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

BIWEEKLY 2011-05

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U.S. Department of Transportation
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;			
Biweekly 2011-01			
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 S 2011-01-51	Piaggio	P-180
Biweekly 2011-02			
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
Biweekly 2011-03			
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	Glider: L 23 Super Blanik
Biweekly 2011-04			
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 S 2011-01-51	Piaggio Aero Industries	P-180
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
Biweekly 2011-05			
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

[Federal Register Volume 76, Number 34 (Friday, February 18, 2011)]
[Rules and Regulations]
[Pages 9495-9498]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2011-3653]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2010-0827; Directorate Identifier 2010-CE-029-AD; Amendment 39-16552; AD 2010-17-18 R1]

RIN 2120-AA64

Airworthiness Directives; Air Tractor, Inc. Models AT-802 and AT-802A Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final regulatory flexibility analysis (FRFA).

SUMMARY: This document incorporates the FRFA for Airworthiness Directive (AD) 2010-17-18, which applied to these products: Air Tractor, Inc. (AirTractor) Models AT-802 and AT-802A airplanes. We have since revised AD 2010-17-18, which requires you to repetitively inspect (using the eddy current method) the two outboard fastener holes in both of the wing main spar lower caps at the center splice joint for cracks and repair or replace any cracked spar, and changes the safe life for certain serial number (SN) ranges. Our initial analysis indicated that a FRFA was necessary for AD 2010-17-18. We issued AD 2010-17-18 without the FRFA to immediately address the unsafe condition. This action presents the FRFA for AD 2010-17-18, which is required to be published in the Federal Register.

DATES: This FRFA is effective February 18, 2011.

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Andrew McAnaul, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; e-mail: andrew.mcanaul@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

On August 11, 2010, we issued AD 2010-17-18, amendment 39-16412 (75 FR 52255, August 25, 2010), for all Air Tractor Models AT-802 and AT-802A airplanes. That AD required you to repetitively inspect (using the eddy current method) the two outboard fastener holes in both of the wing main spar lower caps at the center splice joint for cracks and repair or replace any cracked spar, and changes the safe life for certain SN ranges. That AD resulted from the FAA's evaluation of service information issued by Air Tractor and our determination that we needed to add inspections, add modifications, and change the safe life for certain SN ranges. We issued that AD to detect and correct cracks in the wing main spar lower cap at the center splice joint, which could result in failure of the spar cap and lead to wing separation and loss of control of the airplane.

Reason for This Action

The Regulatory Flexibility Act of 1980 (Pub. L. 96-354) (RFA) establishes as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation.

To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The RFA covers a wide range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. In accordance with Section 608 of the Regulatory Flexibility Act, an agency head may waive or delay completion of some or all of the requirements of Section 603 by providing a written finding that this final rule is being promulgated in response to an emergency that makes compliance or timely compliance with the provisions of Section 603 impracticable.

Our initial analysis indicated that a FRFA was necessary for this action. We issued AD 2010-17-18 without the FRFA to immediately address the unsafe condition.

On December 16, 2010, we issued AD 2010-17-18 R1, amendment 39-16552 (75 FR 82219, December 30, 2010), for certain Air Tractor Models AT-802 and AT-802A airplanes. This AD retains the actions of AD 2010-17-18 and reduces the applicability from all SN beginning with SN-0001 as required by the previous AD to SN-0001 through SN-0269. This AD was prompted by our evaluation of a comment from David Ligon, Air Tractor, and our determination that we should reduce the applicability from that already required by the previous AD.

This action presents the FRFA, which is required to be published in the Federal Register.

Final Regulatory Flexibility Analysis

On August 25, 2010, the Federal Aviation Administration (FAA) issued Airworthiness Directive (AD 2010-17-18) for Air Tractor Models AT-802 and AT-802A airplanes. The FAA determined that the final rule was being issued in response to an emergency and that timely compliance with the Regulatory Flexibility Act of 1980 (Pub. L. 96-354) (RFA) was impracticable. This analysis fulfills the RFA requirements.

