FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES

SMALL AIRPLANES, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

BIWEEKLY 2012-14

July 2 – July 15, 2012

U.S. Department of Transportation
Federal Aviation Administration
Engineering Procedures Office, AIR-110
P. O. Box 25082
Oklahoma City, OK 73125-0460

AD No.	Information	Manufacturer	Applicability

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

Biweekly 2012-01

2010-19-06 R1	COR	Turbomeca	Engine: Arriel 1A, 1A1, 1B, 1C, 1C1, 1C2, 1D, 1D1, and 1S1 turboshaft
2011-26-10		Enstrom Helicopter Corporation	Rotorcraft: F-28C, F-28C-2, F-28F, 280C, 280F, 280FX, TH-28, 480, and 480B
2011-27-09		Socata	TBM 700
2012-01-01		Various Aircraft	See AD
2012-01-02		Schempp-Hirth Flugzeugbau	Glider: Discus 2cT

Biweekly 2012-02

2011-18-12	S 82-13-05R1	Eurocopter France	Rotorcraft: AS350B, B1, B2, B3, BA, and D; and AS355E, F, F1, F2, and N
2011-27-08		Agusta S.p.A.	Rotorcraft: A109S and AW109SP
2011-27-51		Hawker Beechcraft	1900, 1900C, 1900C (Military), 1900D
2012-01-07		BRP-Powertrain GmbH	Engine: Rotax 914 F2, 914 F3, and 914 F4 reciprocating
2012-01-11		Cirrus Design	SR22T
2012-02-05		Thielert Aircraft Engines GmbH	Engine: TAE 125-02-99 and TAE-125-02-114 reciprocating

Biweekly 2012-03

71-13-01R1		Lycoming Engines	Engine: TIO-540-A series
2012-01-03		Eurocopter France	Rotorcraft: AS332L2 and EC225LP
2012-02-02	S 2008-03-02	Cessna	172R and 172S
2012-02-06		Honeywell International	Engine: TPE331-10, -10AV, -10GP, -10GT, -10N, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, and TPE331-11U
2012-02-10	S 2011-07-13	CPAC	112, 112B, 112TC, 112TCA, 114, 114A, 114B, and 114TC
2012-02-13		Eurocopter France	Rotorcraft: EC130B4
2012-02-51	E	Bell Helicopter Textron Canada Limited	Rotorcraft: 206L, L-1, L-3, and L-4
2012-03-06	S 2011-15-10	Superior Air Parts, Lycoming Engines, and Continental Motors	Engine: Fuel injected reciprocating engines
2012-03-52	E	Mooney Aviation	M20TN and M20R

Biweekly 2012-04

2012-03-01		Eurocopter Deutschland	Rotorcraft: EC135 helicopters
2012-03-07		Lycoming Engines	Engine: See AD
2012-03-11	S 2010-03-06	Turbomeca S.A.	Engine: Arriel 2B and 2B1 turboshaft engines

Biweekly 2012-05

2010-11-09R1	R	Thielert Aircraft Engines GmbH	Engine: TAE 125-01 and TAE 125-02-99 reciprocating engines
2011-12-10	COR	Robinson Helicopter Company	R22, R22 Alpha, R22 Beta, and R22 Mariner helicopters; R44 and R44 II helicopters
2011-27-04	COR	Hawker Beechcraft Corporation	95-C55, D55, E55, 58, and 58A airplanes
2012-03-52		Mooney	M20R and M20TN airplanes
2012-04-03		BRP-Powertrain GmbH & Co. KG	912 S2 and 912 S3 reciprocating engines; 914 F2 reciprocating engines

Biweekly 2012-06

2012-04-10		Burl A. Rogers	15AC and S15AC airplanes
2012-05-01		Eurocopter France	SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters
2012-05-09	S 2012-03-52	Mooney Aviation	M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S, and M20TN airplanes

