

EASA	EMERGENCY AIRWORTHINESS DIRECTIVE
	AD No.: 2011-0235-E Date: 13 December 2011 Note: This Emergency 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 EC 1702/2003, Part 21A.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 Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive 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].	
Type 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 EASA AD 2011-0225-E dated 01 December 2011.
ATA 32	Landing Gear – Nose Landing Gear (NLG) / Actuator Axle Attaching Bolt – Check / Replacement
Manufacturer(s):	SOCATA (formerly EADS SOCATA)
Applicability:	SOCATA TBM 700 aeroplanes, all Serial Numbers (S/N).
Reason:	A TBM 700 operator reported a case of rupture of the bolt attaching the actuator hinge axle on the NLG of the aeroplane. The results of the technical investigations carried out by SOCATA revealed that this rupture could have been caused by the installation of a bolt bearing incorrect Part Number (P/N) during overhaul of the NLG. Furthermore, the investigations led to identify the NLG part numbers identified by S/N which are potentially affected after repair or overhaul. This condition, if not detected and corrected, could lead to partial disengagement of the actuator hinge axle on the NLG of the aeroplane, resulting in nose landing gear collapse, possibly resulting in structural damage to the aeroplane. To address this condition, SOCATA have developed Service Bulletin SB 70-194-32 which gives instructions for accomplishing repetitive checks of the bolt attaching actuator hinge axle on NLG and for replacing the bolt attaching the actuator hinge axle with a correct bolt P/N. For the reasons described above, this AD requires accomplishment of repetitive checks of potentially affected NLGs and replacement of the bolt attaching the actuator hinge axle with a serviceable bolt. This AD also prohibits installation on any aeroplane of a potentially affected NLG, unless

	the bolt attaching the actuator hinge axle has been replaced with a serviceable bolt and the NLG has been marked with a green varnish line. Following issuance of EASA AD 2011-0225-E, it has been determined that further NLG P/Ns and S/Ns are affected by this AD. SOCATA have developed an erratum to SB 70-194-32 amendment 2, which lists the new P/Ns and S/Ns as well affected by this AD. For the above reason, this AD, which supersedes EASA AD 2011-0225-E, retaining its requirements, extends the list of NLG P/Ns and S/Ns affected by the AD requirements.													
Effective Date:	15 December 2011													
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within 5 Flight Cycles (FC) after the effective date of this AD, accomplish the following actions concurrently: (1.1) Identify the P/N and the S/N of the NLG installed on the aeroplane. The affected NLGs are identified by P/N and by S/N in Table 1 of this AD. Table 1 – Affected NLGs <table border="1"> <thead> <tr> <th>P/N</th><th>S/N</th></tr> </thead> <tbody> <tr> <td rowspan="8">P/N D23766000, or P/N D23766000-X</td><td>B001 thru B373 inclusive</td></tr> <tr> <td>B375</td></tr> <tr> <td>AR1000 thru AR1023 inclusive</td></tr> <tr> <td>AR1025 thru AR1031 inclusive</td></tr> <tr> <td>AR1033 thru AR1036 inclusive</td></tr> <tr> <td>AAB00000A thru AAB13766Z inclusive</td></tr> <tr> <td>AAB00000 thru AAB13766 inclusive</td></tr> <tr> <td>EURXXX</td></tr> <tr> <td>P/N 21130-001-XY, or P/N 21130-000-XY</td><td>All</td></tr> </tbody> </table> Note 1: For the purpose of this AD, when a NLG P/N reference is followed by -X or -XY, the X or XY can be any numerical digit, and when a NLG S/N reference is EURXXX, the XXX can be any numerical digit. (1.2) If the S/N of the NLG, identified as required by paragraph (1.1) of this AD, is listed in Table 1 of the AD, accomplish a check of the washer of the NLG and thereafter, repeat the check before each flight after the effective date of this AD in accordance with the Accomplishment Instructions of SOCATA SB 70-194-32 amendment 2. Note 2: The repetitive pre-flight checks of this AD may be accomplished by the flight crew or the pilot-owner in accordance with the provisions of Part M and Part 145. (2) If, during any check as required by paragraph (1.2) of this AD, the washer of the NLG rotates freely, before next flight, accomplish concurrently the following actions in accordance with the Accomplishment Instructions of SOCATA SB 70-194-32 amendment 2: (2.1) Replace the bolt attaching the actuator hinge axle of the NLG with a serviceable bolt P/N 5101301111.	P/N	S/N	P/N D23766000, or P/N D23766000-X	B001 thru B373 inclusive	B375	AR1000 thru AR1023 inclusive	AR1025 thru AR1031 inclusive	AR1033 thru AR1036 inclusive	AAB00000A thru AAB13766Z inclusive	AAB00000 thru AAB13766 inclusive	EURXXX	P/N 21130-001-XY, or P/N 21130-000-XY	All
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	(2.2) Mark the landing gear with a green varnish line. (3) For the NLG P/Ns and S/Ns as listed in Table 1 of this AD, within 10 months after the effective date of this AD, unless already accomplished following a discrepancy identified during any inspection as required by paragraph (1.2) of this AD, accomplish concurrently the following actions in accordance with the Accomplishment Instructions of SOCATA SB 70-194-32 amendment 2: (3.1) Replace the bolt attaching the actuator hinge axle of the NLG with a serviceable bolt P/N 5101301111 and; (3.2) Mark the landing gear with a green varnish line. (4) Replacing of the bolt attaching the actuator hinge axle of the NLG with a serviceable bolt P/N 5101301111 and marking the landing gear with a green varnish line terminate the repetitive checks as required by paragraph (1.2) of this AD. (5) After the effective date of this AD, do not install a NLG with P/N and S/N as listed in Table 1 of this AD, unless the bolt attaching the actuator hinge axle of the NLG has been replaced and the NLG has been marked with a green varnish line in accordance with the requirements of this AD.
Ref. Publications:	SOCATA Service Bulletin 70-194-32 amendment 2 dated November 2011, including the Erratum dated December 2011. The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.
Remarks :	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: 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. or for the U.S.A 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.