Agencies must perform a review to determine whether a rule will have a significant economic impact on a substantial number of small entities. If the agency determines that it will, the agency must prepare a regulatory flexibility analysis as described in the RFA.

This final rule will have a significant impact on a substantial number of small entities. In accordance with the requirements in the RFA, we have performed this FRFA and address the following requirements:

(1) A succinct statement of the need for, and objectives of, the rule.

(2) A summary of the significant issues raised by the public comments.

(3) A description and an estimate of the number of small entities.

(4) A description of the projected reporting, recordkeeping, and other compliance requirements.

(5) A description of the steps the agency has taken to minimize the significant adverse economic impact on small entities.

(6) An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the final rule.

Next, we address each of those individual requirements.

(1) A succinct statement of the need for, and objectives of, the rule.

This AD will improve the ability of operators flying Models Air Tractor 802 and 802A airplanes to discover and to correct cracks in the wing main spar lower cap at the center splice joint, which could result in the failure of the spar cap and lead to the wing separating from the airplane body.

The FAA is responsible for the safety of flight in the United States and for the safety of U.S.-registered aircraft and U.S. operations. The FAA is also responsible for issuing rules affecting the safety of air commerce and national security. The FAA's authority to issue the rules on aviation safety is found in Title 49 of the United States Code. Subtitle I, section 106(g) describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the agency's authority. Section 40101(d)(1) provides that the Administrator shall consider in the public interest, among other matters, assigning, maintaining, and enhancing safety and security as the highest priorities in air commerce. Further, the FAA has broad authority under section 44701(a)(5) to prescribe regulations governing the practices, methods, and procedures the Administrator finds necessary for safety in air commerce and national security. The FAA finds this action necessary to prevent a potential hazard to Air Tractor Models AT-802 and AT-802A airplanes engaged primarily in agricultural and firefighting operations.

(2) A summary of the significant issues raised by the public comments.

The FAA received one comment on this final rule. Air Tractor commented that there should be no additional inspections required for their AT-802 and AT-802A airplanes with serial numbers greater than 0269. We concurred and on December 30, 2010, issued AD 2010-17-18 R1 to reduce the applicability of AD 2010-17-18 only to Models AT-802 and AT-802A serial numbers 0001 through 0269.

(3) A description and an estimate of the number of small entities.

There are 52 of these affected Air Tractor airplanes operating in the United States. Of these 52 airplanes, 46 are operated by the private sector and 6 are operated by the United States State Department. Of the 46 operated by the 34 entities in the private sector, 25 operate only 1 airplane, 1 operates 2 airplanes, 5 operate 3 airplanes, and 1 operates 4 airplanes. The Small Business Administration classifies operators with less than 1,500 employees as small businesses. All of the private entities are small entities with fewer than 1,500 employees.

(4) A description of the projected reporting, recordkeeping, and other compliance requirements.

This final rule changes the existing requirement that any inspection finding a crack must be reported to the FAA by requiring the operator to use a specific one-page reporting form that has been approved by the Office of Management and Budget for that report.

The final rule requires operators of Air Tractor serial numbers AT-802-0092 through 0101 and AT-802A-0092 through 0101:

- To perform, using the eddy current method, two inspections at 1,700 time-in-service (TIS) hours, at 2,500 TIS hours, and at 3,300 TIS hours (at a cost of $650 an inspection) of the two outboard

- fastener holes in both of the wing main spar lower caps at the center splice joint for cracks and to repair or replace any cracked spar.
- To install at 4,100 TIS hours a center web plate and splice blocks (at a cost of $25,500).

Operators of Air Tractor serial numbers AT-802-0102 through 0178 and AT-802A-0102 through 0178 to perform using the eddy current method, two inspections at 5,500 TIS hours and at 6,600 TIS hours (at a cost of $650 an inspection) of the two outboard fastener holes in both of the wing main spar lower caps at the center splice joint for cracks and to repair or replace any cracked spar.

