installation Prohibition

After the effective date of this AD, do not install onto any engine a main bearing stud with P/N 05-7211-K009801 and batch number B180703/1, B184216/1, B184216/2, or B191277/1.

(i) Definitions

(1) For the purpose of this AD, Group 1 engines are affected engines installed on single-engine airplanes, with main bearing stud with P/N 05-7211-K009801 and batch number B180703/1, B184216/1, B184216/2, or B191277/1 installed on the engine, and affected engines installed on twin-engine airplanes, with main bearing stud with P/N 05-7211-K009801 and batch number B180703/1, B184216/1, B184216/2, or B191277 /1 installed on both engines.

(2) For the purpose of this AD, Group 2 engines are affected engines installed on twin-engine airplanes, with main bearing stud with P/N 05-7211-K009801 and batch number B180703/1, B184216/1, B184216/2, or B191277/1 installed on only one engine.

(3) For the purpose of this AD, parts eligible for installation are any main bearing studs that do not have P/N 05-7211-K009801 and batch number B180703/1, B184216/1, B184216/2, or B191277/1.

(j) Alternative Methods of Compliance (AMOCs)

The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in §39.19. In accordance with §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)(2) of this AD and email to: . 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) Additional Information

(1) Refer to European Union Aviation Safety Agency (EASA) AD 2021-0022, dated January 18, 2021, for related information. This EASA AD may be found in the AD docket at *regulations.gov* under Docket No. FAA-2022-1413.

(2) For more information about this AD, contact Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: .

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under and .

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

(i) Continental Aerospace Technologies GmbH Service Bulletin CG 125-1027 P1, Revision 1, dated May 28, 2021.

(ii) Continental Aerospace Technologies GmbH Repair Instruction RI-05-0017-04, Revision 4, dated April 1, 2021.

(3) For Continental Aerospace Technologies GmbH service information identified in this AD, contact Continental Aerospace Technologies GmbH, Platanenstrasse 14, 09356 Sankt Egidien, Germany; phone: +49 37204 696 0; email: ; website: *continentaldiesel.com*.

(4) You may view this service information at the 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 (817) 222-5110.

(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: , or go to: .

Issued on January 6, 2023.

Christina Underwood,

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

[Filed 2-1-23; 8:45 am]

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

[Amended]

The FAA amends §39.13 by adding the following new airworthiness directive:

2023-01-10 GE Aviation Czech s.r.o (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.): Amendment 39-22304; Docket No. FAA-2022-1414; Project Identifier MCAI-2021-01303-E.

(a) Effective Date

This airworthiness directive (AD) is effective March 13, 2023.

(b) Affected ADs

None.

(c) Applicability

This AD applies to GE Aviation Czech s.r.o. (GEAC) M601E-11, M601E-11A, M601E-11AS, M601E-11S, and M601F model turboprop engines, with an installed compressor case part number (P/N) M601-154.51, which includes compressor cases identified as, or recorded in the engine logbook as P/N M601-154.6; or with an installed compressor drum having P/N M601-130.7 or P/N M601-134.7.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by the manufacturer's determination that the life limits for certain compressor cases and compressor drums were not published in the applicable airworthiness limitations section of the engine maintenance manual. Additionally, it was determined that following rework, certain compressor cases were improperly re-identified and the engine logbook entries were not completed. The FAA is issuing this AD to prevent the failure of the compressor case and compressor drum. The unsafe condition, if not addressed, could result in engine mount failure and high energy debris release.

(f) Compliance

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

(g) Required Actions

(1) Within 90 days after the effective date of this AD, recalculate the consumed life of the affected compressor case and affected compressor drum in accordance with the formula and lifing coefficients in paragraph 2.B., Table 1 of the Accomplishment Instructions of GEAC Alert Service Bulletin ASB-M601F-72-30-00-0061 [01] ASB-M601E-72-30-00-0110 [01] (single document; formatted as service bulletin identifier [revision number]), dated October 15, 2021.

