SERVICE BULLETIN
No. 28

DOA No. EASA.21J.020

Subject: Installation of a Strake on TBM 700/850 series aircraft

Effectivity: TBM aircraft s/n 1 to 684 with 5-blade propeller MTV-27-1-E-C-F-R(P)/ CFR225-55f

Reason: Take advantage of an aerodynamic improvement as a result of the TBM900 development using the Ansys ® Fluent ® software (*), which enhances aircraft flying qualities at low speeds.

Summary:
A. PREPARATION

B. BONDING OF THE STRAKE

Compliance: At user's convenience

Warranty: None

Procurable Material:
- Parts to be ordered free of charge from any TBM spare parts distributor.

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
<th>Description</th>
<th>Qty/ aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>T 700A512025700100</td>
<td>Strake</td>
<td>1</td>
</tr>
</tbody>
</table>

Consumable Material (Local purchase):
- Cleaning agent Methyl-Ethyl-Ketone (MEK),
- Sealant PR 1782B or equivalent
- Abrasive cloth Grit No. 180

Tooling:
- Standard aeronautical maintenance station tools

Manpower:
- 1 aeronautical mechanic: 1 hour taken into account free of charge from SOCATA Service Centers.

Technical Incidences:
- None

(*) Ansys ® Fluent is a tool for computational fluid dynamics; as a reference simulation tool since 2004 in the latest edition, it was implemented early 2008 for further TBM development to assess aerodynamic phenomena.

Checked / Approved:
Head, Office of Airworthiness

Martin Albrecht
Date: June 10, 2014

Edition
Josef Pieck
Date: June 10, 2014

This Service Bulletin has been approved according the procedures established for the EASA-certified Design Organization No.: EASA.21J.020.
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Accomplishment Instructions:

Note.
Operations required in this Service Bulletin must be accomplished by persons authorized by their Airworthiness Authorities and according to the procedure described hereafter.

A. Preparation - see Figure 1:
1) Make sure the “SOURCE” selector is set to “OFF” and the crash lever is down.
2) Install the warning sign prohibiting “SOURCE” selector operation.

WARNING:
DO NOT OPERATE MAINTENANCE WORK IN PROGRESS!

B. Bonding of the Strake – see Figures 1 and 2
1) Draw aircraft centerline (3) between frame C1 and frame C5.
2) As per Figure 1, position the strake rear part (13) at 42.52 inch (1080 mm) from frame C1 (6) and at 18.19 inch (462 mm) from aircraft centerline (3).
3) Use the strike (2) as a template to draw its outer contour (10).
4) As per Figure 2, draw the limit of the surface to be pickled (11).
5) With abrasive cloth Grit No. 180, pickle the surface (12).
6) Clean with Methyl – Ethyl –Ketone (MEK).
7) Using any appropriate means, press on strake base- plate and bond it with sealant PR 1782B.
8) Allow sealant to cure for 72 hours as an ambient temperature between 68° and 77°F (20 and 25°C).

Updating of the Aircraft Documentation:

Upon Completion of Service Bulletin 28 “Installation of Strake” make an appropriate record entry.

Warning: SOCATA considers that it is VERY IMPORTANT for operators to comply with the instructions of this Service Bulletin.
Operators who arbitrarily ignore the compliance statement indicated in this Service Bulletin do so at their own risk.

Additional Information:
SOCATA will supply the strake free of charge and the 1 hour required for installation.
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Figure 1: Positioning of the Strake Aircraft with 5 blades
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2 – Strake
10 – Strake outer contour
11 – Limit of the surface to be pickled
12 – Surface to be pickled
13 – Strake rear part

X = 0.20 in (5 mm)

Figure 2: Pickling