We determined that an average AT-802 or AT-802A lasts 40 years before it leaves service in the United States. We also determined that it flies an average of 450 hours a year. Thus, an AT-802 or AT-802A accumulates an average of 18,000 TIS hours before it leaves service in the United States. All of the affected airplanes (AT-802 0092-0178 and AT-802A 0092-0178) were built between 2000 and 2004.

The baseline from which the FAA calculated the incremental costs to comply with Air Tractor AD 2010-17-18 is compliance with the previous Air Tractor AD (AD 2010-13-08) published in the Federal Register on June 23, 2010. This earlier AD addressed Air Tractor Airplane Model AT-802 serial numbers 0001 through 0091 and Model AT-802A serial numbers 0001 through 0091.

This AD imposed no new requirements beyond those in AD 2010-13-08 on Air Tractor Models AT-802 serial numbers 0001 through 0091 and Model AT-802A serial numbers 0001 through 0091.

As previously noted, this AD also addressed Air Tractor Model AT-802 serial numbers 0179 forward and Model AT-802A serial numbers 0179 forward. However, the December 30, 2010, AD removed these airplanes from compliance with this AD.

Thus, in comparison with AD 2010-13-08, this AD affects Model AT-802 serial numbers 0092 through 0178 and Model AT-802A serial numbers 0092 through 0178 in service in the United States.

For the purposes of this analysis, there are two different categories within each of these two models. Category 1 consists of Model AT-802 serial numbers 0092 through 0101 and Model AT-802A serial numbers 0092 through 0101, which were manufactured in 2000. Category 2 consists of Model AT-802 serial numbers 0102 through 0178 and Model AT-802A serial numbers 0102 through 0178 manufactured between 2000 through 2004. As seen in Table 1, there are only 6 category 1 airplanes and 40 category 2 airplanes.

Table 1–Numbers of Affected AT-802 and AT-802A Airplanes in Private Operations by Category and by Year of Manufacture

Manufacture year	Category		Total
	1	2	
2000	6	4	10
2001		10	10
2002		6	6
2003		13	13
2004		7	7
Total	6	40	46

For category 1 airplanes, this AD requires that the operator must perform three eddy current inspections (at 1,700 TIS hours, at 2,500 TIS hours, and at 3,300 TIS hours), each inspection costing $650. However, as all of these airplanes were manufactured in 2000 and, given an average of 450 annual TIS hours, they are already, on average, at 4,050 TIS hours. Nevertheless, the FAA assumes that these six airplanes will need one inspection, which will be taken in 2011.

The AD also reduced their spar cap maximum safe life from 8,163 TIS hours to 4,100 TIS hours. However, the operator can extend the spar cap maximum safe life from 4,100 hours to 8,000 hours by spending $25,500 to install a center web plate and splice blocks. The FAA assumes that all of these installations will occur in 2012. Finally, although the spar cap has to be replaced (at a cost of $81,175) by 8,000 TIS hours, this is required under AD 2010-13-08.

For category 2 airplanes, this AD reduced their spar cap maximum safe life from 8,163 TIS hours to 5,500 TIS hours. However, if the operator performs two eddy current inspections (at 5,500 TIS hours and at 6,600 TIS hours), each inspection costing $650, the spar cap maximum safe life can be extended to 8,000 TIS hours. Given an average of 450 annual TIS hours, these airplanes will have their first inspection (at 5,500 TIS hours) 12 years after they were manufactured and will have their second inspection 3 years later (after having an average of 1,350 TIS hours during those 3 years). As these airplanes were manufactured between late 2000 and 2004, the FAA assumes that the 2000 airplanes will have their first inspection in 2012 and the second inspection in 2015; the 2001 airplanes will have their first inspection in 2013 and the second inspection in 2016, etc.

The FAA uses a 10-year period of analysis (2011-2020) because that is when nearly all of the compliance expenditures will be made. The FAA also uses a 7 percent discount rate to calculate the present values of the costs.

The AD does not require any additional inspections after the replacement spar has been installed because the replacement spars are higher quality than the original equipment.

