



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
SMALL AIRCRAFT, ROTORCRAFT, GLIDERS,  
BALLOONS, & AIRSHIPS**

**BIWEEKLY 2011-25**

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U.S. Department of Transportation  
Federal Aviation Administration  
Regulatory Support Division  
Delegation and Airworthiness Programs Branch, AIR-140  
P. O. Box 26460  
Oklahoma City, OK 73125-0460  
FAX 405-954-4104



**SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS**

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;			
<b>Biweekly 2011-01</b>			
2010-17-18 R1	R	Air Tractor	AT-802 and AT-802A
2010-22-08	COR	Eurocopter France	Rotorcraft: AS 350 B, BA, B1, B2, B3, and D, and Model AS355 E, F, F1, F2, and N
2010-26-04		Piper	PA-28-161
2010-26-09		Sikorsky	Rotorcraft: S-76A, B, and C
2010-26-11		Kaman Aerospace	Rotorcraft: K-1200
2011-01-52	E	Schweizer	Rotorcraft: 269A, A-1, B, C, C-1, and Th-55 series
2011-01-53	E	Piaggio	P-180
	S 2011-01-51		
<b>Biweekly 2011-02</b>			
2010-24-05	COR	Pratt & Whitney Canada	Engine: PW305A and PW305B
2010-26-54		Cessna	LC41-550FG, LC42-550FG
2011-01-03		GROB-WERKE	G102 ASTIR CS, G102 CLUB ASTIR III, G102 CLUB ASTIR IIIb, G102 STANDARD ASTIR III
2011-01-04		Embraer	EMB-500
2011-02-04		M7 Aerospace LP	SA26-AT, SA26-T, SA226-AT, SA226-T, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT
<b>Biweekly 2011-03</b>			
2011-01-53	S 2011-01-51	Piaggio Aero Industries	P-180
2011-02-02	S 2008-19-06	Socata	TBM 700
2011-02-08		Aircraft Industries	Gliders: L 23 Super Blanik
<b>Biweekly 2011-04</b>			
2011-01-14	S 2005-17-01	Pilatus	PC-6, PC-6-H1, PC-6-H2, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/C1-H2
2011-01-53	COR	Piaggio Aero Industries	P-180
	S 2011-01-51		
2011-03-04	S 2009-09-09	Cessna	LC40-550FG (300), LC41-550FG (400), and LC42-550FG (350)
2011-03-05	S 2007-11-03	Dornier Luftfahrt GmbH	Dornier 228-100, Dornier 228-101, Dornier 228-200, Dornier 228-201, Dornier 228-202, and Dornier 228-212
<b>Biweekly 2011-05</b>			
2010-17-18 R1		Air Tractor	AT-802 and AT-802A
2011-05-01		Piaggio Aero Industries	P-180
2011-05-02		Viking Air Limited	DHC-3
2011-05-06		Thielert	Engine: TAE 125-02-99 and TAE 125-02-114 reciprocating
2011-05-51	E	Turbomeca	Engine: 1E2, 1S, and 1S1 turboshaft
<b>Biweekly 2011-06</b>			
2010-26-51	S 2009-08-03	Bell Helicopter Textron Canada Limited	Rotorcraft: 206A, 206B, 206L, 206L-1, 206L-3, 206L-4, 222, 222B, 222U, 230, 407, 427, and 430
2011-03-02		Eurocopter France	Rotorcraft: SA330F, SA330G, and SA330J
2011-03-03		Bell Helicopter Textron Canada Limited	Rotorcraft: 427
2011-03-06		Eurocopter France	Rotorcraft: AS-365N2, AS 365 N3, and SA-365N1
2011-05-07	S 2008-22-21	Allied Ag Cat Productions	G-164, G-164A, G-164B, G-164B with 73" wing gap, G-164B-15T, G-164B-20T, G-164B-34T, G-164C, G-164D, G-164D with 73" wing gap
2011-05-08	S 2011-05-51	Turbomeca	Engine: Arriel 1E2, 1S, and 1S1 turboshaft
2011-06-01		APEX Aircraft	CAP10 B and CAP10 B
2011-06-06	S 2008-24-07	Eclipse	EA500
<b>Biweekly 2011-07</b>			
2011-05-09		B-N Group Ltd	BN-2, BN-2A, BN-2A-2, BN-2A-3, BN-2A-6, BN-2A-8, BN-2A-9, BN-2A-20, BN-2A-21, BN-2A-26, BN-2A-27, BN-2B-20, BN-2B-21, BN-2B-26, BN-2B-27, BN-2T, and BN-2T-4R
2011-06-07		Eurocopter France	Rotorcraft: EC130 B4
2011-07-03	S 2007-02-12	Reims Aviation S.A.	F406

