| EASA | AIRWORTHINESS DIRECTIVE |
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| | **No : 2008-0043**<br><br>**Date: 27 February 2008** |

No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.

| **Type Approval Holder's Name :** | **Type/Model designation(s) :** |
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| TURBOMECA | TM 333 2B2 turboshaft engines |

TCDS Number : EASA E.030

Foreign AD : Not applicable

Supersedure : None

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| **ATA 72** | **Engine – Gas Generator & Power Turbine N1 and N2 Cycle Values – Update** |
| Manufacturer(s): | Turboméca S.A. |
| Applicability: | TM 333 2B2 turboshaft engines, serial numbers 1002, 1003, 1008, 1011, 1013, 1014, 1015, 1018, 1019, 1021, 1023, 1028, 1031, 1032, 1033, 1034, 1035, 1037, 1039, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1059, 1060, 1061, 1063, 1064 and 1065.<br><br>These engines are known to be installed on, but not limited to, Hindustan Aeronautics Limited "Dhruv" (ALH) helicopters. |
| Reason: | The Gas Generator and Power Turbine cycle counts for the TM 333 2B2 are automatically performed by the Engine Electronic Control Unit (ECU), as specified in the Airworthiness Limitation Section (ALS) of the Engine Maintenance Manual. Prior to incorporation of the control system software modification TU9C, the Gas Generator and Power Turbine cycle counts performed by the ECU were found to be incorrect. Turboméca modification TU9C, which has been incorporated on all TM 333 2B2 engines, has restored the proper counting. Although no engine currently contains any life limited part close to its cyclic limit, a false count of Gas Generator and Power Turbine cycles could lead to a premature disc burst, resulting in uncontained high energy debris and subsequent damage to the aircraft.<br><br>For the reasons stated above, this Airworthiness Directive (AD) requires the update of Gas Generator and Power Turbine cycle values in the engine logbook, for those engines on which at least some cycles were counted using the automatic ECU cycle counting before the software modification TU9C was introduced. |
| Effective Date: | 12 March 2008 |

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| Compliance: | Requires as indicated, unless accomplished previously:<br><br>Within 50 flight cycles, but not later than 31 May 2008, whichever occurs first after effective date of this AD, update the Gas Generator (N1) and Power Turbine (N2) cycle values in the engine logbook in accordance with the instructions of Turboméca Mandatory Service Bulletin (MSB) n° A333 72 0804. |
| Ref. Publications: | Turboméca MSB n° A333 72 0804 dated 24 January 2008.<br><br>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 accept Alternative Methods of Compliance for this AD.<br><br>2. This AD has been published as PAD 08-016 on 29 January 2008 for consultation until 26 February 2008. No comments were received during the consultation period.<br><br>3. Enquiries regarding this AD should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail: ADs@easa.europa.eu .<br><br>4. For any question concerning the technical content of the requirements in this AD, please contact:<br>Turboméca S.A., Service DSO/MTM (Equipe TM 333 2B2), 40220 TARNOS, FRANCE. Fax: +33 5 59 74 45 48, or your usual or nearest TURBOMECA technical representative<br>(refer to http://www.turbomeca-support.com) |