Thus, the AD will impose two types of compliance costs. The first are the costs from the inspections. The second are the costs to the category 1 Air Tractor operators that will need to install a center web plate and splice blocks at 4,100 TIS hours.

As seen in Table 2, the cost to comply with the AD requirements for inspections during the ten-year period would be $55,900, which, using a 7 percent discount rate, has a present value of $39,260.

Table 2–Total and Present Value Compliance Costs To Comply With the Inspections Required by the AD [2011-2020]

Manufacture year	Number of inspections by year										Total
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
2000 (Cat 1)	6	0	0	0	0	0	0	0	0	0	6
2000 (Cat 2)	0	4	0	0	4	0	0	0	0	0	8
2001	0	0	10	0	0	10	0	0	0	0	20
2002	0	0	0	6	0	0	6	0	0	0	12
2003	0	0	0	0	13	0	0	13	0	0	26
2004	0	0	0	0	0	7	0	0	7	0	14
Total	6	4	10	6	17	17	6	13	7	0	86
Total Cost	$3,900	$2,600	$6,500	$3,900	$11,050	$11,050	$3,900	$8,450	$4,550	$0	$55,900
Present Value	$3,645	$2,271	$5,306	$2,975	$7,878	$7,363	$2,429	$4,918	$2,475	$0	$39,260

Each of the 6 category 1 Air Tractor airplane operators will need to spend $25,500 to install the center web plate and splice blocks in 2012, which has a present value of $22,273 using a 7 percent discount rate. The total cost to install this equipment on these 6 airplanes is $153,000, which has a present value of $133,638 using a 7 percent discount rate.

Thus, the total cost would be $208,900, which has a present value of $172,898 using a 7 percent discount rate.

However, these costs are unequally distributed across the 34 operators. The six category 1 Air Tractor airplane operators will need to spend $26,150 an airplane while the category 2 Air Tractor airplane operators will need to spend between $650 and $1,300 an airplane.

(5) A description of the steps the agency has taken to minimize the significant economic impact of the final rule on small entities.

The FAA is responsible for the safety of U.S.-registered aircraft and U.S. operators. The FAA has not identified any significant alternatives to this final rule that accomplish the stated objectives of applicable statutes, and which minimize any significant economic impact of the final rule SFAR on small entities.

(6) An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the final rule.

The FAA knows of no other Federal rules which duplicate, overlap, or conflict with the final rule.

Determination of Significant Impact

As discussed in the compliance cost section, all of these operators are small businesses. Further, nearly all of them are privately held businesses that do not file reports that the FAA can access to determine annual revenues. However, the FAA can determine that the average value of an Air Tractor Model AT-800A serial number 0091-0101 is about $650,000. This rule requires the 6 operators of these airplanes to spend about 4 percent ($25,500) of the value of the airplane on a repair. The FAA believes that this magnitude of an expenditure could place these six operators in some financial difficulty.

Therefore, this final rule will have a significant economic impact on a substantial number of small entities.

Issued in Kansas City, Missouri, on February 11, 2011.

John R. Colomy,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2011-3653 Filed 2-17-11; 8:45 am]
BILLING CODE 4910-13-P

2011-05-01 PIAGGIO AERO INDUSTRIES S.p.A: Amendment 39-16610; Docket No. FAA-2010-1099; Directorate Identifier 2010-CE-054-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective March 31, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to PIAGGIO AERO INDUSTRIES S.p.A Model PIAGGIO P-180 airplanes, all manufacturer serial numbers (MSN), certificated in any category.

Subject

(d) Air Transport Association of America (ATA) Code 50: Cargo and Accessory Compartments.

Reason

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

> Compass mismatch (up to loss of heading information) were reported by operators, due to ferro-magnetic masses (like the telescopic Tow-Bar) stowed in the baggage compartment. A limitation was added to the approved Airplane Flight Manual, stating that the towing bar P/N 01-1227-0000 or similar ferromagnetic masses are prohibited to be carried in the baggage compartment.

