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## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2008-0974; Directorate Identifier 2008-CE-048-AD; Amendment 39-15673; AD 2008-19-06]**

**RIN 2120-AA64**

#### **Airworthiness Directives; EADS SOCATA Model TBM 700 Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

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**SUMMARY:** We are adopting a new airworthiness directive (AD) for the products listed above. This AD results from mandatory continuing airworthiness information (MCAI) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Following the rupture of an alternator and vapour cycle cooling system pulley drive assembly, the AD 2008-0067-E had been published to require the replacement of the pulley drive assembly by a new one of an improved design.

Recent cases of rupture of the alternator and vapour cycle cooling system compressor drive shaft and of cracks on the standby-alternator and compressor support have reportedly been found.

Such failures could lead to the loss of the alternator and of the vapour cycle cooling systems, and could also cause mechanical damage inside the powerplant compartment.

This AD requires actions that are intended to address the unsafe condition described in the MCAI.

**DATES:** This AD becomes effective October 8, 2008.

On October 8, 2008, the Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD.

We must receive comments on this AD by October 20, 2008.

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

### **Examining the AD Docket**

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 street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090.

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Emergency AD No.: 2008-0129R1-E, dated July 31, 2008 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

Following the rupture of an alternator and vapour cycle cooling system pulley drive assembly, the AD 2008-0067-E had been published to require the replacement of the pulley drive assembly by a new one of an improved design.

Recent cases of rupture of the alternator and vapour cycle cooling system compressor drive shaft and of cracks on the standby-alternator and compressor support have reportedly been found.

Such failures could lead to the loss of the alternator and of the vapour cycle cooling systems, and could also cause mechanical damage inside the powerplant compartment.

To address this condition, this AD supersedes AD 2008-0067-E and mandates the removal, as a temporary measure, of the compressor drive belt and of the torque limiter, the conditional replacement of the pulley drive shear shaft, and repetitive inspections for cracks of the pulley drive assembly and of the alternator/compressor support.

Revision 1 of this AD introduces an alternative temporary solution with the aim to restore the capability to make use of the air conditioning system. This solution consists in replacing the original pulley drive assembly by a time-limited assembly of a new design, corresponding to the EADS SOCATA modification MOD 70-0240-21.

A definitive solution is still under consideration to correct this condition. You may obtain further information by examining the MCAI in the AD docket.

### **Relevant Service Information**

EADS SOCATA has issued EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB No. 70-161, Amendment 2, and EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB No. 70-161, Amendment 3, both dated July 2008. The actions described in the service information are intended to correct the unsafe condition identified in the MCAI.

### **FAA's Determination and Requirements of the AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with this State of Design Authority, they have notified us of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all information provided by the State of Design Authority and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **Differences Between This AD and the MCAI or Service Information**

We have reviewed the MCAI and related service information and, in general, agree with their substance. But we might have found it necessary to use different words from those in the MCAI to ensure the AD is clear for U.S. operators and is enforceable. In making these changes, we do not intend to differ substantively from the information provided in the MCAI and related service information.

We might have also required different actions in this AD from those in the MCAI in order to follow FAA policies. Any such differences are described in a separate paragraph of the AD. These requirements take precedence over those copied from the MCAI.

### **FAA's Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because recent cases of rupture of the alternator and vapor cycle cooling system compressor drive shaft and of cracks on the standby generator and compressor support have reportedly been found. Such failures could lead to loss of the alternator and of the vapor cycle cooling systems and could also cause mechanical damages inside the powerplant compartment.

Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2008-0974; Directorate Identifier 2008-CE-048-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### **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.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866;
- (2) Is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

#### **PART 39—AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:



**2008-19-06 EADS SOCATA:** Amendment 39-15673; Docket No. FAA-2008-0974; Directorate Identifier 2008-CE-048-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective October 8, 2008.

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to Models TBM 700 airplanes, all serial numbers beginning with 434, certificated in any category.

**Subject**

- (d) Air Transport Association of America (ATA) Code 24: Electric Power.

**Reason**

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

"Following the rupture of an alternator and vapour cycle cooling system pulley drive assembly, the AD 2008-0067-E had been published to require the replacement of the pulley drive assembly by a new one of an improved design.

Recent cases of rupture of the alternator and vapour cycle cooling system compressor drive shaft and of cracks on the standby-alternator and compressor support have reportedly been found.

Such failures could lead to the loss of the alternator and of the vapour cycle cooling systems, and could also cause mechanical damage inside the powerplant compartment.

To address this condition, this AD supersedes AD 2008-0067-E and mandates the removal, as a temporary measure, of the compressor drive belt and of the torque limiter, the conditional replacement of the pulley drive shear shaft, and repetitive inspections for cracks of the pulley drive assembly and of the alternator/compressor support.

