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

BIWEEKLY 2009-17

This electronic copy may be printed and used in lieu of the FAA biweekly paper copy.

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
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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;

Biweekly 2009-01

2008-17-51		MD Helicopters, Inc	Rotorcraft: MD900
2008-26-01	S 2008-11-17	Air Tractor, Inc	See AD
2008-26-02	S 2006-06-51	General Electric Company	Engine: CT7-8A
2008-26-05		Bombardier-Rotax GmbH	Engine: 914 F
2008-26-10		Cessna	See AD
2008-26-11		Piper	See AD
2008-26-12		Aircraft Industries a.s	Sailplane: L 23 Super Blanik

Biweekly 2009-02

No Small Aircraft ADs were issued during Biweekly 2009-02.

Biweekly 2009-03

2009-01-11		Turbomeca	Engine: Arriel 2B and 2B1
2009-02-02		Polskie Zaklady Lotnicze Spolka zo.o	PZL M26 01
2009-02-03		Lycoming Engines, SeeAD	Engine: See AD

Biweekly 2009-04

No Small Aircraft ADs were issued during Biweekly 2009-04.

Biweekly 2009-05

2008-02-08	S 2006-21-11	Turbomeca	Engine: Turmo IV A and IV C
2009-03-04		Turbomec	Engine: Arriel 1E2, 1S, and 1S1
2009-03-05		Pratt Whitney Canada	Engine: PW206A, PW206B, PW206B2, PW206C, PW206E, PW207C, PW207D, and PW207E
2009-04-01		Wytownia Sprzetu Komunikacyjnego	Engine: PZL-10W
2009-04-04		Cessna	401, 401A, 401B, 402, 402A, 402B
2009-04-05		Cessna	182Q and 182R
2009-04-08		BURKHART GROB LUFT- UND RAUMFAHRT GmbH & CO KG	Glider: G103 TWIN II, G103A TWIN II ACRO, G103C TWIN III ACRO, G 103 C TWIN III
2009-04-09	S 2008-11-10	Viking Air Limite	DHC-6-1, DHC-6-100, DHC-6-200, and DHC-6-300
2009-04-14		PILATUS AIRCRAFT LTD	PC-12/47E
2009-05-01	S 2007-04-12	Gippsland Aeronautics Pty. Ltd	GA8
2009-05-05		Avidyne Corporation	Primary Flight Displays
2009-05-06		Embraer	EMB-500

Biweekly 2009-06

2009-05-07	S 2008-06-17	Pilatus Aircraft Ltd	PC-12, PC-12/45, PC-12/47, PC-12/47E
2009-05-12		Cessna	208 and 208B

Biweekly 2009-07

2009-05-08		Trimble or Freeflight Systems	Appliance: Global positioning system (GPS)
2009-05-09		Bell Helicopter Textron, Inc.	Rotorcraft: 412, 412EP, 412CF
2009-06-01		Eurocopter France	Rotorcraft: EC 155B and EC155B1
2009-06-07		Agusta S.p.A.:	Rotorcraft: AB139 and AW139
2008-07-51	E	Bell Helicopter Textron Canada	Rotorcraft: 206A, 206B, and 206L and 407 and 427
2009-07-52	E, S 2009-07-52	Bell Helicopter Textron Canada	Rotorcraft: 206A, 206B, and 206L and 407 and 427
2009-07-53	E	Sikorsky Aircraft	Rotorcraft: S-92A