(2) For GEAC M601E-11, M601E-11A, and M601F model turboprop engines, before the recalculated consumed life of an affected compressor case exceeds 11,000 equivalent flight cycles (FCs), replace the compressor case with a compressor case eligible for installation.

(3) For GEAC M601E-11S and M601E-11AS model turboprop engines, before the recalculated consumed life of an affected compressor case exceeds 11,000 equivalent FCs, or within 12 months after the effective date of this AD, whichever occurs first, replace the compressor case with a compressor case eligible for installation.

(4) For all affected engines with an installed compressor drum having P/N M601-130.7 or M601-134.7, before the recalculated consumed life of the compressor drum exceeds 6,750 equivalent FCs, or within 12 months after the effective date of this AD, whichever occurs first, replace the compressor drum with a compressor drum eligible for installation.

(h) Definition

(1) For the purpose of this AD, a "compressor case eligible for installation" is:

(i) For GEAC M601E-11, M601E-11A, and M601F model turboprop engines, an affected compressor case that is identified as P/N M601-154.51 with no reference to other P/N's and that does not have a recalculated consumed life that has exceeded its life limit, or a compressor case that is not P/N M601-154.51.

(ii) For GEAC M601E-11S and M601E-11AS model turbo prop engines, a compressor case that is not P/N M601-154.51.

Note 1 to paragraph (h)(1): A compressor case having P/N M601-154.6 is not an approved configuration, and is not eligible for installation.

(2) For the purpose of this AD, a "compressor drum eligible for installation" is a compressor drum that is not P/N M601-130.7 or M601-134.7.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, ECO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in §39.19. In accordance with §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)(2) of this AD and email to: .

(j) Additional Information

(1) Refer to European Union Aviation Safety Agency (EASA) AD 2021-0264, dated November 22, 2021, for related information. This EASA AD may be found in the AD docket at *regulations.gov* under Docket No. FAA-2022-1414.

(2) For more information about this AD, contact Barbara Caufield, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7146; email: .

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under and .

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

(i) GE Aviation Czech Alert Service Bulletin ASB-M601F-72-30-00-0061 [01] and ASB-M601E-72-30-00-0110 [01], (single document; formatted as service bulletin identifier [revision number]), dated October 15, 2021.

(ii) Reserved.

(3) For GEAC service information identified in this AD, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9, Letany, Czech Republic; phone: +420 222 538 111.

(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 (817) 222-5110.

(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: , or go to: .

Issued on January 11, 2023.

Christina Underwood,

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

[Filed 2-3-23; 8:45 am]

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

[Amended]

The FAA amends §39.13 by adding the following new airworthiness directive:

2023-02-12 Continental Aerospace Technologies, Inc.: Amendment 39-22319; Docket No. FAA-2023-0027; Project Identifier AD-2022-01586-E.

(a) Effective Date

This airworthiness directive (AD) is effective February 17, 2023.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Continental Aerospace Technologies, Inc. (Continental) GTSIO-520, IO-470, IO-520, IO-550, IOF-550, LIO-470, LIO-520, LTSIO-520, O-470, TSIO-470, TSIO-520, TSIO-550, TSIOF-550, and TSIOL-550 model reciprocating engines listed in the Application Table, page 1, of Superior Air Parts, Inc. (SAP) Mandatory Service Bulletin MSB22-01 A, dated December 16, 2022 (SAP MSB22-01 A) with an installed:

(1) SAP cylinder assembly having a part number (P/N) and serial number listed in Table 1 of SAP MSB22-01 A, installed on or after January 20, 2022; or

(2) Cylinder assembly that was repaired and installed on or after January 20, 2022, with a SAP intake valve having P/N SA539988 and lot number 19077 O; or

(3) SAP intake valve with P/N SA539988 and lot number 19077 O.

(d) Subject

Joint Aircraft System Component (JASC) Code 7160, Engine Air Intake System.