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Biweekly 2012-07

2012-06-13		DG Flugzeugbau GmbH	Gliders: DG-500 Elan Orion, DG-500 Elan Trainer, DG-500/20 Elan, DG-500/22 Elan, DG-500M, and DG-500MB
2012-06-16		Pilatus Aircraft	PC-6, PC-6-Hl, PC-6-H2, PC-6/350, PC-6/350-Hl, PC-6/350-H2, PC-6/A, PC-6/A-Hl, PC-6/A-H2, PC-6/B-H2, PC-6/Bl-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/Cl-H2
2012-07-01		Agusta S.p.A.	Rotorcraft: AB412

Biweekly 2012-08

2011-18-52		Agusta S.p.A.	AB139 and AW139 helicopters
2012-02-51		Bell Helicopter Textron Canada Limited	206L, 206L-1, 206L-3, and 206L-4 helicopters
2012-06-15		DG Flugzeugbau GmbH	DG-500 Elan Orion, DG-500 Elan Trainer, DG-500/20 Elan, and DG-500/22 Elan sailplanes, DG-500M and DG-500MB powered sailplanes
2012-06-24		Sikorsky	S-92A helicopters
2012-07-09	S 2009-14-11	Turbomeca S.A.	Arrius 2F turboshaft engines
2012-08-01		Sikorsky	S-92A helicopters

Biweekly 2012-09

2012-08-18		Turbomeca	Arriel 2B and 2B1 turboshaft engines

Biweekly 2012-10

2012-10-02		Hawker Beechcraft	58, G58
2012-10-51	E	Eurocopter Dutschland Gmbh	EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2, and EC135 T2+ helicopters
2012-10-52	E	Hartzell Engine Technologies	Appliance: Turbocharger HET P/N 406610-0005 or P/N 406610-9005, P/N 406610-0005 or P/N 406610-9005, P/N 409836-0005
2012-10-53	E S 2012-10-51	Eurocopter Dutschland Gmbh	EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2, and EC135 T2+ helicopters

Biweekly 2012-11

2012-10-01		Bell Helicopter Textron Canada Limited	427
2012-10-04		Cessna Aircraft Company	210G, T210G, 210H, T210H, 210J, T210J, 210K, T210K,210L, T210L, 210M, T210M, 210N, T210N, P210N, 210R, T210R, P210R
2012-10-09	S 80-11-06	Piper Aircraft Inc	PA-31T, PA-31T1
2012-10-13	S 2011-25-51	Continental Motors Inc	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

Biweekly 2012-12

2012-09-10		Pratt & Whitney Canada	PT6A-38, -41, -42, -42A, -61, -64, -66, -66B, -110, -112, -114, -114A, -121, -135, and -135A series turboprop engines
2012-09-11		Eurocopter Deutschland GMBH	MBB-BK 117 C-1 and C-2 helicopters
2012-10-11		Burkhart GROB Luft- und Raumfahrt GmbH	GROB G 109 and GROB G 109B powered sailplanes
2012-10-52		Hartzell Engine Technologies	Appliance: See AD
2012-11-08		WACO Classic Aircraft Corporation	2T-1A, 2T-1A-1, 2T-1A-2:
2012-11-10		Alpha Aviation Concept Limited	R2160

Biweekly 2012-13

2012-10-14		SOCATA	TBM 700
2012-11-02		Eurocopter Deutschland	EC135 helicopters
2012-11-05		Enstrom	F-28C, F-28C-2, F-28F, 280C, 280F, 280FX, TH-28, 480, and 480B helicopters
2012-11-12		Agusta	AW139 helicopters
2012-11-13		Aeronautical Accessories	See AD
2012-12-10		Agusta	AB139 and AW139 helicopters

