



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

**BIWEEKLY 2010-07**

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Federal Aviation Administration  
Regulatory Support Division  
Delegation and Airworthiness Programs Branch, AIR-140  
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## 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 2010-01</b>			
2009-26-05		Pilatus Aircraft Ltd	PC-7
2009-26-07	S 2009-12-51	Turbomeca	Engine: Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1
2009-26-08	S 2006-21-12	AeroSpace Technologies of Australia Pty Ltd	N22B, N22S, and N24A
2009-26-12	S 2008-19-05	Engine Components, Inc. (ECi)	See AD
<b>Biweekly 2010-02</b>			
2009-21-08 R1		PIAGGIO AERO INDUSTRIES S.p.A.	P-180
2010-01-03		Fire Fighting Enterprises Limited	See AD
2010-02-01		Turbomeca S.A	Arriel 1B, 1D, and 1D1
2010-02-51	E	AGUSTA S.p.A	A109A, A109A II, A109C, and A109K2
<b>Biweekly 2010-03</b>			
2009-19-51		Agusta S.p.A	AB139 and AW139
2009-26-11	S 2006-07-15	Thrush Aircraft, Inc.	See AD
2010-02-07		Eurocopter France	Rotorcraft: SE3160, SA315B, SA316B, SA316C, and SA319B
2010-02-08		Turbomeca	Engine: Turmo IV A and IV C
2010-03-01		Eurocopter France	Rotorcraft: AS332L1, AS332L2, and EC225LP
2010-03-02		Lifesaving Systems Corp.	Appliance
<b>Biweekly 2010-04</b>			
2009-23-51		Sikorsky Aircraft Corporation	Rotorcraft: S-92A
2010-03-03		Bell Helicopter Textron, Inc	Rotorcraft: 205B and 212
2010-03-04		PIAGGIO AERO INDUSTRIES S.p.A	P-180
2010-03-06		Turbomeca	Engine: Arriel 2B and 2B1
2010-03-09		Piaggio Aero Industries S.p.A	P-180
<b>Biweekly 2010-05</b>			
2010-04-05	S 2003-12-05	McCaughey Propeller Systems	Propeller: 1A103/TCM
2010-04-06		Thielert Aircraft Engines GmbH	Engine: TAE 125-01
2010-04-07		Turbomeca	Engine: Arriel 2S1
2010-04-11		Extra Flugzeugproduktions- und Vertriebs- GmbH	EA-300/200, EA-300/L
2010-04-14		Augustair, Inc	2150, 2150 <sup>a</sup> , 2180
2010-04-15		SCHEIBE-Flugzeugbau GmbH	Glider: SF 25C
2010-04-16		SICLI	Appliance: portable fire extinguishers
2010-05-02	S 2009-08-10	Pilatus Aircraft Ltd	PC-12/47E
2010-05-51	E	Eurocopter	Rotorcraft: EC120B
<b>Biweekly 2010-06</b>			
2010-05-10		Hawker Beechcraft	B300, B300C
2010-06-02		Hawker Beechcraft	G58

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

AD No.	Information	Manufacturer	Applicability
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**Biweekly 2010-07**

2010-06-03		Eurocopter France	Rotorcraft: AS355E, AS355F, AS355F1, AS355F2, and AS355N
2010-06-06	S 99-16-13	MD Helicopters, Inc	Rotorcraft: MD-900
2010-06-07		Eurocopter France	Rotorcraft: AS 332 C, L, L1, and L2; AS 350 B3; AS355 F, F1, F2, and N; SA 365N and N1; AS 365 N2 and N3; SA 366G1; EC 130 B4; and EC 155B and B1
2010-06-08		Sikorsky Aircraft Corporation	Rotorcraft: S-76C
2010-06-11		Honeywell International Inc.	Engine: TFE731-2, TFE731-2A, TFE731-2C, TFE731-3, TFE731-3A, TFE731-3AR, TFE731-3B, TFE731-3BR, TFE731-3C, TFE731-3CR, TFE731-3D, TFE731-3DR, TFE731-3R, TFE731-4, TFE731-4R, TFE731-5, TFE731-5AR, TFE731-5BR, and TFE731-5R
2010-06-12		Thielert Aircraft Engines GmbH	Engine: TAE 125-01 and TAE 125-02-99



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**2010-06-03 EUROCOPTER FRANCE:** Amendment 39-16227; Docket No. FAA-2009-1090; Directorate Identifier 2009-SW-31-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective on April 20, 2010.