(e) Unsafe Condition

This AD was prompted by three intake valve failures on reciprocating engines that resulted in engine damage and emergency landing or aborted takeoff. The FAA is issuing this AD to prevent failure of the engine intake valve. The unsafe condition, if not addressed, could result in failure of the engine, in-flight shutdown, and loss of the airplane.

(f) Compliance

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

(g) Required Actions

(1) For engines with an affected SAP cylinder assembly installed, as identified in paragraph (c)(1) of this AD, within 30 days from the effective date of this AD, remove the affected cylinder assembly and replace any affected intake valve with an intake valve that is eligible for installation.

(2) For engines with an affected repaired cylinder assembly installed, as identified in paragraph (c)(2) of this AD, within 30 days from the effective date of this AD, inspect the affected cylinder assembly for installation of any intake valve marked with lot number 19077 O. If, during any inspection required by this paragraph, an intake valve is identified with lot number 19077 O, before further flight, replace the affected intake valve with an intake valve that is eligible for installation.

(3) For engines with an affected SAP intake valve installed, as identified in paragraph (c)(3) of this AD, within 30 days from the effective date of this AD, remove the affected intake valve and replace with an intake valve that is eligible for installation.

(h) Definitions

(1) For the purpose of this AD, an "intake valve that is eligible for installation" is an intake valve that is not SAP P/N SA539988 and lot number 19077 O.

(i) No Reporting Requirement

Although SAP MSB22-01 A specifies to submit certain information and send certain parts to the manufacturer, this AD does not include that requirement.

(j) Special Flight Permit

Special flight permits, as described in and , are prohibited.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Fort Worth ACO 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 local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (l) of this AD.

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

(l) Related Information

For more information about this AD, contact Justin Carter, Aviation Safety Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, TX 76177; phone: (817) 222-5146; email: .

(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 and .

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

(i) Superior Air Parts, Inc. Mandatory Service Bulletin MSB22-01 A, dated December 16, 2022.

(ii) [Reserved]

(3) For service information identified in this AD, contact SAP, 621 S Royal Lane, Suite 100, Coppell, TX 75019; phone: (800) 420-4727; email: ; website: *superiorairparts.com*.

(4) You may view this service information at the 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 (817) 222-5110.

(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: , or go to: .

Issued on January 25, 2023.

Christina Underwood,

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

[Filed 2-1-23; 8:45 am]

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

[Amended]

The FAA amends §39.13 by adding the following new airworthiness directive:

2023-03-01 Airbus Helicopters Deutschland GmbH (AHD): Amendment 39-22326; Docket No. FAA-2023-0159; Project Identifier MCAI-2023-00046-R.

(a) Effective Date

This airworthiness directive (AD) is effective February 21, 2023.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH (AHD) Model BO-105A, BO-105C, BO-105S, BO-105LS A-1, BO-105LS A-3 (including those modified by Supplemental Type Certificate SR00043RD), 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, and MBB-BK 117 D-2 helicopters, certificated in any category.

Note 1 to paragraph (c): Helicopters with an MBB-BK117 C-2e designation are Model MBB-BK117 C-2 helicopters.

(d) Subject

Joint Aircraft System Component (JASC) Code: 6230, Main Rotor System.

(e) Unsafe Condition

This AD was prompted by a report of a missing main rotor swashplate (swashplate) inner ring (inner ring). The FAA is issuing this AD to detect a missing inner ring. The unsafe condition, if not addressed, could result in loss of main rotor control and subsequent loss of control of the helicopter.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency Emergency AD 2023-0006-E, dated January 12, 2023 (EASA AD 2023-0006-E).

(h) Exceptions to EASA AD 2023-0006-E

(1) Where EASA AD 2023-0006-E refers to its effective date, this AD requires using the effective date of this AD.

(2) Where the service information referenced in paragraph (1) of EASA AD 2023-0006-E specifies that a pilot may check for installation of the inner ring on the swashplate, this AD requires that inspection to be accomplished by persons authorized under .