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;			
Biweekly 2009-08			
2006-08-08 R1	R	Air Tractor, Inc.	AT-400, AT-401, AT-401B, AT-402, AT-402A, and AT-402B
2009-07-08		Piper	PA-46-350P and PA46R-350T
2009-07-09		DORNIER Luftfahrt GmbH	228-100, Dornier 228-101, Dornier 228-200, Dornier 228-201, Dornier 228-202, and Dornier 228-212
2009-07-13		MD Helicopters, Inc.	Rotorcraft: MD900
2009-07-14		Diamond Aircraft Industries GmbH	DA 40
2009-08-03	S 2007-19-52	Bell Helicopter Textron Canada Limited	Rotorcraft: 206A, 206B, 206L, 206L-1, 206L-3, 206L-4, 222, 222B, 222U, 230, 407, 427, and 430
2009-08-05		Liberty Aerospace Incorporated	XL-2
Biweekly 2009-09			
2009-07-52	FR	Bell Helicopter Textron Canada Limited	Rotorcraft: 206A series, 206B series, and 206L
2009-08-08		Turbomeca	Engine: Arriel 1B, 1D, and 1D1, Arriel 2B, and 2B1
2009-08-09		EADS SOCATA	TBM 700
2009-08-10	S 2009-04-14	Pilatus Aircraft Ltd	PC-12/47E
2009-08-11		Pilatus Aircraft Ltd	PC-12 and PC-12/45
2009-09-51	E	EUROCOPTER FRANCE	Rotorcraft: EC225LP
Biweekly 2009-10			
2009-07-53	FR	Sikorsky Aircraft Corporation	Rotorcraft: S-92A
2009-09-03		Turbomeca S.A.	Engine: Arriel 2B and 2B1
2009-09-04		EADS-PZL	PZL-104 WILGA 80
2009-09-09		Cessna	LC40-550FG, LC41-550FG, LC42-550FG
Biweekly 2009-11			
2009-10-04	S 2007-17-06	Diamond Aircraft	DA 40, DA 40F
2009-10-09		Cessna	See AD
2009-10-14		Hartzell	Propeller: See AD
2009-11-05	S 2008-10-12	Air Tractor, Inc.	AT-400, AT-400A, AT-402A, AT-402B, AT-502, AT-502A, AT-502B, AT-503A, AT-602, AT-802, AT-802A
Biweekly 2009-12			
2009-11-01	S 95-21-12	Eurocopter Deutschland GmbH	Rotorcraft: MBB-BK 117 A-1, A-3, A-4, B-1, B-2, and C-1
2009-11-06		M7 Aerospace LP	SA226-AT, SA226-T, SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, and SA227-DC (C-26B)
2009-11-10		Eurocopter Deutschland GmbH	EC135
2009-12-51	E	Turbomeca S.A.	Engine: Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1
Biweekly 2009-13			
2009-12-01		Bell Helicopter Textron, Inc	See AD
2009-12-07		Agusta S.p.A	Rotorcraft : A109E, A109S, A119, and AW119MKII
2009-12-12		ATR-GIE Avions de Transport Régional	ATR42-500, ATR72-212A
2009-12-14		Aeromot-Industria Mecanico Metalurgica Ltda	Glider: AMT-100, AMT-200, AMT-200S, AMT-300
2009-12-15		GROB-Werke	G120A
2009-12-16		Dornier Luftfahrt GmbH	228-100, 228-101, 228-200, 228-201, 228-202, 228-212
2009-13-01		Sikorsky	Rotorcraft: S-92A
2009-13-04		Dornier Luftfahrt GmbH	228-100, Dornier 228-101, Dornier 228-200, Dornier 228-201, Dornier 228-202, and Dornier 228-212
2009-13-05		Socata	TBM 700
2009-13-06		Piper	See AD

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Biweekly 2009-14

2009-12-51	FR	Turbomeca S.A	Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1
2009-13-10		British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201
2009-14-01		Turbomeca S.A	Arrius 2F

Biweekly 2009-15

2009-14-10	S 2009-09-04	EADS-PZL Warszawa-Okecie S.A.	PZL-104 WILGA 80
2009-14-11		Turbomeca S.A.	Engine: ARRIUS 2F
2009-14-13	S 2003-14-07	Pilatus Aircraft Ltd	PC-12, PC-12/45, PC-12/47, PC-12/47
2009-15-01		Hawker Beechcraft Corporation	G36
2009-15-05		Cessna Aircraft Company	208, 208B