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<b>Biweekly 2011-08</b>			
2011-06-10	S 99-15-04 R1	Piper Aircraft	PA-46-310P, PA-46-350P, and PA-46R-350T
2011-07-09		Thielert Aircraft Engines GmbH	Engine: TAE 125-01, TAE 125-02-99, and TAE 125-02-114 reciprocating
2011-07-13		CPAC, Inc	112, 112B, 112TC, 112TCA, 114, 114A, 114B, and 114TC
2011-08-01	S 2010-25-51	Bell Helicopter Textron	212
<b>Biweekly 2011-09</b>			
2011-06-02		Cessna	172F, 172G, 172H, 172I, 172K, 172L, 172M, F172F, F172G, F172H, F172K, F172L, F172M, 172N, 172P, F172N, F172P, 172R and 172S
2011-08-06		Honeywell International Inc	LTS101-600A-2, -3, -3A, LTS101-700D-2, LTS101-650B-1, LTS101-650C-3, LTS101-650C-3A, LTS101-750B-1, LTS101-750B-2, LTS101-750C-1, and LTS101-850B-2 turboprop; and LTP101-600A-1A and LTP101-700A-1A turboprop
2011-09-08		Pacific Aerospace Limited	750XL
<b>Biweekly 2011-10</b>			
2011-04-02	COR	Hamilton Sundstrand Corporation	Propeller: 247F series
2011-09-16		DG Flugzeugbau GmbH	Gliders: DG-808C
2011-09-51	E	Piaggio Aero Industries S.p.A	P-180
<b>Biweekly 2011-11</b>			
2011-06-02	COR	Cessna	172F, 172G, 172H, 172I, 172K, 172L, 172M, F172F, F172G, F172H, F172K, F172L, F172M, 172N, 172P, F172N, F172P, 172R and 172S
2011-09-19		BURKHART GROB LUFT-UND	Glider: G 103 C Twin III SL
2011-09-51	COR	Piaggio Aero Industries S.P.A.	P-180
2011-10-09	S 2011-01-53	Cessna	See AD
2011-10-11	S 87-20-03 R2	Agusta S.p.A.	Rotorcraft: AB412
2011-10-12		Eurocopter France	Rotorcraft: AS350B, B1, B2, B3, BA, and EC130 B4
2011-10-13		Diamond Aircraft Industries GmbH	DA 42, DA 42-NG, and DA 42 M-NG
2011-11-01		British Aerospace	HP.137 Jetstream Mk.1, Jetstream Series 200, Jetstream Series 3101, and Jetstream Model 3201
<b>Biweekly 2011-12</b>			
2011-11-03		Various Aircraft	See AD
2011-11-04		L'Hotellier	Appliance: Portable Halon 1211 fire extinguisher
2011-11-07		Diamond Aircraft Industries GmbH	DA 42
2011-12-02		Viking Aircraft Limited	DHC-3 (Otter)
2011-12-03		Sikorsky Aircraft Corporation	Rotorcraft: S-92A
<b>Biweekly 2011-13</b>			
2011-12-04		BRP-Powertrain GmbH & Co. KG	Engine: 912 F3, 912 S2, 912 S3, 912, 914 F2, 914 F3, and 914 F4
2011-12-07		Eurocopter France	Rotorcraft: SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1
2011-12-08		Bell Helicopter Textron, Inc.	Rotorcraft: 205A, 205A-1, 205B, 212, 412, 412CF, and 412EP
2011-12-10	S 2007-26-12	Robinson Helicopter	Rotorcraft: R22, R22 Alpha, R22 Beta, R22 Mariner, R44 and R44 II