**Other Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Model AS355E, AS355F, AS355F1, AS355F2, and AS355N helicopters with tail rotor drive shaft forward shaft section, part number 355A 34-1090-00, serial number 858 through 873 (inclusive) with a prefix "M," certificated in any category. This AD does not apply to helicopters manufactured after January 1, 2005.

**Reason**

(d) The mandatory continuing airworthiness information (MCAI) AD states that a metallurgical non-conformity was discovered on a flange of the forward shaft section of the tail rotor drive shaft (drive shaft). The MCAI AD also states that stress analysis has shown that this non-conformity can significantly reduce the strength of the drive shaft and thereby its service life. This AD is intended to remove non-conforming drive shafts from service and prevent failure of the drive shaft and subsequent loss of control of the helicopter.

**Actions and Compliance**

- (e) Unless already accomplished, do the following:
  - (1) For any drive shaft that has less than 2,400 hours time-in-service (TIS), on or before reaching 2,500 hours TIS, remove the drive shaft and replace it with an airworthy drive shaft that is not included in the applicability of this AD.
  - (2) For any drive shaft with 2,400 or more hours TIS, within the next 100 hours TIS, remove the drive shaft and replace it with an airworthy drive shaft that is not included in the applicability of this AD.

**Differences Between This AD and the MCAI AD**

- (f) This AD differs from the MCAI AD as follows:
  - (1) We refer to the compliance time as "hours time-in-service" rather than "flying hours" and

(2) We do not require returning spares to the manufacturer.

**Other Information**

(g) Alternative Methods of Compliance (AMOCs): The Manager, Safety Management Group, FAA, ATTN: Uday Garadi, Aviation Safety Engineer, Regulations and Policy Group, FAA, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5123, 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) European Aviation Safety Agency (EASA) AD No. 2006-0100, dated April 24, 2006, and Eurocopter Alert Service Bulletin No. 01.00.51, Revision 1, dated February 9, 2006, contain related information.

**Joint Aircraft System/Component (JASC) Code**

(i) The JASC Code is 6510: Tail rotor drive shaft.

Issued in Fort Worth, Texas, on February 22, 2010.  
Lance T. Gant,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



**2010-06-06 MD Helicopters, Inc.:** Amendment 39-16230. Docket No. FAA-2009-0953; Directorate Identifier 2009-SW-45-AD. Supersedes AD 99-16-13, Amendment 39-11248, Docket No. 98-SW-42-AD.

**Applicability:** MD-900 helicopters, certificated in any category.

**Compliance:** Required as indicated, unless accomplished previously.

To establish appropriate life limits for various parts, and to prevent fatigue failure of those parts and subsequent loss of control of the helicopter, accomplish the following:

(a) Remove from service as follows:

(1) The nonrotating swashplate assembly, part number (P/N) 900C2010192-105, -107, -109, or -111, on or before 1,800 hours time-in-service (TIS).

(2) The collective drive link assembly, P/N 900C2010207-101, on or before 3,307 hours TIS.

(3) The swashplate spherical slider bearing, P/N 900C3010042-103, on or before 700 hours TIS.

(4) The vertical stabilizer control system (VSCS) bellcrank assembly, P/N 900FP341712-103, and bellcrank assembly, P/N 900F2341712-101, on or before 2,700 hours TIS.

(b) Within 100 hours TIS:

(1) For Model MD-900 helicopters with serial numbers (S/N) 900-00002 through 900-00012, apply the appropriate S/N to the mid-forward truss assembly, P/N 900F2401200-102, and the forward and aft deck-fitting assemblies, P/N 900F2401500-103 and P/N 900F2401600-103.

