EASA AD No.: 2013-0035

## EASA

## **AIRWORTHINESS DIRECTIVE**

AD No.: 2013-0035

Date: 22 February 2013

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Design Approval Holder's Name: SOCATA		Type/Model designation(s): TBM 700 aeroplanes
TCDS Number:	EASA A.010	
Foreign AD:	Not applicable	
Supersedure:	This AD supersedes DGAC Fran	nce AD 2000-307(A) dated 09 August 2000.
ATA 55	Stabilizers – Horizontal Stabiliser Outboard Fittings – Modification	
Manufacturer(s):	SOCATA (formerly EADS SOCATA)	
Applicability:	SOCATA TBM 700 aeroplanes, manufacturer serial numbers (MSN): 1 through 161 inclusive, except MSN 99 and 157, which were already modified during production.	
Reason:	During the 1990s, several occurrences were reported of finding cracks in the outboard hinge fittings of the horizontal stabiliser on TBM 700 aeroplanes.	
	This condition, if not detected and corrected, could result in rupture of the outboard hinge fittings, which would adversely affect the structural integrity of the horizontal stabiliser. The in-flight loss of the horizontal stabiliser would result in reduced control of the aeroplane.	
	To address this unsafe condition, DGAC France issued AD 1999-060(A), requiring repetitive inspections of the fittings and, depending on findings, corrective action.	
	After that AD was issued, SOCATA determined that the cause of the cracks was a wrong installation of the fittings during production, inducing stress. Consequently, DGAC France issued AD 2000-307(A), partially retaining the requirements of DGAC France AD 1999-060(A), which was superseded, and required, depending on findings, that the installation of the fittings of in-service aeroplanes be rectified by introduction of adjusting shims, a modification which was introduced as standard on the production line from MSN 162. The periodical inspection of the fittings for cracks was still required, pending a better understanding of the cause of the cracks.	
	Since DGAC France AD 2000-307(A) was issued, the results of the further	

EASA AD No.: 2013-0035

	analysis revealed that the final design (installation of shims on the outboard hinge fittings of the horizontal stabiliser) guarantees a service fatigue life which exceeds the one established for the TBM 700 during certification.  Consequently, for aeroplanes with this modification, the repetitive inspections of the fittings can be discontinued. However, as the installation of the fittings was only required depending on findings, this modification may not have been accomplished on all affected aeroplanes.  For the reasons described above, this AD supersedes (and thereby cancels the requirements of) DGAC France AD 2000-307(A) and requires installation of shims on the outboard hinge fittings of the horizontal stabiliser.	
Effective Date:	8 March 2013	
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:  Within 110 flight hours after the effective date of this AD, install shims on the outboard hinge fittings of the horizontal stabiliser, in accordance with the instructions of SOCATA Service Bulletin (SB) 70-080-55.	
Ref. Publications:	SOCATA SB SB 70-080-55 Original issue dated July 2000, or Revision 1 dated August 2000, or Revision 2 dated August 2012.  The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.	
Remarks:	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>This AD was posted on 22 January 2013 as PAD 13-019 for consultation until 19 February 2013. No comments were received during the consultation period.</li> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu.</li> <li>For any question concerning the technical content of the requirements in this AD, please contact:         <ul> <li>SOCATA, Direction des services, 65921 Tarbes Cedex 9, France. Tel. +33 (0) 5 62 41 73 00, Fax: +33 (0) 5 62 41 76 54.</li> <li>or for the U.S.A</li> <li>SOCATA NORTH AMERICA, North Perry Airport, 7501 South Airport Road, Pembroke Pines, Florida 33023, The United States of America. Tel.: +1 (954) 893 1400 Fax: +1 (954) 964 4141.</li> </ul> </li> </ol>	