AD No.	Information	Manufacturer	Applicability

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2012-12-11		Bell Canada	206, 206A, 206A-1, 206B, 206B-1, 206L, 206L-1, 206L-3, and 206L-4 helicopters
2012-12-20		Turbomeca	Arriel 2C1, 2C2, and 2S2 turboshaft engines
2012-12-21		Eurocopter Deutschland	MBB-BK 117 C-2 helicopters
Biweekly 2012-14			
2012-13-04		Embraer	EMB-505
2012-14-06		Rolls-Royce Corporation	250-C20, -C20B, and -C20R/2 turboshaft engines

2012-13-04 Empresa Brasileria de Aeronáutica S.A. (EMBRAER): Amendment 39-17106; Docket No. FAA-2012-0441; Directorate Identifier 2012-CE-011-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective August 6, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Empresa Brasileria de Aeronáutica S.A. (EMBRAER) Model EMB-505 airplanes certificated in any category.

(1) Group 1: Serial numbers (S/Ns) 50500030, 50500033 through 50500037, 50500039, 50500040, 50500044, and 50500046.

(2) Group 2: S/Ns 5050004 through 50500029, 50500031, 50500032, 50500038, 50500041 through 50500043, 50500045, 50500047 through 50500059, 50500061, 50500063, 50500065 through 50500068, 50500070, 50500074, and 50500075.

(3) Group 3: S/N 50500072.

(4) Group 4: S/Ns 50500069, 50500071, and 50500073.

(d) Subject

Air Transport Association of America (ATA) Code 27: Flight Controls.

(e) Reason

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 describes the unsafe condition as an inadequate amount of drain holes in the primary control surfaces (rudder, elevator, aileron) and their tab surfaces, which may allow water to accumulate in the control surfaces. We are issuing this AD to prevent unbalanced flight control surfaces and reduced flutter margins, which could result in loss of control of the airplane.

(f) Actions and Compliance

Unless already done, do the following actions:

(1) Group 1 airplanes specified in paragraph (c)(1) of this AD:

(i) Within the next 100 hours time-in-service after August 6, 2012 (the effective date of this AD) or within the next 3 calendar months after August 6, 2012 (the effective date of this AD), whichever occurs first, visually inspect the right-hand (RH) and left-hand (LH) aileron lower skin for the existence of required drain holes.

(ii) Before further flight after the inspection required in paragraph (f)(1)(i) of this AD, if the required drain holes do not exist, drill the drain holes.

(iii) Within the next 24 months after August 6, 2012 (the effective date of this AD), rework the ailerons, aileron trim-tabs, aileron horn covers, rudder, rudder trim-tab, elevators, and elevator auto-tab surfaces by drilling additional drain holes.

(iv) Do the actions required in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD following the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0003, dated November 16, 2011.

(v) Do the actions required in paragraph (f)(1)(iii) of this AD following Part I of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012.

(2) Group 2 airplanes specified in paragraph (c)(2) of this AD: Within the next 24 months after August 6, 2012 (the effective date of this AD), rework the ailerons, aileron trim-tabs, aileron horn covers, rudder, rudder trim-tab, elevators, and elevators auto-tab surfaces by drilling additional drain holes. Do the modifications following Part I of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012.

(3) Group 3 airplanes specified in paragraph (c)(3) of this AD:

(i) Within the next 24 months after August 6, 2012 (the effective date of this AD), rework the rudder, rudder trim-tab, elevators, and elevators auto-tab surfaces by drilling additional drain holes.

(ii) Within the next 24 months after August 6, 2012 (the effective date of this AD), inspect the ailerons for the existence of required drain holes.

(iii) Before further flight after the inspection required in paragraph (f)(3)(ii) of this AD, if the required drain holes do not exist, drill the drain holes.

(iv) Do the actions required in paragraph (f)(3)(i) of this AD following Part II of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012.

(v) Do the actions required in paragraphs (f)(3)(ii) and (f)(3)(iii) of this AD following Part II of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0004, dated February 16, 2012.

(4) Group 4 airplanes specified in paragraph (c)(4) of this AD:

(i) Within the next 24 months after August 6, 2012 (the effective date of this AD), inspect the ailerons, elevators, and rudder for the existence of required drain holes.