(2) For Model MD-900 helicopters with S/N 900-00002 through 900-00048, apply S/N to the left and right VSCS bellcrank assemblies, P/N 900F2341712-101 and P/N 900FP341712-103, and the mid-aft truss strut assembly, P/N 900F2401300-103.

(3) Apply the S/N, as specified in paragraphs (b)(1) and (b)(2) of this AD, adjacent to the existing P/N, as listed in Appendix A of this AD, using permanent ink or paint. When dry, apply a clear coat over the S/N.

(c) This AD revises the Airworthiness Limitations Section of the MD-900 Maintenance Manual by increasing the life limits for certain parts and reducing the life limit of the slider bearing.

Note: The Airworthiness Limitations Section of the MD-900 Rotorcraft Maintenance Manual, Reissue 1, Revision 25, dated April 16, 2006, and MD Helicopters Service Bulletin SB900-096, dated February 28, 2005, pertain to the subject of this AD.

(d) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Los Angeles Aircraft Certification Office, FAA, for information about previously approved alternative methods of compliance.

**Appendix A**  
**VSCS Bellcrank, Mid-Aft Strut and Deck Fitting Serialization**

Serial Number To Be Applied			
Aircraft Ser. No.	VSCS Bellcrank Assembly 900F2341712-101 and 900FP341712-103		Strut Assy, Mid-Aft 900F2401300-103
	LH VSCS	RH VSCS	
0002	009999-0001	009999-0002	Previously serialized
0008	009999-0003	009999-0004	Previously serialized
0010	009999-0005	009999-0006	Previously serialized
0011	009999-0007	009999-0008	Previously serialized
0012	009999-0009	009999-0010	Previously serialized
0013	009999-0011	009999-0012	009999-0006
0014	009999-0013	009999-0014	009999-0007
0015	009999-0015	009999-0016	009999-0008
0016	009999-0017	009999-0018	009999-0009
0017	009999-0019	009999-0020	009999-0010
0018	009999-0021	009999-0022	009999-0011
0019	009999-0023	009999-0024	009999-0012
0020	009999-0025	009999-0026	009999-0013
0021	009999-0027	009999-0028	009999-0014
0022	009999-0029	009999-0030	009999-0015
0023	009999-0031	009999-0032	009999-0016
0024	009999-0033	009999-0034	009999-0017
0025	009999-0035	009999-0036	009999-0018
0026	009999-0037	009999-0038	009999-0019
0027	009999-0039	009999-0040	009999-0020
0028	009999-0041	009999-0042	009999-0021
0029	009999-0043	009999-0044	009999-0022
0030	009999-0045	009999-0046	009999-0023

## Appendix A (continued)

Serial Number To Be Applied (Cont.)			
Aircraft Ser. No.	VSCS Bellcrank Assembly 900F2341712-101 and 900FP341712-103		Strut Assy, Mid-Aft 900F2401300-103
	LH VSCS	RH VSCS	
0031	009999-0047	009999-0048	009999-0024
0032	009999-0049	009999-0050	009999-0025
0033	009999-0051	009999-0052	009999-0026
0034	009999-0053	009999-0054	009999-0027
0035	009999-0055	009999-0056	009999-0028
0036	009999-0057	009999-0058	009999-0029
0037	009999-0059	009999-0060	009999-0030
0038	009999-0061	009999-0062	009999-0031
0039	009999-0063	009999-0064	009999-0032
0040	009999-0065	009999-0066	009999-0033
0041	009999-0067	009999-0068	009999-0034
0042	009999-0069	009999-0070	009999-0035
0043	009999-0071	009999-0072	009999-0036
0044	009999-0073	009999-0074	009999-0037
0045	009999-0075	009999-0076	009999-0038
0046	009999-0077	009999-0078	009999-0039
0047	009999-0079	009999-0080	009999-0040
0048	009999-0081	009999-0082	009999-0041

**NOTE** - Aircraft 00002 thru 00012 are equipped with 900F2401300-101 Mid-Aft Strut Assemblies. These strut assemblies were previously serialized, therefore, no action is required. Refer to CSP-900RMM-2, Section 04-00-00, for retirement time of this part.