(3) Where the service information referenced in paragraph (1) of EASA AD 2023-0006-E and where paragraph (2) of EASA AD 2023-0006-E specify contacting AH [Airbus Helicopters] to obtain further instructions or approved instructions, this AD requires actions done in accordance with a method approved by the Manager, General Aviation & Rotorcraft Section, International Validation Branch, FAA; or EASA; or Airbus Helicopters Deutschland GmbH's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature. As an option, you may accomplish the actions identified in paragraphs (h)(3)(i) and (ii) of this AD.

(i) Before further flight, replace the affected swashplate.

(ii) At the applicable compliance time identified in paragraph (h)(3)(ii)(A) or (B) of this AD, report the inspection results and describe in detail any other findings, along with the helicopter model and serial number, swashplate part number, and the following text: "EASB BO105-40A-110, BO105LS-40A-15, BO105 LS A-3-STC-0654/3058-40A-3, MBB-BK117-40A-118, MBB-BK117-62-32-0001" by email to .

(A) If the inspection in paragraph (1) of EASA AD 2023-0006-E was done on or after the effective date of this AD: Submit the report within 10 days after completing paragraph (1) of EASA AD 2023-0006-E.

(B) If the inspection in paragraph (1) of EASA AD 2023-0006-E was done before the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

(4) This AD does not adopt the Remarks paragraph of EASA AD 2023-0006-E.

(i) Special Flight Permit

Special flight permits are prohibited.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation 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 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 (k) 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 local flight standards district office/certificate holding district office.

(k) Related Information

For more information about this AD, contact Dan McCully, Program Manager, COS Program Management Section, Operational Safety Branch, Compliance & Airworthiness Division, FAA, 1701 Columbia Ave., Mail Stop: ACO, College Park, GA 30337; telephone (404) 474-5548; email .

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under and .

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

(i) European Union Aviation Safety Agency (EASA) Emergency AD 2023-0006-E, dated January 12, 2023.

(ii) [Reserved]

(3) For EASA AD 2023-0006-E, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ; internet *easa.europa.eu*. You may find the EASA material on the EASA website at *ad.easa.europa.eu*.

(4) You may view this 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.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email, or go to: .

Issued on January 31, 2023.

Christina Underwood,

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

[Filed 2-2-23; 11:15 am]

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

[Amended]

The FAA amends §39.13 by adding the following new airworthiness directive:

2023-03-10 Schempp-Hirth Flugzeugbau GmbH: Amendment 39-22335; Docket No. FAA-2023-0162; Project Identifier MCAI-2022-01559-G.

(a) Effective Date

This airworthiness directive (AD) is effective February 24, 2023.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Schempp-Hirth Flugzeugbau GmbH Model Duo Discus and Duo Discus T gliders, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 2730, Elevator Control System.

(e) Unsafe Condition

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI identifies the unsafe condition as cracks in the connecting tube of the elevator U-bracket of the horizontal tail, which could compromise the stiffness of the elevator control system and of the attachment of the horizontal tail. The FAA is issuing this AD to address this condition. The unsafe condition, if not addressed, could result in failure of the elevator control system, loss of the horizontal tail attachment, and consequent loss of glider control.

(f) Compliance

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

(g) Required Actions

(1) Before further flight after the effective date of this AD and thereafter at intervals not to exceed 12 months, inspect the elevator U-bracket for indications of cracking by following paragraphs 1.a) and 1.b) of Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18,

A532-10, Revision 0, dated February 28, 2022 (issued as one document). For the purposes of this AD, indications of cracking include elastic and permanent twisting.

Note 1 to paragraph (g)(1): Technical Note Schempp-Hirth Flugzeugbau GmbH Technical Note 396-22; and Schempp-Hirth Flugzeugbau GmbH Technical Note 890-18; both Revision 1; both dated October 13, 2022, contain information related to this AD.