(ii) Before further flight after the inspection required in paragraph (f)(4)(i) of this AD, if the required drain holes do not exist, drill the drain holes.

(iii) Do the actions required in paragraphs (f)(4)(i) and (f)(4)(ii) of this AD following Part I of the Accomplishment Instructions in EMBRAER Phenom Service Bulletin No. 505-57-0004, dated February 16, 2012.

(g) Other FAA AD Provisions

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: Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: (816) 329-4090; email: jim.rutherford@faa.gov. 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, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(h) Related Information

Refer to MCAI Agência Nacional de Aviação Civil (ANAC) Brazilian Airworthiness Directive 2012-03-01, dated March 20, 2012; EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012; EMBRAER Phenom Service Bulletin No. 505-57-0003, dated November 16, 2011; and EMBRAER Phenom Service Bulletin No. 505-57-0004, dated February 16, 2012, for related information.

(i) 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 of the following service information on:

(i) EMBRAER Phenom Service Bulletin No. 505-57-0002, dated February 13, 2012;

(ii) EMBRAER Phenom Service Bulletin No. 505-57-0003, dated November 16, 2011; and

(iii) EMBRAER Phenom Service Bulletin No. 505-57-0004, dated February 16, 2012.

(2) For service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), Phenom Maintenance Support, Av. Brigadeiro Faria Lima, 2170, São José dos Campos–SP, CEP: 12227-901–P.O. Box 36/2, BRASIL; fax ++55 12 3927-2619; email phenom.reliability@embraer.com.br; Internet: http://www.embraer.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.

Issued in Kansas City, Missouri, on June 21, 2012.

James E. Jackson,

Acting Manager, Small Airplane Directorate,

Aircraft Certification Service.

2012-14-06 Rolls-Royce Corporation (Formerly Allison Engine Company and Allison Gas Turbine Division of General Motors): Amendment 39-17120; Docket No. FAA-2011-0961; Directorate Identifier 2011-NE-22-AD.

(a) Effective Date

This AD is effective August 14, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies only to Rolls-Royce Corporation 250-C20, -C20B, and -C20R/2 turboshaft engines with 3rd stage turbine wheel, part number (P/N) 23065818, and 4th stage turbine wheel, P/N 23055944.

(d) Unsafe Condition

This AD was prompted by seven cases reported of released turbine blades and shrouds, which led to loss of power and engine in-flight shutdowns. We are issuing this AD to prevent failure of 3rd or 4th stage turbine wheel blades which could cause engine failure and damage to the airplane.

(e) Compliance

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

(1) Remove the 3rd stage turbine wheel, P/N 23065818, and the 4th stage turbine wheel, P/N 23055944, within 1,750-hours since last inspection.

(2) Perform a one-time visual inspection and a fluorescent penetrant inspection on the 3rd and 4th stage turbine wheels for cracks at the trailing edge of the turbine blades near the fillet at the rim.

(3) If any cracks in the trailing edge near the rim are detected, do not return the wheel to service.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Chicago Aircraft 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) For more information about this AD, contact John Tallarovic, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; phone: 847-294-8180; fax: 847-294-7834; email: john.m.tallarovic@faa.gov.

(2) Rolls-Royce Corporation Alert Commercial Engine Bulletin No. CEB-A-1407, Revision 1, dated February 7, 2011 and CEB-A-72-4098, Revision 1, dated February 7, 2011 (combined in one document) pertain to the subject of this AD.

(3) For service information identified in this AD, contact Rolls-Royce Corporation Customer Support, P.O. Box 420, Indianapolis, IN 46206-0420; phone: 888-255-4766 or 317-230-2720; fax: 317-230-3381; email: helicoptercustsupp@rolls-royce.com, and Web site: www.rolls-royce.com.

(4) You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on June 25, 2012.
Peter A. White,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.