Biweekly 2009-16

2009-03-05	COR	Pratt & Whitney Canada	Engine: PW206A, PW206B, PW206B2, PW206C, PW206E, PW207C, PW207D, and PW207E
2009-15-13		Honeywell International Inc.	Engine: T5313B, T5317A, T5317A-1, T5317B, and T5317BCV

Biweekly 2009-17

2007-03-17 R1		Socata	TBM 700
2009-15-14		Agusta S.p.A	Rotorcraft: AB139, AW139
2009-15-15		Bell Helicopter Textron Canad	Rotorcraft: 427
2009-16-02		Pilatus Aircraft Limited	PC-7
2009-16-03		Superior Air Parts, Inc. (SAP)	See AD



**FAA
Aircraft Certification Service**

AIRWORTHINESS DIRECTIVE

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

2007-03-17 R1 SOCATA: Amendment 39-15983; Docket No. FAA-2006-26234; Directorate Identifier 2006-CE-064-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective September 9, 2009.

Affected ADs

- (b) This AD revises AD 2007-03-17, Amendment 39-14928 (72 FR 5923, February 8, 2007).

Applicability

- (c) This AD applies to TBM 700 airplanes, serial numbers 1 through 345, certificated in any category.

Subject

- (d) Air Transport Association of America (ATA) Code 53: Fuselage.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

This Airworthiness Directive (AD) was prompted by reports of loose rivets on frames C18 BIS and C19, which could result in a reduced structural integrity of the tail area.

This MCAI requires you to inspect the rivets on frames C18 BIS and C19, and, if necessary, apply corrective actions. You may obtain further information by examining the MCAI in the AD docket.

Actions and Compliance

- (f) Unless already done, within the next 100 hours time-in-service (TIS) after September 9, 2009 (the effective date of this AD) or within the next 12 months after September 9, 2009 (the effective date of this AD), whichever occurs later, and repetitively thereafter at intervals not to exceed every 100 hours TIS, do a detailed inspection of the area and apply corrective actions, as necessary. Follow the accomplishment instructions of either SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-129, dated June 2005 or SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-129, AMENDMENT 1, dated February 2009.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: SOCATA revised the service bulletin used in AD 2007-03-17, Amendment 39-14928 (72 FR 5923, February 8, 2007). The revised service bulletin changes the applicability of the airplanes from what was in the original service bulletin. The MCAI has not been revised and allows the use of "Any subsequent approved revision of this document is acceptable" for service bulletin revisions. The FAA AD does not have a similar provision. This revised AD changes the Applicability section based on the revised service bulletin.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et.seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI Direction Générale de l'aviation Civile Airworthiness Directive No F-2005-132, dated August 3, 2005; SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-129, dated June 2005; and SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-129, AMENDMENT 1, dated February 2009 for related information.

Material Incorporated by Reference

(i) You must use SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-129, dated June 2005, or SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-129, AMENDMENT 1, dated February 2009, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-129, AMENDMENT 1, dated February 2009, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On March 15, 2007 (72 FR 5923, February 8, 2007), the Director of the Federal Register previously approved the incorporation by reference of SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-129, dated June 2005.

(3) For service information identified in this AD, contact SOCATA, 65921 Tarbes Cedex 9, France; Telephone: +33 (0) 5 62 41 73 00; Fax: +33 (0)5 62 41 73 05; Internet: <http://www.socata.com>.

(4) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(5) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on July 16, 2009.

Wes Ryan,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.



CORRECTED: The "Effective Date" subject heading text was out of place in the AD. The Federal Register will issue a correction. This copy has been corrected.

2009-15-14 Agusta S.p.A.: Amendment 39-15977; Docket No. FAA-2009-0168; Directorate Identifier 2007-SW-33-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective on September 9, 2009.

Other Affected ADs

- (b) None.