Note 2 to paragraph (g)(1): This service information contains German to English translation. The European Union Aviation Safety Agency (EASA) used the English translation in referencing the document from Schempp-Hirth Flugzeugbau GmbH. For enforceability purposes, the FAA will refer to the Schempp-Hirth Flugzeugbau GmbH service information in English as it appears on the document.

(i) If indications of cracking are present, remove the elevator U-bracket and inspect it for any crack and broken weld seam by following paragraph 1.c) of Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document).

(ii) If no indications of cracking are present and you do not have suitable tools such as a mirror, flashlight, borescope, or equivalent to do the inspection required in paragraph (g)(1)(i) of this AD, remove the elevator U-bracket and inspect for any crack and broken weld seam by following paragraph 1.c) of Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document).

(iii) If no indications of cracking are present and you have suitable tools such as a mirror, flashlight, borescope, or equivalent to do the inspection required in paragraph (g)(1)(i) of this AD, inspect the elevator U-bracket for any crack and broken weld seam by following paragraph 1.c) of Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document). This inspection may be done without removing the elevator U-bracket.

(2) If during any inspection as required by paragraph (g)(1) of this AD, there is any crack or broken weld seam in the elevator U-bracket, before further flight, replace the elevator U-bracket by following paragraph 1.
d) of Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document).

(3) Before further flight after completing the actions in paragraph (g)(1) and (2) of this AD, as applicable, and thereafter at intervals not to exceed 12 months, rig the horizontal tail on the fin by following paragraph 1.
d) of the Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document).

(4) Before further flight after completing the action in paragraph (g)(3) of this AD, and thereafter at intervals not to exceed 12 months, inspect for softness and play in the rear connection between the horizontal tail and the rear attachment on the fuselage by following paragraph 1.d) of Schempp-Hirth Flugzeugbau GmbH Working Instructions.

Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document). If there is softness or play, before further flight, do the applicable corrective actions by following paragraph 1.d) of the Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document). Where the service information specifies contacting Schempp-Hirth Flugzeugbau GmbH for a repair, instead use a method approved by the Manager, International Validation Branch, FAA; EASA; or Schempp-Hirth Flugzeugbau GmbH's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(5) Before further flight after completing the action in paragraph (g)(4) of this AD, and thereafter at intervals not to exceed 12 months, inspect the foam support for compression between the vertical and horizontal tail by following paragraph 1.d) of Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document). If the foam support has settled to the point that it cannot be further compressed, it must be replaced before further flight.

(h) Special Flight Permits

Special flight permits are prohibited.

(i) Alternative Methods of Compliance (AMOCs)

The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in §39.19. In accordance with §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, mail it to the address identified in paragraph (j)(2) of this AD or email to: . If mailing information, also submit information by email. 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) Additional Information

(1) Refer to EASA Emergency AD 2022-0242-E, dated December 7, 2022, for related information. This EASA Emergency AD may be found in the AD docket at *regulations.gov* under Docket No. FAA-2023-0162.

(2) For more information about this AD, contact Jim Rutherford, Aviation Safety Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4165; email: .

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

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under and .

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

(i) Schempp-Hirth Flugzeugbau GmbH Working Instructions Technical Note 396-22, 380-3, 868-24, 890-18, A532-10, Revision 0, dated February 28, 2022 (issued as one document).

Note 1 to paragraph (k)(1)(i): This service information contains German to English translation. EASA used the English translation in referencing the document from Schempp-Hirth Flugzeugbau GmbH. For enforceability purposes, the FAA will refer to the Schempp-Hirth Flugzeugbau GmbH service information in English as it appears on the document.

(ii) [Reserved]

(3) For service information identified in this AD, contact Schempp-Hirth, Krebenstrasse 25, Kirchheim unter Teck, Germany; phone: +49 7021 7298-0; email: ; website: *schempp-hirth.com*.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222-5110.

(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: , or go to: .

Issued on February 3, 2023.

Christina Underwood,

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

[Filed 2-8-23; 8:45 am]