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<b>Biweekly 2011-14</b>			
2011-09-51	COR S 2011-01-53	Piaggio Aero Industries S.P.A.	P-180
2011-13-02		Costruzioni Aeronautiche Tecnam srl	P2006T
2011-13-03		Lycoming Engines and Teledyne Continental Motors	Engine: TSIO-520-BE, TSIO-360-MB, SB, TIO-540-AK1A, L/TSIO-360-RB, TIO-540-AE2A, TSIO-360-H, O-540-L3C5D, TSIO-520-T, L/TO-360-E1A6D, TIO-540-AG1A, TIO-540- AF1A, TIO-540-AF1B, TIO-540-AH1A, TIO-541-E1D4, TIO- 541-E1C4, TIGO-541-E, GTSIO-520-F, GTSIO-520-K, GTSIO- 520-D, GTSIO-520-H
<b>Biweekly 2011-15</b>			
2011-12-16	S 2011-01-52	Schweizer	Rotorcraft: 269A, A-1, B, C; C-1; and TH-55 series
2011-13-05		Turbomeca S.A.	Engine: ARRIEL 2B and 2B1 turboshaft
2011-14-05	S 2010-18-52	MD Helicopters, Inc.	Rotorcraft: MD900
2011-14-08		B/E Aerospace	Appliance: Continuous Flow Passenger Oxygen Mask Assembly
2011-14-09	S 2011-11-03	Various Aircraft	See AD
2011-15-05		Hawker Beechcraft	B300 and B300C (C-12W)
2011-15-51	E	Bell Helicopter Textron Canada	Rotorcraft: 407 and 427
<b>Biweekly 2011-16</b>			
None			
<b>Biweekly 2011-17</b>			
2011-15-10		Superior Air Parts and Lycoming Engines	Engine: See AD
2011-15-11		Cessna	337, 337A (USAF 02B), 337B, 337C, 337D, 337E, T337E, 337F, T337F, 337G, T337G, M337B, F 337E, FT337E, F 337F, FT337F, F 337G, and FT337GP
<b>Biweekly 2011-18</b>			
2009-10-09 R2	R 2009-10-09 R1	Cessna Aircraft Company	150F, 150G, 150H, 150J, 150K, 150L, 150M, A150K, A150L, A150M, F150F, F150G, F150H, F150J, F150K, F150L, F150M, FA150K, FA150L , FA150L or FRA150L, FA150M or FRA150M, 152, A152, F152, FA152
2011-15-11		Cessna	337, 337A (USAF 02B), 337B, 337C, 337D, 337E, T337E, 337F, T337F, 337G, T337G, M337B, F 337E, FT337E, F 337F, FT337F, F 337G, and FT337GP
2011-16-05		Eurocopter France	Rotorcraft: SA-365N and SA-365N1
2011-17-01	S 2010-02-51	Agusta S.p.A.	Rotorcraft: A109A, A109A II, A109C, and A109K2
2011-17-06		SOCATA	TBM 700
2011-17-07		M7 Aerospace LP	SA226-T, SA226-T(B), SA226-TC, SA226-AT
2011-17-13		Eurocopter France	Rotorcraft: EC120B
2011-17-14		Agusta S.p.A.	Rotorcraft: A109A, A109AII
2011-17-15		Embraer	EMB-500
2011-18-51	E	Honeywell International	Engine: TPE331
2011-18-52	E	Agusta S.p.A.	Rotorcraft: AB139 and AW139
<b>Biweekly 2011-19</b>			
2011-18-19	S 2010-23-09	Austro Engine GmbH	Engine: E4 diesel piston
<b>Biweekly 2011-20</b>			
2011-18-07		Wytownia Sprzetu Komunikacyjnego (WSK) PZL- Rzeszow" Spolka Akcyjna (SA)	Engine: WSK PZL-10W series turboshaft
2011-18-09		Lycoming Engines	IO-720-A1B
2011-18-11	S 2011-05-02	Viking Air Limited	DHC-3
2011-20-51	E	Pratt & Whitney Canada	Engine: PT6A-15AG, -27, -28, -34, -34AG, -34B, and -36 series turboPROP