Applicability

(c) This AD applies to Model AB139 helicopters, serial number (S/N) 31005 through 31054, except S/N 31007, and AW139 helicopters, S/N 31055 through 31067, S/N 31070, and S/N 31071, certificated in any category.

Reason

(d) The mandatory continuing airworthiness information (MCAI) states that during the installation of a fire extinguisher bottle, part number 3G2620V00131, on a helicopter during manufacture, it was found that the electrical receptacle/connectors on the bottle which commands the firing of the extinguishing agent were swapped between engines No. 1 and No. 2. This condition could affect helicopters already in service and fire extinguisher bottles of the same part number in stock as spare parts. If not corrected, an improperly wired fire extinguishing bottle might cause the extinguishing agent to be discharged toward the unselected engine when the system is activated, rather than toward the engine with the fire. This AD requires determining if each engine has the proper outlet end on the electrical receptacle/connector that attaches the firing cartridge to the fire extinguisher bottle, and if not, replacing the fire extinguisher bottle. This AD is intended to prevent the fire extinguishing agent from not discharging toward the engine with the fire, which could result in loss of the helicopter due to an engine fire.

Actions and Compliance

(e) Within 100 hours time-in-service (TIS) or 3 months, whichever occurs first, unless already done, do the following actions.

(1) Determine whether the fire extinguishing bottle (bottle) for engines No. 1 and No. 2 have the proper outlet end on the electrical receptacle/connector, which attaches the firing cartridge to the

bottle, by following steps 4. and 5. of the Compliance Instructions in Agusta Bollettino Tecnico No. 139-085, dated May 18, 2007 (BT).

(2) If a bottle has an electrical receptacle/connector for the firing cartridge with an improper outlet end, before further flight, replace the bottle with a bottle that has an electrical receptacle/connector with a proper outlet end in accordance with step 6. of the Compliance Instructions in the BT.

Differences Between This AD and the MCAI AD

(f) This AD uses the term "hours time-in-service" rather than "flight hours."

Other Information

(g) Alternative Methods of Compliance (AMOCs): The Manager, Safety Management Group, Rotorcraft Directorate, FAA, ATTN: John Strasburger, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5167; fax (817) 222-5961, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) MCAI Ente Nazionale Per L'Aviazione Civile Airworthiness Directive No. 2007-227, dated June 18, 2007, contains related information.

Joint Aircraft System/Component (JASC) Code

(i) JASC Code 2621: Fire Bottle, Fixed.

Material Incorporated by Reference

(j) You must use the specified portions of Agusta Bollettino Tecnico No. 139-085, dated May 18, 2007 to do the actions required.

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

(2) For service information identified in this AD, contact Agusta, Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA), Italy, telephone 39 0331-229111, fax 39 0331-229605/222595, or at http://customersupport.agusta.com/technical_advice.php.

(3) You may review copies at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on July 10, 2009.

Larry M. Kelly,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2009-15-15 Bell Helicopter Textron Canada (BHTC): Amendment 39-15978; Docket No. FAA-2009-0227; Directorate Identifier 2007-SW-65-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective on September 8, 2009.

Other Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Model 427 helicopters, serial numbers 56001 through 56057, 58001, and 58002, certificated in any category.

Reason

(d) Transport Canada states in the mandatory continuing airworthiness information (MCAI) that it has been determined that the existing hardware connecting the vertical fin to the tail rotor gearbox needs to be upgraded to prevent the vertical fin from becoming loose. BHTC has received reports of loose vertical fins discovered during inspections. Investigation revealed that the current vertical fin attachment hardware may not provide adequate clamp-up. If not corrected, the vertical fin could become loose and cause vibration, which could lead to subsequent loss of control of the helicopter.

