COMMONWEALTH OF AUSTRALIA CIVIL AVIATION SAFETY AUTHORITY SCHEDULE OF AIRWORTHINESS DIRECTIVES

AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/TBM 700/45 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Aerospatiale (Socata) TBM 700 Series Aeroplanes

AD/TBM 700/45 Nose Landing Gear Actuator Hinge Pin 11/2006 Amdt 1 TX

Applicability: All TBM

All TBM 700 A and B aircraft fitted with Nose Landing Gear (NLG) part number (P/N) 21130-001-02 whose serial number (S/N) are ranging from B155 to B173 inclusive and S/N EUR 174 to EUR 240 inclusive.

Requirement:

- 1. Verify the NLG serial number to determine its applicability to this AD. If the NLG S/N is not listed in the applicability section of this AD no further action is required.
- 2. For aircraft with applicable NLG serial number, incorporate the operational procedure as detailed in paragraph A of the accomplishment instructions of EADS SOCATA Service Bulletin (SB) No. 70-147 or later EASA approved revision into the AFM.

Special flight permits may be issued for Aircraft fitted with the applicable NLG serial number, to reach an approved Maintenance Centre to check the batch number and to do the pin check.

3. Identify the Pin batch number as instructed in paragraph B of the accomplishment instructions of EADS SOCATA SB No. 70-147 or later EASA approved revision.

For aircraft with the correct pin batches numbers, no further action is required. Return the aircraft to service as instructed in the EADS SOCATA SB No. 70-147 or later EASA approved revision.

- 4. For aircraft with pins from the defective pin batches numbers or for which the batch number is unreadable, action in accordance with paragraph B 5, C & D of the accomplishment instructions of EADS SOCATA SB No. 70-147 or later EASA approved revision.
- 5. Replace any pin as instructed in the accomplishment instructions of the EADS SOCATA SB No. 70-147 or later EASA approved revision.

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- 6. Perform a dimensional check on any hinge pin listed in EADS SOCATA Service Bulletin (SB) No. 70-147 or later EASA approved revision.
- 7. Do not install on any EADS SOCATA TBM700 series aeroplane, NLG actuator hinge pins coming from the three defectives batches identified as EUR BC 21344-000-01, EUR BD 21344-000-01 & EUR SF 21344-000-01 on Nose Landing Gear P/N 21130-001-02.

Note: EASA Emergency AD 2006-0271-E dated 4 September 2006 refers. This AD supersedes EASA AD 2006-0226-E.

Compliance:

- 1. Before further flight after the effective date of this AD.
- 2. Before further flight after the effective date of this AD.
- 3. Before further flight after the effective date of this AD.
- 4. Before further flight after the effective date of this AD.
- 5. Any out of tolerance pin, before further flight after the effective date of this AD.

 Any pin from the defective batches, with satisfactory dimensional check, before 3 October 2006.
- 6. After any "Pancake" or "three-point" landing after the effective date of this AD.
- 7. From the effective date of this AD.

This Amendment becomes effective on 8 September 2006.

Background:

This AD results from one report of a Nose Landing Gear (NLG) hinge pin rupture that caused an uncommanded NLG retraction.

Investigations identified the unsafe condition as that resulting from an incomplete thermal treatment done on three hinge pin batches lowering their mechanical properties with a high risk of deformation under service loads.

These AD requirements are first to identify the concerned NLG and second to detect the defective hinge pins on aircraft and subsequently carry out replacement of those pins prior to pin rupture.

This amendment is issued to extend the landing gear applicability as listed in the original issue of this AD.

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Aerospatiale (Socata) TBM 700 Series Aeroplanes

AD/TBM 700/45 Amdt 1 (continued)

The original issue of this AD became effective on 26 July 2006.

James Coyne

Delegate of the Civil Aviation Safety Authority

6 September 2006