Serial Number To Be Applied			
Aircraft Serial No.	Strut Assembly, Mid-Fwd Truss (900F2401200-102)	Deck Fitting Assembly, Fwd (900F2401500-103)	Deck Fitting Assembly, Aft (900F2401600-103)
0002	009999-0001	009999-0001	009999-0001
0008	009999-0002	009999-0002	009999-0002
0010	009999-0003	009999-0003	009999-0003
0011	009999-0004	009999-0004	009999-0004
0012	009999-0005	009999-0005	009999-0005

(e) This amendment becomes effective on April 20, 2010.

Issued in Fort Worth, Texas, on February 18, 2010.

Mark R. Schilling,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



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**2010-06-07 Eurocopter France:** Amendment 39-16231; Docket No. FAA-2009-0663; Directorate Identifier 2007-SW-25-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective on April 21, 2010.

**Other Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Eurocopter France (Eurocopter) Model AS 332 C, L, L1, and L2; AS 350 B3; AS355 F, F1, F2, and N; SA 365N and N1; AS 365 N2 and N3; SA 366G1; EC 130 B4; and EC 155B and B1 helicopters, certificated in any category.

**Reason**

(d) The mandatory continuing airworthiness information (MCAI) AD states that the AD is issued following a manufacturing nonconformity found on one batch of the servo-control cap, part number (P/N) 800137. With a defective servo-control, rotation of the distributor might not be stopped mechanically since only friction of inner seals holds the distributor sleeve in its position. If not corrected this condition could cause untimely movements of servo-controls, which are used on main and anti-torque rotors, and lead to the loss of control of the helicopter.

**Actions and Compliance**

(e) Within 2 months after the effective date of this AD, unless already done, do the following actions.

(1) For each servo-control with a P/N and a serial number (S/N) listed in paragraph 1.A.1. of the applicable Eurocopter Alert Service Bulletin (ASB) stated in Table 1 of this AD, determine whether there is a letter "R" marked in the inspection box of the servo-control identification plate.

(2) If there is no letter "R" marked in the inspection box of a servo-control identification plate, on the next removal of the servo-control, or not later than 2 years after the effective date of this AD, whichever occurs first, replace the servo-control with an airworthy servo-control that has an "R" marked in the inspection box of the servo-control identification plate or one with a serial number not listed in paragraph 1.A.1 of the ASB applicable to your model helicopter.

Note 1: The letter "R" marked in the inspection box of the servo-control identification plate indicates that the servo-control cap assembly has been brought into conformity with design data and has been installed properly.

(3) There are 2 identically numbered and dated ASBs. There is an ASB No. 67A010, dated February 19, 2007, that applies to the Model EC130B4 helicopters and an ASB No. 67A010, dated February 19, 2007, that applies to the Model EC 155B and B1 helicopters. You must use the ASB that applies to your model helicopter.

**Table 1**

<b>For Helicopter Model:</b>	<b>Refer to paragraph 1.A.1 of ASB:</b>
AS 332 C, L, L1, and L2	No. 67.00.37, dated February 19, 2007
AS 350 B3	No. 67.00.40, dated February 19, 2007
AS 355 F, F1, F2, and N	No. 67.00.28, dated February 19, 2007
AS 365 N and N1	No. 67.00.13, dated February 19, 2007
SA 366 G1	No. 67.08, dated February 19, 2007
EC 130 B4	No. 67A010, dated February 19, 2007
EC 155B and B1	No. 67A010, dated February 19, 2007

### **Differences Between This AD and the MCAI AD**

(f) This AD differs from the MCAI AD in that it:

- (1) Is not applicable to the Model AS 332 C1 helicopters because they are not type certificated in the United States;
- (2) Does not require returning the servo-controls to the manufacturer;
- (3) Does not address servo-control "spares" (parts not installed on a helicopter);
- (4) Uses the term "inspect" rather than "check"; and
- (5) Includes information explaining that there are 2 ASBs with the same number and date.

### **Other Information**

(g) 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: Uday Garadi, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, Fort Worth, Texas 76137, telephone (817) 222-5123, fax (817) 222-5961.