Actions and Compliance

- (e) Within the next 150 hours time-in-service, unless already done, do the following:
 - (1) Remove the vertical fin and visually inspect the inboard and outboard surfaces of the vertical fin where it attaches to the tail rotor gearbox support for a crack, an elongated bolt hole, fretting, distortion and corrosion.
 - (2) Visually inspect the tail rotor gearbox support attachment legs for a crack, fretting and corrosion.
- (f) If a crack, elongated bolt hole, fretting, distortion or corrosion is detected, repair or replace the part with an airworthy part before further flight.
- (g) Reinstall the vertical fin.

Differences Between This AD and the MCAI AD

(h) This AD differs from the MCAI AD as follows:

(1) We do not require compliance “no later than November 27, 2007”, because that date has passed.

(2) We refer to the compliance time as “hours time-in-service” rather than “air time hours.”

Other Information

(i) Alternative Methods of Compliance (AMOCs): The Manager, Safety Management Group, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Sharon Miles, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations and Guidance Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5122, fax (817) 222-5961.

Related Information

(j) Mandatory Continuing Airworthiness Information (MCAI) Transport Canada Airworthiness Directive CF-2007-22, dated September 14, 2007, and Bell Helicopter Textron Alert Service Bulletin No. 427-06-15, dated December 14, 2006, contain related information.

Subject

(k) Joint Aircraft System/Component (JASC) Code: 5553, Vertical Stabilizer, Attach Fittings.

Issued in Fort Worth, Texas, on July 14, 2009.

Judy I. Carl,
Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.
[FR Doc. E9-18431 Filed 7-31-09; 8:45 am]



2009-16-02 Pilatus Aircraft Limited: Amendment 39-15985; Docket No. FAA-2009-0509; Directorate Identifier 2009-CE-029-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 9, 2009.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Model PC-7 airplanes, all manufacturer serial numbers, certificated in any category.

Subject

(d) Air Transport Association of America (ATA) Code 53: Fuselage.

Reason

(e) The mandatory continuing airworthiness information (MCAI) states:

This Airworthiness Directive (AD) is prompted due to reported corrosion on the bolts and in the bores of the attachment fittings for the engine mounting frame. The corrosion is caused by damaged cadmium plating of the bolts or damaged surface finish of the attachment fitting.

Such a condition, if left uncorrected, could lead to crack initiation at the bolt and the fitting bore and subsequently to the failure of the engine attachment fitting.

In order to correct and control the situation, this AD requires a visual inspection of the relevant bolts and fittings. Additionally, the replacement of the bolts is required.

Actions and Compliance

(f) Unless already done, do the following actions:

(1) Visually inspect the bolts and the bores (with boroscope) of the attachment fittings for the engine mounting frame following paragraph 3.A of PILATUS Aircraft Ltd. Pilatus PC-7 Service Bulletin No. 53-006, dated November 17, 2008, at whichever of the following occurs later:

(i) Upon accumulating 5,000 hours total time-in-service (TIS) or 5 years from the date of manufacture, whichever occurs first; or

(ii) Within the next 6 months after September 9, 2009 (the effective date of this AD).

(2) If no sign of corrosion is found during the inspection required in paragraph (f)(1) of this AD, before further flight, replace the bolts. Repetitively inspect thereafter at intervals not to exceed every 5 years following PILATUS Aircraft Ltd. Pilatus PC-7 Maintenance Manual Chapter 05-10-20, page 4, dated November 30, 2008.

(3) If any sign of corrosion is found during any of the inspections required in paragraphs (f)(1) and (f)(2) of this AD, before further flight, do the corrective actions following paragraph 3.A. of PILATUS Aircraft Ltd. Pilatus PC-7 Service Bulletin No. 53-006, dated November 17, 2008. Repetitively inspect thereafter at intervals not to exceed every 5 years following PILATUS Aircraft Ltd. Pilatus PC-7 Maintenance Manual Chapter 05-10-20, page 4, dated November 30, 2008.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI FOCA AD HB-2009-004, dated May 12, 2009; PILATUS Aircraft Ltd. Pilatus PC-7 Service Bulletin No. 53-006, dated November 17, 2008; and Pilatus PC-7 Maintenance Manual Chapter 05-10-20, page 4, dated November 30, 2008, for related information.