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<b>Biweekly 2011-21</b>			
2009-13-06 R1	R 2009-13-06	Piper Aircraft	See AD
2011-18-51 R1	R 2011-18-51	Honeywell International	Engines: TPE331
2011-19-02		Dowty Propellers	Propellers: R212/4-30-4/22 and R251/4-30-4/49
2011-19-03		General Electric	Engines: CT7-8, CT7-8A, CT7-8A1, CT7-8E, CT7-8F5
2011-21-51	E	Cessna	525C
<b>Biweekly 2011-22</b>			
2011-12-02	COR	Viking Aircraft Limited	DHC-3 (Otter)
2011-18-07	COR	Wytownia Sprzetu Komunikacyjnego	Engine: WSK PZL-10W series
2011-20-51		Pratt & Whitney Canada	Engine: PT6A-15AG, -27, -28, -34, -34AG, -34B, and -36 series
2011-21-10		Diamond Aircraft Industries	DA 40
2011-21-16		Diamond Aircraft Industries	Glider: H-36 "DIMONA"
2011-22-51	E	Sikorsky	Rotorcraft: S-70, S-70A, S-70C, S-70C(M), and S-70C(M1)
<b>Biweekly 2011-23</b>			
2010-26-52	S 2007-19-53	Bell Helicopter Textron, Inc.	Rotorcraft : 204B, 205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP
2011-15-51		Bell Helicopter Textron, Inc.	Rotorcraft: 407 and 427
2011-16-04		Sikorsky Aircraft Corporation	Rotorcraft: S-92A
2011-18-16		Eurocopter France	Rotorcraft: AS332C, L, L1, and L2
2011-20-05		Eurocopter France	Rotorcraft: EC225LP
2011-20-06	S 2009-19-51	Agusta S.p.A.	Rotorcraft: AB139 and AW139
2011-20-08		Agusta S.p.A.	Rotorcraft: AB139 and AW139
2011-21-11		Eurocopter France	Rotorcraft: EC225LP
2011-21-12		Erickson Air-Crane Inc	Rotorcraft: S-64F
2011-21-13		Eurocopter Deutschland GmbH	Rotorcraft: MBB-BK 117 C-2
2011-21-17		General Electric	Engine: CT7-8A, CT7-8A1, CT7-8E, and CT7-8F5 turboshaft
2011-21-51		Cessna	525C
2011-22-03		Rolls-Royce Corporation	Engine: AE 3007A, AE 3007A1/1, AE 3007A1, AE 3007A1/3, AE 3007A1E, AE 3007A1P, and AE 3007A3 turbofan
2011-23-02	S 2010-03-03	Bell Helicopter Textron, Inc.	Rotorcraft: 205A-1, 205B, 210 and 212
2011-23-03		SOCATA	TBM 700
<b>Biweekly 2011-24</b>			
2009-10-09 R2	COR R 2009-10-09 R1	Cessna Aircraft Company	See AD
2011-22-05	S 2003-22-06	Eurocopter France	Rotorcraft: AS350B, B1, B2, B3, BA, C, D, D1; and Model AS355E, F, F1, F2, N, and NP
2011-22-08	S 2008-22-53	MD Helicopters Inc.	Rotorcraft: MD900
2011-23-01	S 2010-1-02	Thielert Aircraft Engines GmbH	Engine: TAE 125-01 and TAE 125-02-99
2011-23-11		Pacific Aerospace Limited	FU24-954 and FU24A-954
2011-23-13		Honeywell International Inc.	Engine: LTS101-600A-2, -3, -3A, and LTS101-700D-2
2011-24-01		Piaggio Aero Industries S.p.A.	P-180
<b>Biweekly 2011-25</b>			
2011-24-07		Turbomeca S.A.	Engine: Arriel 2B
2011-24-08		Turbomeca S.A.	Engine: Makila 1A2
2011-25-04		Quest Aircraft Design	Kodiak 100
2011-25-51	E	Continental Motors	TSIO-520, TSIO-550-K, TSIOF-550K, and IO-550-N



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**2011-24-07 Turbomeca S.A.:** Amendment 39-16871; Docket No. FAA-2011-1031; Directorate Identifier 2011-NE-27-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective December 14, 2011.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Turbomeca Arriel 2B turboshaft engines with a hydromechanical unit (HMU) that has a part number (P/N) and serial number (S/N) listed in Table 1 of this AD installed.

**Table 1—Affected HMUs**

<b>P/Ns</b>	<b>S/Ns</b>
0292860750	1008B
0292860750	1068B
0292860750	1142B
0292860750	1143B
0292860750	1183B
0292860750	1230B
0292860750	272B
0292860750	275B
0292860750	342B
0292860750	363B
0292860750	422B
0292860750	436B
0292860750	499B
0292860750	524B
0292860750	536B
0292860750	560B
0292860750	598B

0292860750	606B
0292860750	647B
0292860750	652B
0292860750	716B
0292860750	749B
0292860750	763B
0292860750	806B
0292860750	830B
0292860750	861B
0292860750	944B
0292860750	967B
0292861020	632B

### Reason

(d) This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Non-conformities on adjustment of some hydromechanical units (HMUs) have been reported by a Turbomeca repair centre. The technical investigations carried out by Turbomeca are showing that only a limited number of HMUs are potentially affected by this non-conformity to HMU adjustment.