### **Related Information**

(h) MCAI EASA Airworthiness Directive 2007-0099, dated April 11, 2007, contains related information.

## Joint Aircraft System/Component (JASC) Code

- (i) JASC Code 6700: Rotorcraft Flight Control.

## Material Incorporated by Reference

(j) You must use the portions of the service information specified in Table 2 to do the actions required.

(1) The Director of the Federal Register approved the incorporation by reference of the service information specified in Table 2 under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, TX 75053-4005, telephone (972) 641-3460, fax (972) 641-3527, or at <http://www.eurocopter.com>.

(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>.

**Table 2 – Material Incorporated by Reference**

<b>Eurocopter Alert Service Bulletin</b>	<b>Date</b>	<b>For Helicopter Model</b>
No. 67.00.37	February 19, 2007	AS 332 C, L, L1, and L2
No. 67.00.40	February 19, 2007	AS 350 B3
No. 67.00.28	February 19, 2007	AS 355 F, F1, F2, and N
No. 67.00.13	February 19, 2007	AS 365 N and N1
No. 67.08	February 19, 2007	SA 366 G1
No. 67A010	February 19, 2007	EC 130 B4
No. 67A010	February 19, 2007	EC 155B and B1

Issued in Fort Worth, Texas, on February 18, 2010.

Mark R. Schilling,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



**FAA**  
**Aviation Safety**

## **AIRWORTHINESS DIRECTIVE**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

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**2010-06-08 Sikorsky Aircraft Corporation:** Amendment 39-16232. Docket No. FAA-2010-0242; Directorate Identifier 2009-SW-27-AD.

**Applicability:** Sikorsky Aircraft Corporation Model S-76C helicopters, serial numbers 760501 and 760506 through 760761, with Option Code 88051 Flotation System installed by Keystone Helicopter Corporation, certificated in any category.

**Compliance:** Before the next flight over water, or within 30 days, whichever occurs first, unless accomplished previously.

To determine if a metallic foil shunt is installed in the flotation system, which could prevent the flotation system from deploying and could prevent the helicopter from staying afloat long enough to enable emergency evacuation after a water landing, accomplish the following:

(a) Inspect the flotation system connector and if a metallic foil shunt is found, remove it in accordance with the Accomplishment Instructions, paragraphs 3.A.(1) through 3.A.(9), in Sikorsky Alert Service Bulletin No. 76-32-30, dated April 8, 2009.

(b) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Boston Aircraft Certification Office, FAA, Attn: Terry Fahr, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7155, fax (781) 238-7170.

(c) The inspection shall be done in accordance with the specified portions of Sikorsky Alert Service Bulletin No. 76-32-30, dated April 8, 2009. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, mailstop s581a, 6900 Main Street, Stratford, CT, telephone (203) 383-4866, e-mail address [tsslibrary@sikorsky.com](mailto:tsslibrary@sikorsky.com), or at <http://www.sikorsky.com>. Copies may be inspected 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/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**Joint Aircraft System/Component (JASC) Code**

(d) JASC Code 3212: Emergency Flotation Systems.

(e) This amendment becomes effective on April 1, 2010.

Issued in Fort Worth, Texas, on February 3, 2010.

Mark R. Schilling,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



**2010-06-11 Honeywell International Inc. (Formerly AlliedSignal Inc., formerly Garrett Turbine Engine Company):** Amendment 39-16235. Docket No. FAA-2009-0331; Directorate Identifier 2008-NE-40-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective April 21, 2010.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Honeywell International Inc. TFE731-2, TFE731-2A, TFE731-2C, TFE731-3, TFE731-3A, TFE731-3AR, TFE731-3B, TFE731-3BR, TFE731-3C, TFE731-3CR, TFE731-3D, TFE731-3DR, TFE731-3R, TFE731-4, TFE731-4R, TFE731-5, TFE731-5AR, TFE731-5BR, and TFE731-5R series turbofan engines with certain second stage low-pressure compressor rotor (LPCR) discs, part number (P/N) 3072396-1 or 3075190-1, and/or certain third stage LPCR discs, P/N 3072397-1 or 3075192-1, installed. These engines are installed on, but not limited to, the airplanes listed in Table 1 of this AD.