We require the incorporation of Piaggio Aero Industries S.p.A. and Piaggio Aero Industries (Piaggio) Temporary Change No. 7, into the Pilot's Operating Handbook and EASA Approved Airplane Flight Manual Rep. 6591, issued: February 24, 2009, and Temporary Change No. 11 into the EASA Approved Airplane Flight Manual Rep. 180-MAN-0010-01100, issued: February 24, 2009, and installation of a placard.

Actions and Compliance

(f) Unless already done, within 5 flights after March 31, 2011 (the effective date of this AD), do the following actions:

(1) For MSN 1004 through 1104: Incorporate Piaggio Aero P.180 AVANTI Temporary Change No. 7 to the Pilot's Operating Handbook and EASA Approved Airplane Flight Manual Rep. 6591, issued: February 24, 2009, in the Limitations section following Piaggio Aero Industries S.p.A. Service Bulletin (Mandatory) N.: SB 80-0275, Rev. N. 0, dated June 15, 2009.

(2) For MSN 1105 and subsequent: Incorporate Piaggio Aero P.180 AVANTI II Temporary Change No. 11 to the EASA Approved Airplane Flight Manual Rep. 180-MAN-0010-01100, issued: February 24, 2009, in the Limitations section following Piaggio Aero Industries S.p.A. Service Bulletin (Mandatory) N.: SB 80-0275, Rev. N. 0, dated June 15, 2009.

(3) All MSN: Install the part number 80K347593-005 limitation placard in the front of the baggage compartment door following Piaggio Aero Industries S.p.A. Service Bulletin (Mandatory) N.: SB 80-0275, Rev. N. 0, dated June 15, 2009.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: Revisions and changes to the Limitations section of the AFM are mandatory in Europe as part of the European regulatory process upon issuance by the type certificate holder. The FAA must mandate any such changes through rulemaking, specifically in this case an airworthiness directive.

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: Sarjapur Nagarajan, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4145; 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, 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.

Related Information

(h) Refer to Piaggio Aero Industries S.p.A. Service Bulletin (Mandatory) N.: SB 80-0275, Rev. N. 0, dated June 15, 2009; Piaggio Aero P.180 AVANTI Temporary Change No. 7 to the Pilot's Operating Handbook and EASA Approved Airplane Flight Manual Rep. 6591, issued: February 24, 2009; and Piaggio Aero P.180 AVANTI II Temporary Change No. 11 to the EASA Approved Airplane Flight Manual Rep. 180-MAN-0010-01100, issued: February 24, 2009, for related information. For service information related to this AD, contact Piaggio Aero Industries S.p.A., Via Cibrario, 4-16154 Genoa, Italy; phone: +39 010 6481 353; fax: +39 010 6481 881; e-mail: airworthiness@piaggioaero.it; Internet: http://www.piaggioaero.com. You may review copies of the referenced 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.

Material Incorporated by Reference

(i) You must use Piaggio Aero Industries S.p.A. Service Bulletin (Mandatory) N.: SB 80-0275, Rev. N. 0, dated June 15, 2009; Piaggio Aero P.180 AVANTI Temporary Change No. 7 to the Pilot's Operating Handbook and EASA Approved Airplane Flight Manual Rep. 6591, issued: February 24, 2009; and Piaggio Aero P.180 AVANTI II Temporary Change No. 11 to the EASA Approved Airplane Flight Manual Rep. 180-MAN-0010-01100, issued: February 24, 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 this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Piaggio Aero Industries S.p.A., Via Cibrario, 4-16154 Genoa, Italy; phone: +39 010 6481 353; fax: +39 010 6481 881; e-mail: airworthiness@piaggioaero.it; Internet: http://www.piaggioaero.com.

(3) You may review copies of the referenced 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 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 February 14, 2011.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

2011-05-02 Viking Air Limited (Type Certificate No. A-815 Formerly Held by Bombardier Inc. and de Havilland, Inc.): Amendment 39-16611; Docket No. FAA-2010-1192; Directorate Identifier 2010-CE-020-AD.