Revision 1 of this AD introduces an alternative temporary solution with the aim to restore the capability to make use of the air conditioning system. This solution consists in replacing the original pulley drive assembly by a time-limited assembly of a new design, corresponding to the EADS SOCATA modification MOD 70-0240-21."

A definitive solution is still under consideration to correct this condition.

## **Actions and Compliance**

(f) Unless already done, for airplanes S/N 434 through 459 only, before further flight after October 8, 2008 (the effective date of this AD), do the following actions following EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 2, dated July 2008:

(1) Remove the pulley drive assembly, the torque limiter, the compressor drive belt, and the alternator/compressor support.

(2) Inspect for cracks on the pulley drive surfaces and the alternator/compressor support welds.

(i) If any crack is detected, replace the pulley drive assembly or conditionally repair the cracked unit following the accomplishment instructions in section D.2 of EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 2, dated July 2008.

(ii) Replacement of the assembly incorporates replacement of the pulley drive sheer shaft required by paragraph (f)(3) of this AD for airplanes with 30 hours TIS or more with the torque limiter installed on the pulley drive shear shaft.

(3) Replace any pulley drive shear shaft that has accumulated 30 hours TIS or more with the torque limiter installed. This action is not required if you replaced the whole assembly per paragraph (f)(2)(i) of this AD.

(4) Re-install the pulley drive assembly and the alternator/compressor support, without re-installing the compressor drive belt or the torque limiter.

(5) Install on the instrument panel and in the pilot's primary field of vision, the following placard:

"AIR COND" INOPERATIVE

RECOMMENDED "AIR COND" SWITCH POSITION: "MANUAL"

and insert EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 2, dated July 2008 in the limitations section of the pilot's operating handbook.

(g) For all serial number airplanes;

(1) Within 100 hours TIS after October 8, 2008 (the effective date of this AD), and thereafter at intervals not to exceed 100 hours TIS, inspect for cracks on the pulley drive surfaces and the alternator/compressor support welds, following EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 2, dated July 2008. For accomplishment of the repetitive inspections required by paragraph (g)(1) of this AD, paragraph C.2 of the accomplishment instructions of EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 2, dated July 2008, does not apply since the torque limiter has already been removed.

(2) If cracks are found during any of these inspections, before further flight, replace the assembly or conditionally repair the unit following EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 2, dated July 2008. The 100-hour TIS repetitive inspections are still required after replacement or repair.

(h) As an alternative to the requirements of paragraphs (f) and (g) of this AD, do the following actions before further flight after October 8, 2008 (the effective date of this AD), following EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 3, dated July 2008:

(1) Install a zero-timed pulley drive assembly P/N T700G215510000000 following the accomplishment instructions in section D.1, I and J of EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 3, dated July 2008.

(2) Within 100 hours TIS after the installation required in paragraph (h)(1) of this AD and repetitively thereafter at intervals not to exceed 100 TIS, inspect the alternator/compressor support welds for cracks following the accomplishment instructions in sections B,G, H, I, and J of EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 3, dated July 2008.

(3) If any crack is detected in the inspection required in paragraph (h)(2) of this AD, before further flight, replace or repair the cracked unit following EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 3, dated July 2008.

(4) Upon the accumulation of 400 hours TIS, replace each pulley drive assembly, P/N T700G215510000000, with a zero- timed one.

Note 1: Compliance with the requirements of paragraph (h) of this AD restores the capability to make use of the air conditioning system.

### **FAA AD Differences**

Note 2: This AD differs from the MCAI and/or service information as follows: No differences.

### **Other FAA AD Provisions**

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

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

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

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

### **Related Information**

(j) Refer to MCAI EASA Emergency AD No.: 2008-0129R1-E, dated July 31, 2008; EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 2, and EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 3, both dated July 2008, for related information.

### **Material Incorporated by Reference**

(k) You must use EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 2, or EADS SOCATA Mandatory TBM Aircraft Alert Service Bulletin SB 70-161, amendment 3, both dated July 2008, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact EADS SOCATA–Direction des Services, 65921 Tarbes Cedex 9, France; telephone: +33 (0)5 62 41 73 00; fax: +33 (0)5 62 41 7-54; or in the United States contact EADS SOCATA North America, Inc., North Perry Airport, 7501 South Airport Road., Pembroke Pines, Florida 33023; telephone: (954) 893-1400; fax: (954) 964-4141.

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Kansas City, Missouri, on September 8, 2008.

Kim Smith,

Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. E8-21429 Filed 9-17-08; 8:45 am]