**Table 1 – Installed on Airplanes by Manufacturer**

<b>Manufacturer</b>	<b>Model</b>
Dassault-Aviation or Dassault Aviation	Falcon 10 (Falcon 100) and Mystere-Falcon 20, 50, 900 and MF900 series.
Cessna Aircraft Company	Model 650, Citation III, VI, and VII.
Gulfstream Aerospace LP	1125 Westwind Astra.
Israel Aircraft Industries	1124 and 1124A (Westwind).
Learjet Inc.	31, 31A, 35, 35A, 36, 36A, 55, 55B, 55C, and M31.
Lockheed Martin Corporation (formerly Lockheed-Georgia)	1329-23A, 1329-23D, 1329-23E, and 1329-25.
Raytheon Corporate Jets (formerly British Aerospace and Hawker Beechcraft Corporation)	DH.125 Series 1A, 3A, and 3A/RA, HS.125 Series F3B and F3B/RA, BH.125 and DH.125 Series 400A, HS.125 Series 403B, F400B, and F403B, HS.125 Series 600A, BH.125 Series 600A, HS.125 Series F600B, 700A, and 700B, BAe.125 Series 800 and 1000, and Hawker 800 and 850XP series.

## **Unsafe Condition**

(d) This AD results from a report of cracks found during a fluorescent penetrant inspection (FPI) of the disc bore. We are issuing this AD to prevent an uncontained failure of a second stage LPCR disc and/or a third stage LPCR disc due to cracks in the bore, which could result in damage to the airplane.

## **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.

## **Removing LPCR Discs From Service**

(f) For engines with any of the serial number (S/N) LPCR discs listed in Table 5 of Honeywell International Inc. Alert Service Bulletins (ASBs) TFE731-72-A3748, dated August 21, 2008, and/or Table 5 of TFE731-72-A3749, dated August 21, 2008, remove those LPCR discs from service within 100 cycles-in-service (CIS) after the effective date of this AD.

(g) For engines with any of the S/N LPCR discs listed in Table 6 of Honeywell International Inc. ASBs TFE731-72-A3748, dated August 21, 2008, and/or Table 6 of TFE731-72-A3749, dated August 21, 2008, do the earlier of the following:

- (1) Remove the LPCR disc from service within 2,000 CIS after the effective date of this AD,
- or
- (2) Remove the LPCR disc from service the next time the intermediate case is removed from the low-pressure compressor case.

## **Installation Prohibition**

(h) After the effective date of this AD, do not install any of the S/Ns of LPCR discs listed in Table 5 of Honeywell International Inc. ASBs TFE731-72-A3748, dated August 21, 2008, and the discs listed in Table 5 of TFE731-72-A3749, dated August 21, 2008, into any engine. Also, do not install any of the S/Ns of LPCR discs listed in Table 6 of Honeywell International Inc. ASBs TFE731-72-A3748, dated August 21, 2008, and the discs listed in Table 6 of TFE731-72-A3749, dated August 21, 2008, into any engine.

## **Alternative Methods of Compliance**

(i) The Manager, Los Angeles Aircraft 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.

## **Related Information**

(j) Contact Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; e-mail:

joseph.costa@faa.gov; telephone: (562) 627-5246; fax: (562) 627-5210, for more information about this AD.

### Material Incorporated by Reference

(k) You must use the service information specified in the following Table 2 to identify the affected discs requiring removal. The Director of the Federal Register approved the incorporation by reference of the documents listed in the following Table 2 in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Honeywell Engines and Systems Technical Publications and Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, AZ 85072-2170, telephone: Global Customer Care toll free (800) 601-3099; International callers (602) 365-3099, 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>.

**Table 2 – Incorporation by Reference**

<b>Honeywell International Inc. Alert Service Bulletin No.</b>	<b>Page</b>	<b>Revision</b>	<b>Date</b>
TFE731-72-A3748 Total Pages: 18	All	Original	August 21, 2008
TFE731-72-A3749 Total Pages: 14	All	Original	August 21, 2008

Issued in Burlington, Massachusetts, on March 5, 2010.