Twenty nine HMUs have been identified with potential non-conformities in the proper adjustment of the metering valve. The exact location of these 29 HMUs is unknown. We are issuing this AD to prevent an uncommanded inflight shutdown, which could result in an emergency autorotation landing.

### Actions and Compliance

(e) Unless already done, do the following actions.

(f) Before further flight, perform a one-time functional test of the engine to confirm proper engine operation. This one-time functional test is not a normal engine run-up test. Use the instructions in paragraph 2.B.(1)(a) of Turbomeca Alert Mandatory Service Bulletin No. A292 73 2841, Version A, dated July 4, 2011, to perform the functional test.

(1) If the engine fails the functional test, replace the HMU with an HMU eligible for installation.

(2) If the engine passes the functional test, do the following:

(i) Within four months after the effective date of this AD, install software modification TU143 on the Engine Electronic Control Unit of the engine. Use paragraph 2.B. of Turbomeca Service Bulletin No. 292 73 2143, dated July 24, 2007 to do the installation; and

(ii) Within 12 months after the effective date of this AD, replace the HMU with an HMU eligible for installation.

## Definition

(g) For the purpose of this AD, an HMU eligible for installation is defined as one with a serial number not listed in Table 1 of this AD, or, an HMU that passed when tested using Turbomeca Service Bulletin No. 292 73 2840.

## FAA AD Differences

(h) None.

## Alternative Methods of Compliance (AMOCs)

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

## Related Information

(j) Refer to MCAI Airworthiness Directive 2011-0128-E, dated July 6, 2011, for related information.

(k) Contact Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: (781) 238-7758; fax: (781) 238-7199, email: mark.riley@faa.gov; for more information about this AD.

## Material Incorporated by Reference

(l) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on the date specified:

(1) Turbomeca Alert Mandatory Service Bulletin No. A292 73 2841, Version A, dated July 4, 2011, approved for IBR December 14, 2011.

(2) Turbomeca Service Bulletin No. 292 73 2143, dated July 24, 2007, approved for IBR December 14, 2011.

(3) For service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33-05-59-74-40-00, fax: 33-05-59-74-45-15.

(4) You may review copies of the service information at the FAA, New England Region, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call (781) 238-7125.

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

Issued in Burlington, Massachusetts on November 14, 2011.

Peter A. White,  
Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.



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**2011-24-08 Turbomeca S.A.:** Amendment 39-16872; Docket No. FAA-2011-1037; Directorate Identifier 2011-NE-30-AD.

**(a) Effective Date**

This airworthiness directive (AD) becomes effective December 7, 2011.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Makila 1A2 turboshaft engines, all serial numbers.

**(d) Reason**

(1) This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

A helicopter experienced an inadvertent activation of the 65% N1 (gas generator speed) back up control mode.

The subsequent technical investigations carried by Turbomeca revealed that an N2 (power turbine speed) sensor harness wire crimping discrepancy was at the origin of this event. Further quality investigations performed with the supplier led to the conclusion that N2 sensor Part Number (P/N) 0 301 52 001 0 whose Serial Numbers (S/N) are between S/N 242 and S/N 339 inclusive are potentially concerned by the same manufacturing discrepancy.

This condition, if not corrected, could lead to the inadvertent activation of the 65% N1 back up mode and consequently to significant power loss on one or more or both engines installed on the same helicopter, potentially resulting in an emergency landing of the helicopter.

(2) We are issuing this AD to prevent inadvertent activation of the backup control mode, which could result in engine power loss and emergency landing of the helicopter.

**(e) Actions and Compliance**

(1) Unless already done, do the following actions.

(2) For engines equipped with N2 sensor harnesses, P/N 0 301 52 001 0, whose S/Ns are between S/N 242 and S/N 339 inclusive, do the following:

(i) If an affected P/N is installed on each of the 2 (two) engines of the helicopter, then within 10 flight hours (FHs) after the effective date of this AD, replace one N2 sensor harness with an N2 sensor harness that is eligible for installation, and within 50 FHs after the effective date of this AD, replace the second harness with an N2 sensor harness that is eligible for installation.

