

**2010-12-02 Turbomeca S.A.:** Amendment 39-16323. Docket No. FAA-2009- 0982; Directorate Identifier 2009-NE-19-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective July 13, 2010.

### **Affected ADs**

(b) None.

### **Applicability**

(c) This AD applies to Turbomeca S.A. Makila 1A and 1A1 turboshaft engines with a comparator/selecter (CS) board, part number (P/N) 0 177 99 716 0, and a serial number (S/N) between 241EL and 1192EL (inclusive) installed. These engines are installed on, but not limited to, Eurocopter AS 332 C, AS 332 C1, AS 332 L, and AS 332 L1 helicopters.

### **Reason**

(d) The European Aviation Safety Agency (EASA) AD 2009-0090, dated April 28, 2009, states that this AD results from the following:

(1) The installation of TU250 CS boards, however, has resulted in a few occurrences of erratic engine behaviour, in the form of unexpected N1 variations and/or illumination of the "GOV" warning light. The conclusions from an investigation by Turbom[acute]ca are that these malfunctions are due to a lapse of quality control in the varnishing process applied to the boards, and that only boards in a specific serial number range, as defined under "Applicability" and referred to below as the "suspect batch", are affected.

(2) We are issuing this AD to prevent loss of automatic engine control during flight due to an uncommanded engine roll-back, which could result in the inability to continue safe flight.

### **Actions and Compliance**

(e) Unless already done, do the following actions.

(1) Within 50 operating hours from the effective date of this AD, replace any CS board, P/N 0 177 99 716 0, with a S/N from 241EL to 1192EL (inclusive), that has fewer than 200 hours-since-new (HSN). Use paragraph 2 of Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 298 73 0809 Version A, dated February 12, 2008, to replace the boards.

(2) During the next 500-hour inspection, replace any CS board, P/N 0 177 99 716 0, with a S/N from 241EL to 1192EL (inclusive), that has 200 HSN or more. Use paragraph 2 of Turbomeca S.A. MSB No. 298 73 0810 Version B, dated April 27, 2009, to replace the boards.

## **FAA AD Differences**

(f) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) and/or service information as follows:

(1) This AD requires replacing within 50 operating hours after the effective date of this AD, all comparator/selector boards, P/N 0 177 99 716 0, with an S/N from 241EL to 1192EL (inclusive) that have fewer than 200 HSN.

(2) This AD requires replacing at the next 500-hour routine inspection after the effective date of this AD, all comparator/ selector boards, P/N 0 177 99 716 0, with a S/N from 241EL to 1192EL (inclusive) that have 200 HSN or more.

## **Alternative Methods of Compliance (AMOCs)**

(g) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

## **Related Information**

(h) Refer to MCAI EASA Airworthiness Directive 2009-0090, dated April 28, 2009, for related information.

(i) Contact Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: kevin.dickert@faa.gov; telephone (781) 238-7117, fax (781) 238-7199, for more information about this AD.

## **Material Incorporated by Reference**

(j) You must use the service information specified in Table 1 of this AD to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Turbomeca, 40220 Tarnos, France; telephone 33 05 59 74 40 00; fax 33 05 59 74 45 15.

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

**Table 1--Material Incorporated by Reference**

<b>Turbomeca Mandatory Service Bulletin No.</b>	<b>Page</b>	<b>Version</b>	<b>Date</b>
298 73 0809 Total Pages: 7	ALL	A	February 12, 2008
298 73 0810 Total Pages: 7	ALL	B	April 27, 2009