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



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**2010-06-12 Thielert Aircraft Engines GmbH:** Amendment 39-16236. Docket No. FAA-2009-0948; Directorate Identifier 2009-NE-30-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective April 20, 2010.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Thielert Aircraft Engines GmbH (TAE) models TAE 125-01 and TAE 125-02-99 reciprocating engines installed in, but not limited to, Cessna 172 and (Reims-built) F172 series (EASA STC No. EASA.A.S.01527); Piper PA-28 series (EASA STC No. EASA.A.S. 01632); APEX (Robin) DR 400 series (EASA STC No. A.S.01380); and Diamond Aircraft Industries Models DA40 and DA42 airplanes.

**Reason**

(d) As a consequence of occurrences and service experience, Thielert Aircraft Engines GmbH has introduced a new rail pressure control valve part number (P/N) 05-7320-E000702 and P/N 02-7320-04100R3 and has amended the Airworthiness Limitation Section (ALS) of the Operation & Maintenance Manual OM-02-02 to include a replacement of the rail pressure control valve. Failure of this part could result in in-flight shutdowns of the engine(s).

This AD results from mandatory continuing airworthiness information (MCAIs) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. We are issuing this AD to prevent engine in-flight shutdown, possibly resulting in reduced control of the aircraft.

**Actions and Compliance**

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

**TAE 125-02-99 Reciprocating Engines**

(1) For TAE 125-02-99 reciprocating engines, within 100 flight hours after the effective date of this AD, replace the existing rail pressure control valve with a rail pressure control valve P/N 05-7320-E000702, and modify the Vrail plug to make it compatible with the replacement rail pressure control valve.

(2) Guidance on the valve replacement and rail modification specified in paragraph (e)(1) of this AD can be found in Thielert Repair Manual RM-02-02, Chapter 73-10.08, and Chapter 39-40.08, respectively.

### **TAE 125-01 Reciprocating Engines**

(3) For TAE 125-01 reciprocating engines, within 100 flight hours after the effective date of this AD, replace the existing rail pressure control valve with a rail pressure control valve, P/N 02-7320-04100R3.

(4) Guidance on the valve replacement specified in paragraph (e)(3) of this AD can be found in Thielert Repair Manual RM-02-01, Chapter 29.0.

### **TAE 125-02-99 and TAE 125-01 Engines, Repetitive Replacements of Rail Pressure Control Valves**

(5) Thereafter, for affected TAE 125-02-99 and TAE 125-01 engines, replace the rail pressure control valve with the same P/N valve within every 600 flight hours.

### **FAA AD Differences**

(f) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) and/or service information as follows:

(1) For the TAE 125-02-99 reciprocating engines, we reduced the initial compliance time from within 110 flight hours to within 100 flight hours after the effective date of this AD.

(2) For the TAE 125-01 reciprocating engines, we changed initial compliance time from within the next 3 months to within 100 flight hours after the effective date of this AD.

(3) The MCAIs instruct the operators to follow Thielert Maintenance Manual, Chapter 5, Airworthiness Limitations, for the repetitive replacement compliance time for the rail pressure control valve, which, in the manual, is 600 flight hours. We found it necessary to specify the repetitive replacement compliance time in this AD, of within every 600 flight hours.

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

(g) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

### **Related Information**

(h) Refer to MCAI European Aviation Safety Agency (EASA) AD 2008-0128, dated July 9, 2008, EASA AD 2008-0215, dated December 5, 2008, Thielert Service Bulletin No. TAE 125-1008 P1, Revision 1, dated September 29, 2008, and Thielert Repair Manual RM-02-02, for related information. Contact Thielert Aircraft Engines GmbH, Platanenstrasse 14 D-09350, Lichtenstein, Germany, telephone: +49-37204-696-0; fax: +49-37204-696-55; e-mail: info@centurion-engines.com, for a copy of this service information.

(i) Contact Tara Chaidez, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: tara.chaidez@faa.gov; telephone (781) 238-7773; fax (781) 238-7199, for more information about this AD.

Issued in Burlington, Massachusetts, on March 8, 2010.  
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Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.