Material Incorporated by Reference

(i) You must use PILATUS Aircraft Ltd. Pilatus PC-7 Service Bulletin No. 53-006, dated November 17, 2008; and Pilatus PC-7 Maintenance Manual Chapter 05-10-20, page 4, dated November 30, 2008, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact PILATUS AIRCRAFT LTD., Customer Service Manager, CH-6371 STANS, Switzerland; telephone: +41 (0)41 619 62 08; fax: +41 (0)41 619 73 11; Internet: <http://www.pilatus-aircraft.com/>, or e-mail: snolan@pilatus-aircraft.com.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on July 23, 2009.

Kim Smith,
Manager, Small Airplane Directorate,
Aircraft Certification Service.



FAA
Aircraft Certification Service

AIRWORTHINESS DIRECTIVE

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

2009-16-03 Superior Air Parts, Inc. (SAP): Amendment 39-15986. Docket No. FAA-2007-0051; Directorate Identifier 2007-NE-37-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 9, 2009.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Teledyne Continental Motors (TCM) IO-520, TSIO-520, and IO-550 series reciprocating engines with SAP investment cast cylinder assemblies, part numbers (P/Ns) SA52000-A1, SA52000-A20P, SA52000-A21P, SA52000-A22P, SA52000-A23P, SA55000-A1, or SA55000-A20P, installed. These engines are installed on, but not limited to, the airplanes listed in Table 1 of this AD.

Table 1 – Teledyne Continental Motors-related Aircraft Models

Engine Model	Aircraft Manufacturer	Aircraft Model Designation
IO-520-A	Cessna	210 D, E, F, G, & H
IO-520-A	Cessna	206
IO-520-A	Cessna	P206
IO-520-A	Rockwell	200 D
IO-520-B	Beechcraft	36 Bonanza
IO-520-B	Beechcraft	A36
IO-520-B	Navion	Range Master
IO-520-BA	Beechcraft	A36
IO-520-BA	Beechcraft	S & V35, V35A, V35B
IO-520-BA	Beechcraft	C33 A
IO-520-BA	Beechcraft	E33 A & C
IO-520-BA	Beechcraft	F33 A & C
IO-520-BA	Navion	Range Master
IO-520-BB	Beechcraft	A36
IO-520-BB	Beechcraft	V35B
IO-520-BB	Beechcraft	F33 A
IO-520-C & CB	Beechcraft	C55 - E55 Baron
IO-520-D	Bellanca	17-30 Viking
IO-520-D	Cessna	A188-300 AG Truck
IO-520-D	Cessna	185
IO-520-E	(Cessna 310)	Exec 600
IO-520-E	(Beech Baron)	Pres 600
IO-520-F	Cessna	207
IO-520-F	Cessna	U206
IO-520-K	Bellanca	17-30A
IO-520-L	Cessna	210 K, L, M, N & R
IO-520-L	Cessna	210N II
IO-520-L	Cessna	210R

IO-520-M	Cessna	310R
IO-520-MB	Cessna	310R
IO-550-A	Cessna	310 Conversion
IO-550-B	Beechcraft	A36
IO-550-B	(Beech Bonanza)	Foxstar
IO-550-C	Beechcraft	58 Baron
IO-550-D	Cessna	185/188 Conversion
IO-550-E	Cessna	310 Conversion
IO-550-F	Cessna	206/207 Conversion
IO-550-L	Cessna	210 Conversion

Unsafe Condition

(d) This AD results from reports of cracks in the area of the exhaust valve and separation of cylinder heads from the barrels of SAP cylinder assemblies with certain part numbers. We are issuing this AD to prevent the separation of the cylinder head, which could result in immediate loss of engine power, possible structural damage to the engine, and possible fire in the engine compartment.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

Inspecting SAP Cylinder Assemblies

(f) If the engine records don't contain the P/N of the cylinder heads, do the following:

- (1) Remove the valve cover from the cylinder assembly.
- (2) Look at the cylinder head for the P/N SAC 52001 I or SAC 55001 I and the word "AMCAST."

