

Airworthiness Directive

AD No.: 2013-0104R2

Issued: 27 October 2022

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I Part M.A.301, or Annex Vb Part ML.A.301, as applicable, 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 [Regulation (EU) 1321/2014 Annex I Part M.A.303, or Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

DAHER AEROSPACE

Type/Model designation(s):

TBM 700 aeroplanes

Effective Date: Revision 2: 10 November 2022
 Revision 1: 27 May 2013
 Original Issue: 27 May 2013

TCDS Number(s): EASA.A.010

Foreign AD: Not applicable

Revision: This AD revises EASA AD 2013-0104R1 dated 24 May 2013, including its correction dated 25 October 2013.

ATA 27 – Flight Controls – Flap Actuator – Inspection / Replacement

Manufacturer(s):

Compagnie DAHER, formerly SOCATA, EADS SOCATA, Société de Construction d'Avions de Tourisme et d'Affaires.

Applicability:

TBM 700 aeroplanes, all manufacturer serial numbers, except those on which DAHER modification (MOD) 70-0777-27 has been embodied in production.

Definitions:

For the purpose of this AD, the following definitions apply:

The SB: DAHER AEROSPACE (DAHER) Service Bulletin (SB) 70-118-27.

Reason:

In 2003, an excessive wear of the inner flap actuator drive nut was detected, which was increased by grease pollution.

This condition, if not detected and corrected, may lead to an improper play between the actuator threaded rod and the drive nut which could result in loss of flap control, ultimately reducing control of the aeroplane.

To address this unsafe condition, DGAC France issued AD F-2004-134, requiring repetitive inspections and cleaning of the flap actuators.

After that AD was issued, further analyses were performed in the frame of an improvement of the TBM 700 Aircraft Maintenance Program. The results of these analyses revealed that the inspection threshold and interval, allowing a timely detection of wears and the accomplishment of an applicable corrective action, can be extended. Prompted by these results, DAHER issued Revision 01 of the SB, as defined in this AD. Consequently, EASA issued AD 2013-0104 (later revised), which retained the requirements of DGAC France AD F-2004-134, which was superseded, but extended the inspection thresholds and intervals.

Since EASA AD 2013-0104R1 was issued, DAHER developed an improved design of the actuator drive nut, embodied in production through MOD 70-0777-27; provided additional data, supporting an extension of the compliance time for the inspections; and issued Revision 02 of the SB accordingly.

For the reason described above, this AD is revised to reduce the applicability, by excluding post-MOD 70-0777-27 aeroplanes, and to extend the inspection threshold and interval.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

Cleaning / Lubrication:

- (1) Before exceeding 400 flight hours (FH) or 12 months, whichever occurs first, since the first installation of a left-hand (LH) or right-hand (RH) inner flap actuator on an aeroplane, and thereafter, at intervals not to exceed 400 FH or 12 months, whichever occurs first, clean and lubricate that LH or RH inner actuator rod in accordance with the instructions of the SB.

Inspection:

- (2) Within the compliance time as identified in Table 1 of this AD, and thereafter, at intervals not to exceed 400 FH or 12 months, whichever occurs first, for each inner flap actuator check the play between the drive nut and the internal actuator rod in accordance with the instructions of the SB (see Note 1 of this AD).

Note 1: The non-cumulative tolerance as defined in DAHER TBM 700 Maintenance Manual may be applied to the actions specified in paragraphs (1) and (2) of this AD.



Table 1 – Initial Compliance Time

	Compliance Time, A or B, as applicable, whichever occurs later
A	3 000 FH since first installation of the inner flap actuator on an aeroplane
B	Within 400 FH or 12 months, whichever occurs first, since the last play check accomplished for that actuator in accordance with the SB

Corrective Action(s):

- (3) If, during any inspection as required by paragraph (2) of this AD, any discrepancy is detected, as identified in the SB, before next flight, accomplish the applicable corrective actions in accordance with the instructions of the SB.

Terminating Action(s):

- (4) None.

Ref. Publications:

DAHER SB 70-118-27 original issue dated May 2004, or Revision 1 dated August 2012, or Revision 2 dated September 2022.

The use of later approved revisions of the above-mentioned 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 original issue of this AD was posted on 09 April 2013 as PAD 13-052 for consultation until 07 May 2013. No comments were received during the consultation period.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: TBM Care, Tel: +1 833 826 2273, Email: tbmcare@daher.com.