Effective Date

(a) This AD is effective March 31, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Viking Air Limited (Type Certificate No. A-815 formerly held by Bombardier Inc. and de Havilland, Inc.) Model DHC-3 airplanes, all serial numbers, that:

(1) Do not have the new elevator servo tab and redundant control linkage installed according to Supplemental Type Certificate (STC) No. SA01059SE; and

(2) Are certificated in any category.

Subject

(d) Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 27, Flight Controls.

Unsafe Condition

(e) This AD results from an evaluation of revisions to the manufacturer's maintenance manual that adds new repetitive inspections to the elevator control tabs. To require compliance with these inspections for U.S. owners and operators we are mandating these inspections through the rulemaking process. We are issuing this AD to add new repetitive inspections of the elevator control tabs. If these inspections are not done, excessive free-play in the elevator control tabs could develop. This condition could lead to loss of tab control linkage and severe elevator flutter. Such elevator flutter could lead to possible loss of control.

Compliance

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

Actions	Compliance	Procedures
(1) Inspect the elevator control tabs for discrepancies.	Initially within the next 50 hours time-in-service (TIS) after March 31, 2011 (the effective date of this AD). Repetitively thereafter inspect at intervals not to exceed 100 hours TIS.	Following Viking DHC-3 Otter Maintenance Manual Temporary Revisions No. 18, No. 19, and No. 20, all dated December 5, 2008.
(2) If any discrepancies are found during any inspection required in paragraph (f)(1) of this AD, take necessary corrective actions to bring all discrepancies within acceptable tolerances.	Before further flight after any inspection required in paragraph (f)(1) of this AD in which discrepancies are found.	Following Viking DHC-3 Otter Maintenance Manual Temporary Revisions No. 18, No. 19, and No. 20, all dated December 5, 2008.
(3) If, during any inspection required in paragraph (f)(1) of this AD, the total maximum free play of the elevator servo tab and trim tab relative to the elevator exceeds 1.0 degree (this is equal to a maximum displacement of 0.070” at the trailing edge), report the results of the inspection to the FAA.	Within 30 days after the inspection. We are collecting these inspection results for 24 months after March 31, 2011 (the effective date of this AD). The reporting requirements of this AD are no longer required after that time.	Use the form (Figure 1 of this AD) and submit it to FAA, Small Airplane Directorate, Attn: Jim Rutherford, 901 Locust, Room 301, Kansas City, Missouri 64106.

Docket No. FAA-2010-1192	
Airplane Serial Number:	
Time-in-Service (TIS) of Airplane:	
Airplane Engine Type/Model Number/ Series Number:	
TIS of Airplane When Current Engine was Installed:	
Date When Current Engine was Installed:	
STC Number that Installed Current Engine (if applicable):	
Out of Tolerance Recording:	
Corrective Action Taken:	
Any Additional Information (Optional):	
Name:	
Telephone and/or Email Address:	
Date:	

Send report to: Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; facsimile: (816) 329-4090; email: jim.rutherford@faa.gov

Figure 1

Paperwork Reduction Act Burden Statement

(g) 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.

Alternative Methods of Compliance (AMOCs)

(h)(1) The Manager, New York 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 Principal Maintenance Inspector or Principal Avionics Inspector, as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

Related Information

(i) For more information about this AD, contact George Duckett, Aerospace Engineer, New York ACO, FAA, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone: (516) 228-7325; fax: (516) 794-5531; e-mail: george.duckett@faa.gov.

Material Incorporated by Reference

(j) You must use Viking DHC-3 Otter Maintenance Manual Temporary Revision No. 18, Viking DHC-3 Otter Maintenance Manual Temporary Revision No. 19, and Viking DHC-3 Maintenance Manual Temporary Revision No. 20, all dated December 5, 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 information about the revisions to the maintenance program identified in this AD, contact Viking Air Ltd., 9574 Hampden Road, Sidney, BC Canada V8L 5V5; telephone: (800) 663-8444; Internet: http://www.vikingair.com.

