[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2006-26235; Directorate Identifier 2006-CE-065-AD]

RIN 2120-AA64

Airworthiness Directives; SOCATA Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for SOCATA Model TBM 700 airplaness (type certificate previously held by EADS SOCATA) that would revise AD 2007-04-13. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as cracks found on the main landing gear cylinders. We are issuing this proposed AD to require actions to address the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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.

For service information identified in this proposed AD, contact SOCATA, Direction des Services, 65921 Tarbes Cedex 9, France; telephone: 33 (0)5 62.41.73.00; fax: 33 (0)5 62.41.76.54; or SOCATA North America, North Perry Airport, 7501 S Airport Rd., Pembroke Pines, Florida 33023, telephone: (954) 893-1400; fax: (954) 964-4141; Internet: http://www.socata.com. You may view this 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.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2006-26235; 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 proposed 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 J. Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090; email: albert.mercado@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2006-26235; Directorate Identifier 2006-CE-065-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

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

Discussion

On February 8, 2007, we issued AD 2007-04-13, Amendment 39-14945 (72 FR 7576, February 16, 2007). That AD requires actions intended to address an unsafe condition on SOCATA Model TBM 700 airplanes (type certificate previously held by EADS SOCATA) and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country.

Since we issued AD 2007-04-13, Amendment 39-14945 (72 FR 7576, February 16, 2007), it has been determined that the time between repetitive inspections should be extended and an optional terminating action for the repetitive inspections is now available.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued AD No. 2006-0085R2, dated January 16, 2015 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

> Cracks on several main landing gear (MLG) cylinders have been reported in service.
>
> This condition, if not to detected and corrected, could lead to fatigue cracks in the shock strut cylinder of the MLG, which could result in a collapsed MLG during take-off or landing runs, and possibly reduce the structural integrity of the aeroplane.
>
> To address this unsafe condition, EASA issued AD 2006-0085 to require repetitive special detailed inspections (SDI) for cracks of the MLG shock strut cylinder and, depending on findings, relevant investigative and corrective actions.
>
> After that AD was issued, SOCATA performed an analysis to demonstrate that the inspection interval could be extended, and developed a reinforced MLG less prone to fatigue, which is embodied in production through SOCATA modification (MOD) 70-0190-32 and can be introduced in service through SOCATA Service Bulletin (SB) 70-130-32 at Revision 03.
>
> Prompted by these developments, EASA issued AD 2006-0085R1 to increase the inspection interval and to introduce the installation of a reinforced MLG on the right hand (RH) side and left hand (LH) side as an optional terminating action for the repetitive SDI required by this AD.
>
> Since that AD was issued, it was found that aeroplanes MSN 639 to 683 (inclusive) are not affected by this AD. The applicability has therefore been revised to remove those MSN.

You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2006-26235.

Relevant Service Information under 1 CFR part 51

SOCATA has issued DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, Revision 3, dated December 2014. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI. The DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, Revision 3, dated December 2014, describes procedures for repetitively inspecting the main landing gear (MLG) for cracks and replacing cracked MLG with a reinforced MLG as a terminating action for the repetitive inspections. This service information is reasonably available; see ADDRESSES for ways to access this service information.

FAA's Determination and Requirements of the Proposed 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 proposing this AD because we evaluated all information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD will affect 431 products of U.S. registry. We also estimate that it would take about 3 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is $85 per work-hour.

Based on these figures, we estimate the cost of the proposed AD on U.S. operators to be $109,905, or $255 per product.

In addition, we estimate that any necessary follow-on actions would take about 4 work-hours and require parts costing $6,000, for a cost of $6,340 per product. We have no way of determining the number of products that may need these actions.

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 proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 this proposed regulation:

(1) Is not a "significant regulatory action" under Executive Order 12866,

(2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

List of Subjects in 14 CFR Part 39

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

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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 removing Amendment 39-14945 (72 FR 75776, February 16, 2007), and adding the following new AD:

SOCATA (type certificate previously held by EADS SOCATA): Docket No. FAA-2006-26235; Directorate Identifier 2006-CE-065-AD.