(ii) If an affected P/N is installed only on 1 (one) engine of the helicopter, then within 50 FHs after the effective date of this AD, replace the affected N2 sensor harness with an N2 harness that is eligible for installation.

(3) After the effective date of this AD, do not install in an engine any N2 sensor harness, P/N 0 301 52 001 0, whose S/N is between S/N 242 and S/N 339 inclusive, unless the part has "SB 0815" marked on the identification plate.

(4) After the effective date of this AD, do not install in a helicopter an engine equipped with an N2 sensor harness, P/N 0 301 52 001 0, whose S/N is between S/N 242 and S/N 339 inclusive, unless the part has "SB 0815" marked on the identification plate.

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

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

**(g) Related Information**

(1) Refer to MCAI EASA AD 2011-0147, dated August 5, 2011, and Turbomeca Service Bulletin No. 298 77 0817, for related information. Contact Turbomeca; 40220 Tarnos, France; phone: 33-05-59-74-40-00; fax: 33-05-59-74-45-11; for a copy of this service information.

(2) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; email: james.lawrence@faa.gov; phone: (781)-238-7176; fax: (781) 238-7199, for more information about this AD.

**(h) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on November 9, 2011.  
Peter A. White,  
Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.



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**2011-25-04 Quest Aircraft Design, LLC:** Amendment 39-16880; Docket No. FAA-2011-1328; Directorate Identifier 2011-CE-037-AD.

**(a) Effective Date**

This AD is effective December 19, 2011.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Quest Aircraft Design, LLC Model Kodiak 100 airplanes, serial numbers 100-0001 through 100-0056, certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 7160, Engine Air Intake System.

**(e) Unsafe Condition**

This AD was prompted by reports of five instances where a loose IPS bolt was found on the right-hand side of the engine bypass door attachment. This condition, if not corrected, could lead to an inoperable bypass door, which could result in engine inlet icing with consequent loss of engine power and forced landing. We are issuing this AD to correct the unsafe condition on these products.

**(f) Compliance**

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

**(g) Torque of the IPS AN4-4A Bolt**

Before further flight on or after December 19, 2011 (the effective date of this AD), inspect the torque of the IPS bolt, part number (P/N) AN4-4A, and re-torque, if necessary, following Quest Aircraft Company Field Service Instruction No. FSI-028, Revision 02, (undated) as specified in Mandatory Service Bulletin No. SB11-17, Revision: 00, dated November 1, 2011.

**(h) Replace the IPS AN4-4A and AN4-5A Bolts**

Within 15 hours time-in-service (TIS) after December 19, 2011 (the effective date of this AD), replace the IPS bolts, P/N AN4-4A and P/N AN4-5A, with new IPS bolts, P/N AN4H4A and P/N AN4H5A, respectively. After installing the new bolts, install safety wire around the new bolts.

Do the actions following Quest Aircraft Company Field Service Instruction No. FSI-028, Revision 02, (undated) as specified in Mandatory Service Bulletin No. SB11-17, Revision: 00, dated November 1, 2011.

**(i) Prohibition of Installation of IPS AN4-4A and AN4-5A Bolts**

As of December 19, 2011 (the effective date of this AD), do not install any IPS bolts, P/N AN4-4A or P/N AN4-5A.

**(j) Special Flight Permit**

Special flight permits are permitted with the following limitation: Flight into known icing is prohibited.

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

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section 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 Tung Tran, Aerospace Engineer, Seattle ACO, FAA, 1601 Lind Avenue SW., Renton, Washington 98057; phone: (425) 917-6505; fax: (425) 917-6590; email: tung.tran@faa.gov.

**(m) Material Incorporated by Reference**

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 on December 19, 2011.

(i) Quest Aircraft Company Mandatory Service Bulletin No. SB11-17, Revision: 00, dated November 1, 2011; and

(ii) Quest Aircraft Company Field Service Instruction No. FSI-028, Revision 02, (undated).

(2) For service information identified in this AD, contact Quest Aircraft Design, LLC, 1200 Turbine Drive, Sandpoint, Idaho 83864; phone: (208) 263-1111; fax: (208) 263-1511; email: <http://questaircraft.com/quest/contact-quest/customer-service/>; Internet: <http://questaircraft.com/>.