(3) You may review copies of the referenced revisions 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 February 15, 2011.
Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

2011-05-06 Thielert Aircraft Engines GmbH: Amendment 39-16615. Docket No. FAA-2010-0892; Directorate Identifier 2010-NE-32-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective March 30, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Thielert Aircraft Engines GmbH models TAE 125-02-99 and TAE 125-02-114 reciprocating engines installed in, but not limited to, Cessna 172 and (Reims-built) F172 series (European Aviation Safety Agency (EASA) Supplemental Type Certificate (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 DA 40, DA 42, and DA 42M NG airplanes.

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:

> Service experience has shown that fracture of the timing chain has occurred due to chain wear. This condition, if not corrected, could lead to in-flight cases of engine shutdown.

We are issuing this AD to prevent engine in-flight shutdown leading to loss of control of the airplane by requiring life limits for the timing chain.

Actions and Compliance

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

Initial Replacement of Timing Chain

(1) For engines with serial numbers (S/Ns) listed in Table 1 of this AD, replace the timing chain within 600 flight hours-since-new, or no later than 55 flight hours after the effective date of this AD, whichever occurs later.

Table 1–S/Ns of Engines Affected by the Compliance Time in Paragraph (e)(1) of This AD

02–02–01510 to 02–02–01514 inclusive
02–02–01518 to 02–02–01520 inclusive
02–02–01529
02–02–01717
02–02–01718
02–02–01720
02–02–01721
02–02–01727
02–02–01728
02–02–01730 to 02–02–01733 inclusive
02–02–01739 to 02–02–01752 inclusive

(2) For engines with S/Ns not listed in Table 1 of this AD, replace the timing chain within 910 flight hours-since-new, or no later than 55 flight hours after the effective date of this AD, whichever occurs later.

Repetitive Replacements of Timing Chains for All TAE 125-02-99 and TAE 125-02-114 Engines

(3) Thereafter, for all TAE 125-02-99 and TAE 125-02-114 engines, repetitively replace the timing chain within every additional 910 flight hours.

(4) Guidance on replacing the timing chain can be found in Thielert Aircraft Engines GmbH Service Bulletin No. TM TAE 125-1010 P1, Revision 2, dated May 26, 2010.

FAA AD Differences

(f) This AD differs from the MCAI and/or service information, which require initial replacement of the timing chain for the engines listed in paragraph (e)(1) above within either the next 110 flight hours or at the next maintenance, whichever occurs first, for those engines having accumulated between 500 and 600 flight hours time-since-new. The reason for the difference is to ensure that the compliance requirements for all engines in paragraph (e)(1) above are consistent.

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 AD 2010-0136, dated June 30, 2010, and Thielert Aircraft Engines GmbH Service Bulletin No. TM TAE 125-1010 P1, Revision 2, dated May 26, 2010, for related information. Contact Thielert Aircraft Engines GmbH, Platanenstrasse 14 D-09350, Lichtenstein, Germany, telephone: 37204-696-0; fax: 37204-696-55; e-mail: engines.com">info@centurion-engines.com, for a copy of this service information.

(i) Contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: alan.strom@faa.gov; telephone (781) 238-7143; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(j) None.

Issued in Burlington, Massachusetts, on February 16, 2011.
Peter A. White,
Acting Manager, Engine and Propeller Directorate,
Aircraft Certification Service.

DATE: February 16, 2011
AD #: 2011-05-51

Background

This emergency AD was prompted by three reports of incorrectly assembled low-pressure fuel system ejectors; with one of them resulting in an uncommanded engine in-flight shutdown. The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, issued emergency AD No. 2011-0023-E on February 9, 2011 (corrected on February 10, 2011). That AD states:

> In October 2009, Turbomeca issued SB [Service Bulletin] No. 292 73 0826, Version A that instructed operators to check the effectiveness of the bonding of the ejector jet installed on the low-pressure fuel system between the tank and the high-pressure fuel pump.
>
> So far, Turbomeca have been informed of three discrepancies with the reassembly of the ejector following a maintenance procedure performed during accomplishment of Turbomeca SB No. 292 73 0826, Version A.
>
> In all three cases, the discrepancies led to a "one-off" abnormal evolution of gas generator (NG) rating during engine starting. In one of these cases, this resulted in an uncommanded in-flight shutdown, during a cruising phase at 8,000 feet.