(g) For TCM IO-520, TSIO-520, and IO-550 series reciprocating engines with SAP investment cast cylinder assemblies, P/Ns SA52000-A1, SA52000-A20P, SA52000-A21P, SA52000-A22P, SA52000-A23P, SA55000-A1, or SA55000-A20P, installed, with over 750 flight hours (FH) time-in-service (TIS), do the following within 25 FH TIS after the effective date of this AD:

- (1) Inspect each cylinder head around the exhaust valve side for visual cracks or any signs of black combustion leakage.
- (2) Replace any cracked or leaking cylinders before further flight.
- (3) Perform a standard cylinder compression test. Guidance on standard cylinder compression tests can be found in Teledyne Continental Aircraft Engine Service Bulletin SB03-3, Differential Pressure Test and Borescope Inspection Procedures for Cylinders, dated March 28, 2003.

(i) If the cylinder pressure gauge reads below 60 pounds per-square inch, determine if the unacceptable pressure is due to a cracked cylinder.

(ii) To check the cylinder, apply a 2 percent soapy water solution to the side of the leaking cylinder.

(iii) If you see air bubbles, indicating air leakage, on the side of the cylinder head, or near the head-to-cylinder interface, replace the cylinder assembly before further flight.

(h) Thereafter, repeat the cylinder visual inspections and compression tests within 50 FH time-since-last inspection (TSLI) until the cylinders reach their time-between-overhaul (TBO) limits specified in Teledyne Continental Aircraft Engine Service Information Letter SIL98-9A, Revision A, dated March 28, 2003.

Replacing SAP Cylinder Assemblies

(i) For TCM IO-520, TSIO-520, and IO-550 series reciprocating engines with SAP investment cast cylinder assemblies, P/Ns SA52000-A1, SA52000-A20P, SA52000-A21P, SA52000-A22P, SA52000-A23P, SA55000-A1, or SA55000-A20P, replace the SAP cylinder head assembly at the first TBO after the effective date of this AD. Engines that were already overhauled may continue in service until the first TBO after the effective date of this AD.

Prohibition Against Installing Certain P/N SAP Cylinder Assemblies

(j) After the effective date of this AD, do not install any SAP investment cast cylinder assembly, P/Ns SA52000-A1, SA52000-A20P, SA52000-A21P, SA52000-A22P, SA52000-A23P, SA55000-A1, or SA55000-A20P, in any engine.

Alternative Methods of Compliance

(k) The Manager, Special Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Special Flight Permits

(l) Under 14 CFR part 39.23, we will not approve special flight permits for this AD for engines that have failed the visual inspection or the 50 hour periodic cylinder assembly compression test required by this AD.

Related Information

(m) Teledyne Continental Service Bulletin No. SB03-3 "Differential Pressure Test and Borescope Inspection Procedures for Cylinders", dated March 28, 2003.

(n) Contact Peter W. Hakala, Aerospace Engineer, Special Certification Office, FAA, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, TX 76137; e-mail: peter.w.hakala@faa.gov; telephone (817) 222-5145; fax (817) 222-5785, for more information about this AD.

Material Incorporated by Reference

(o) You must use Teledyne Continental Aircraft Engine Service Information Letter SIL98-9A, Revision A, dated March 28, 2003 to determine the times-between-overhaul required by this AD. The Director of the Federal Register approved the incorporation by reference of this service information in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Teledyne Continental Motors, Inc., P.O. Box 90, Mobile, Alabama; telephone (251) 438-3411, or go to: <http://www.genuinecontinental.aero>, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on July 23, 2009.

Peter A. White,
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Aircraft Certification Service.