(3) You may review copies of the service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call (202) 741-6030, or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Kansas City, Missouri, on November 25, 2011.  
John Colomy,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.



**DATE:** November 29, 2011

**AD #:** 2011-25-51

Emergency airworthiness directive (AD) 2011-25-51 is sent to owners and operators of certain Continental Motors, Inc. (CMI) Models TSIO-520, TSIO-550-K, TSIOF-550K, and IO-550-N reciprocating engines.

**Background**

This emergency AD was prompted by 5 reports received of fractures in starter adapter shaft gears in certain part number (P/N) CMI starter adapters. This condition, if not corrected, could result in failure of the starter adapter gear shaft, leading to an inoperable oil scavenge pump and engine in-flight shutdown.

**Relevant Service Information**

We reviewed CMI Mandatory Service Bulletin (MSB) No. MSB11-4, dated November 23, 2011. The MSB describes the affected starter adapters, and describes what starter adapters are eligible for installation.

**FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

**AD Requirements**

This AD requires replacing affected CMI starter adapters with starter adapters eligible for installation.

**Differences Between This AD and the Service Information**

The CMI Mandatory Service Bulletin (MSB) No. MSB11-4, dated November 23, 2011 requires reporting. This emergency AD does not.

### **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.

We are 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 AD**

We are issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

### **2011-25-51 Continental Motors, Inc. (formerly Teledyne Continental Motors, Continental):**

Directorate Identifier 2011-NE-41-AD.

#### **(a) Effective Date**

This Emergency AD is effective upon receipt.

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This emergency AD applies to Continental Motors, Inc. (CMI) TSIO-520-B, BB, D, DB, E, EB, J, JB, K, KB, N, NB, UB, VB; TSIO-550-K; TSIOF-550-K; IO-550-N (Turbo-normalized only; STC SE10589SC); with a starter adapter part number (P/N) 642085A17, 642085A19, 642085A20, 642085-1A1, and R-642085A17, installed, where the engine was manufactured between January 1, 2011 and November 20, 2011, or, where a replacement new or rebuilt starter adapter was purchased and installed between January 1, 2011 and November 20, 2011.

**(d) Unsafe Condition**

This AD was prompted by 5 reports received of fractures in starter adapter shaft gears in certain part number (P/N) CMI starter adapters. We are issuing this AD to prevent failure of the starter adapter gear shaft, leading to an inoperable oil scavenge pump and engine in-flight shutdown.

**(e) Compliance**

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

(1) For starter adapters with less than 75 hours of total time-in-service (TIS) at time of receipt of this AD, before further flight, replace the starter adapter with a starter adapter eligible for installation.

(2) For starter adapters with between 75 and 100 hours of total TIS, inclusive at time of receipt of this AD, within the next 10 hours of engine operation, or before exceeding 100 hours TIS, whichever occurs first, replace the starter adapter with a starter adapter eligible for installation.

(3) For starter adapters with more than 100 hours of total TIS at time of receipt of this AD, no further action is required.

**(f) Definition**

For the purpose of this AD, a starter adapter eligible for installation is:

- (1) A starter adapter with one of the P/Ns listed in this AD that has a vibro-peened manufacturer code below the ink stamped P/N on the starter adapter, or
- (2) A starter adapter with one of the P/Ns listed in this AD that has more than 100 hours total TIS.

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

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

**(h) Related Information**

(1) For further information about this AD, contact: Anthony Holton, Aerospace Engineer, Atlanta Certification Office, FAA, Small Airplane Directorate, 1701 Columbia Avenue, Atlanta, GA 30337; phone: 404-474-5567; fax: 404-474-5567; e-mail: [anthony.holton@faa.gov](mailto:anthony.holton@faa.gov).

(2) CMI Mandatory Service Bulletin No. MSB11-4, dated November 23, 2011, pertains to this AD.

(3) For copies of the service information referenced in this AD, contact: Continental Motors, Inc., PO Box 90, Mobile, AL 36601; phone: 251-438-3411, or go to: <http://tcmlink.com/servicebulletins.cfm>. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA.

Issued in Burlington, Massachusetts, on November 29, 2011.

Peter A. White,

Manager, Engine & Propeller Directorate,

Aircraft Certification Service.