This condition, if not corrected, could result in uncommanded engine in-flight shutdown of one or both engines in a two-engine helicopter and an emergency autorotation landing or accident.

Relevant Service Information

We reviewed Turbomeca Mandatory Service Bulletin (MSB) No. A292 73 0834, Version B, dated February 8, 2011, and SB No. 292 73 0826, Version B, dated February 4, 2011. This service information describes procedures for inspecting for proper ejector 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 inspecting the fuel ejector in the body of the fuel ejector assembly for proper installation by checking that the circlip is properly seated in its groove using Turbomeca MSB No. A292 73 0834, Version B, dated February 8, 2011.

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.

2011-05-51: Turbomeca: Directorate Identifier 2011-NE-06-AD.

Effective Date

(a) This Emergency AD is effective upon receipt.

Affected ADs

(b) None.

Applicability

(c) This Emergency AD applies to Turbomeca Arriel 1E2, 1S, and 1S1 turboshaft engines that have incorporated Turbomeca SB No. 292 73 0826, Version A, or incorporated Turbomeca Internal Consign (IC) No. 298468. These engines are installed on, but not limited to, Eurocopter Deutschland MBB BK117-C2 and BK117-C1, and Sikorsky S-76A series and S-76C series, helicopters.

Unsafe Condition

(d) This AD was prompted by three reports of incorrectly assembled low-pressure fuel system ejectors; with one of them resulting in an uncommanded engine in-flight shutdown. We are issuing this AD to prevent uncommanded engine in-flight shutdown of one or both engines in a two-engine helicopter and an emergency autorotation landing or accident.

Compliance

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

Fuel Ejector Inspection

(f) Inspect the fuel ejector in the body of the fuel ejector assembly for proper installation by checking that the circlip is properly seated in its groove. Use Paragraph 2.B of the Instructions to be Incorporated, of Turbomeca Mandatory Service Bulletin (MSB) No. A292 73 0834, Version B, dated February 8, 2011 to do the inspection. Inspect at the following compliance times:

(1) For helicopters having at least one of the two affected engines experiencing starting difficulties, inspect within 5 flight hours (FH) after the effective date of this AD.

(2) For helicopters having only one affected engine, and experiencing starting difficulties in that engine, inspect within 20 FH after the effective date of this AD.

Inspection Results

(g) If you find a fuel ejector improperly installed in the body of the fuel ejector assembly, replace the fuel ejector assembly before further flight with a serviceable fuel ejector assembly.

Definition

(h) For the purpose of this AD, starting difficulties occur when N1 stagnation or variations are encountered. During starting, N1 rise shall be continuous and linear up to ground idle.

Credit for Actions Accomplished in Accordance with Previous Service Information

(i) Inspections and replacements done using Turbomeca MSB No. A292 73 0834, Version A, dated February 4, 2011, or Turbomeca Service Bulletin No. 292 73 0826, Version B, dated February 4, 2011, before the effective date of this AD, satisfy the requirements of this AD.

Alternative Methods of Compliance (AMOCs)

(j) 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

(k) For further information about this AD, contact: Rose Len, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; phone: (781) 238-7772; fax: (781) 238-7199; e-mail: rose.len@faa.gov.

(l) For copies of the service information referenced in this AD, contact: Turbomeca, 40220 Tarnos, France; phone: 33 559 74 40 00; fax: 33 559 74 45 15; Web site: www.turbomeca-support.com. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803.

(m) EASA AD No. 2011-0023-E, dated February 9, 2011 (corrected on February 10, 2011), also pertains to this AD.

Issued in Burlington, Massachusetts, on February 15, 2011.

Thomas A. Boudreau,

Acting Assistant Manager, Engine and Propeller Directorate,

Aircraft Certification Service.