(a) **Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) **Affected ADs**

This AD revises AD 2007-04-13, Amendment 39-14945, (72 FR 75776, February 16, 2007) ("AD 2007-04-13").

(c) **Applicability**

This AD applies to SOCATA Model TBM 700 airplanes, serial numbers 1 through 638 and 687, that:

(1) are not equipped with a left-hand main landing gear (MLG) body part number (P/N) D68161 or D68161-1 and a right-hand MLG body P/N D68162 or D68162-1; and

(2) are certificated in any category.

(d) **Subject**

Air Transport Association of America (ATA) Code 32: Landing gear.

(e) **Reason**

This AD was prompted by reports of cracks found on several main landing gear (MLG) cylinders. We are issuing this proposed AD to detect and correct cracks in the shock strut cylinder of the MLG, which could cause the MLG to fail. This failure could result in a collapsed MLG during takeoff or landing and possible reduced structural integrity of the airplane. We are revising AD 2007-04-13 to increase the time between the repetitive inspections and to incorporate an optional modification to terminate the required repetitive inspections.

(f) **Actions and Compliance**

Unless already done, do the following actions in paragraphs (f)(1) through (f)(4) of this AD:

(1) As of March 23, 2007 (the effective date retained from AD 2007-04-13), for MLG with forging body totaling more than 1,750 landings but less than 3,501 landings since new:

(i) Inspect the forging body for cracks within 100 landings after March 23, 2007 (the effective date retained from AD 2007-04-13), following the Accomplishment Instructions of EADS SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, dated January 2006, or DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, Revision 3, dated December 2014.

(ii) If no cracks are detected during the inspection required in paragraph (f)(1)(i) of this AD, repetitively thereafter inspect at intervals not to exceed 240 landings until a reinforced landing gear specified in paragraph E. Terminating Solution of the Accomplishment Instructions in DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, Revision 3, dated December 2014, is installed.

(2) As of March 23, 2007 (the effective date retained from AD 2007-04-13), for MLG with forging body totaling more than 3,500 landings since new:

(i) Inspect the forging body for cracks within 25 landings after March 23, 2007 (the effective date retained from AD 2007-04-13), following the Accomplishment Instructions of EADS SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, dated January 2006, or DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, Revision 3, dated December 2014.

(ii) If no cracks are detected during the inspection required in paragraph (f)(2)(i) of this AD, repetitively thereafter inspect at intervals not to exceed 240 landings until a reinforced landing gear specified in paragraph E. Terminating Solution of the Accomplishment Instructions in DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, Revision 3, dated December 2014, is installed.

(3) If any cracks are detected during any inspection required in paragraphs (f)(1) through (f)(2) of this AD, including all subparagraphs:

(i) Before further flight, remove the affected landing gear leg and confirm the presence of the crack with dye penetrant inspection or fluorescent penetrant inspection.

(ii) If the crack is confirmed, before further flight, contact SOCATA at the address in paragraph (h) of this AD to coordinate the FAA-approved landing gear repair/replacement and implement any FAA-approved repair/replacement instructions obtained from SOCATA, or replace the cracked landing gear with a reinforced landing gear specified in paragraph E. Terminating Solution of the Accomplishment Instructions in DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, Revision 3, dated December 2014. This replacement terminates the repetitive inspections required by this AD.

(4) If you do not know the number of landings, follow the instructions in the Compliance section of EADS SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-130, dated January 2006.

(g) **Other FAA AD Provisions**

The following provisions also apply to this AD:

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

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

(h) **Related Information**

Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2006-0085R2, dated January 16, 2015. You may examine the MCAI on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2006-26235. For service information related to this AD, contact SOCATA, Direction des Services, 65921 Tarbes Cedex 9, France; telephone: 33 (0)5 62.41.73.00; fax: 33 (0)5 62.41.76.54; or SOCATA North America, North Perry Airport, 7501 S Airport Rd., Pembroke Pines, Florida 33023, telephone: (954) 893-1400; fax: (954) 964-4141; Internet: http://www.socat.com. You may view this 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.

Issued in Kansas City, Missouri, on February 6, 2015.

Robert Busto,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2015-03163 Filed 02/18/2015 at 8:45 am; Publication Date: 02/19/2015]