


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2011-0182</p> <p>Date: 22 September 2011</p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>
<p>This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p>	
<p>Type Approval Holder's Name :</p> <p>TURBOMECA</p>	<p>Type/Model designation(s) :</p> <p>ARRIUS 2F turboshaft engines</p>
<p>TCDS Number : France n°M22</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : This AD supersedes EASA AD 2008-0134R1 dated 17 February 2009.</p>	
ATA 73	Engine Fuel & Control - P3 Air Pipe – Inspection / Modification
Manufacturer(s):	Turbomeca
Applicability:	<p>ARRIUS 2F turboshaft engines, all serial numbers.</p> <p>These engines are known to be installed on, but not limited to, Eurocopter EC120B helicopters.</p>
Reason:	<p>On several ARRIUS 2F engines, the clearance between the P3 air pipe Part Number (P/N) 0319719180 and the rear right bulkhead P/N 0319998240 has been found to be too small.</p> <p>Investigations have shown that both P3 air pipe and rear right bulkhead were compliant with the design. Turbomeca Engineering Department concluded that the tolerance of assembly established during the design could result in some rubbing between parts.</p> <p>This condition, if not detected and corrected, could lead to chafing between the pipe and the bulkhead and consequent rupture of the P3 air pipe, prompting the fuel control system to go to idle which could result in reduced control of the helicopter.</p> <p>To address this unsafe condition, EASA issued AD 2008-0134 to require the inspection of the P3 air pipe (first section) and Right Hand (RH) rear half-wall and, in case it was found damaged or non-compliant, the replacement or readjustment of parts.</p>

	<p>EASA AD 2008-0134R1 was issued to clarify the wording. It emphasized that, under some circumstances, repetitive inspections are required.</p> <p>Since issuance of EASA AD 2008-0134R1, the results of investigations by Turbomeca have shown that the clearance between the P3 air pipe and the RH rear half-wall might change during installation of the engine on the helicopter. The same investigations have shown that, when a RH rear half-wall P/N 0319998240 is installed on an engine which is already installed on an helicopter, a clearance of more than 0,5 mm between the RH rear half-wall and the P3 air pipe is sufficient to prevent any chaffing between the two parts. This means that the inspections have to be accomplished again on engines that have already been inspected and corrected as required by AD 2008-0134R1. In addition, Turbomeca have developed a new RH rear half-wall P/N 0319 99 008 0 which prevents chafing between RH rear half-wall and P3 air pipe.</p> <p>For the reasons described above, this AD supersedes EASA AD 2008-0134R1 and requires, except for engines on which a RH rear half-wall P/N 0319 99 008 0 is installed (modification TF 80), repetitive inspections of the clearance between the P3 air pipe and RH rear half-wall and, in case of discrepancy, accomplishment of the applicable corrective actions.</p>
Effective Date:	06 October 2011
Required Action(s) and Compliance Time(s):	<p>Required as indicated unless accomplished previously:</p> <ol style="list-style-type: none"> (1) For engines that are already installed on a helicopter and on which a RH rear half-wall P/N 0319 99 82 40 is installed, within 100 Engine Hours (EH) after the effective date of this AD, inspect the P3 air pipe and the RH rear half-wall in accordance with the instructions of Turbomeca Mandatory Service Bulletin (MSB) N°319 75 4810 issue B. For engines that are already installed on a helicopter and on which a RH rear half-wall P/N 0319 99 82 40 is being installed, upon installation of this part, inspect the P3 air pipe and the RH rear half-wall in accordance with the instructions of Turbomeca Mandatory Service Bulletin (MSB) N°319 75 4810 issue B. (2) If, during the inspection required by paragraph (1) of this AD, both the P3 air pipe and the RH rear half-wall are found undamaged, and the distance between the P3 air pipe and the RH rear half-wall is less than 0.5 mm, repeat the inspection as required by paragraph (1) of this AD at intervals not to exceed 100 EH. (3) If, during an inspection as required by paragraphs (1) or (2) of this AD, the RH rear half-wall is found damaged, or the P3 air pipe interferes with RH rear half-wall, before next flight, install a RH rear half-wall P/N 0319 99 008 0 in accordance with the instructions of Turbomeca MSB N°319 75 4810 issue B. (4) If, during an inspection as required by paragraphs (1) or (2) of this AD, P3 air pipe is found damaged, before next flight, install a serviceable P3 air pipe and verify that the distance between P3 air pipe and RH rear half-wall is equal to or greater than 0.5 mm, in accordance with the instructions of Turbomeca MSB N°319 75 4810 issue B. Installation on an engine of a serviceable P3 air pipe and verification that the distance between P3 air pipe and RH rear half-wall P/N 0319 99 82 40 is equal to or greater than 0.5 mm, constitutes terminating action for the repetitive inspections required by paragraph (2) of this AD for that engine. (5) Modification of an engine by installation of a RH rear half-wall P/N 0319 99 008 0 constitutes terminating action for the repetitive inspections required by paragraph (2) of this AD for that engine.

	<p>(6) After modification of an engine as specified in paragraph (5) of this AD, do not install a RH rear half-wall P/N 0319 99 82 40 on that engine.</p> <p>(7) From the effective date of this AD, do not install a RH rear half-wall P/N 0319 99 82 40 on an engine or an engine with a RH rear half-wall P/N 0319 99 82 40 on a helicopter, unless in compliance with the requirements of this AD.</p>
Ref. Publications:	<p>TURBOMECA Mandatory Service Bulletin N°. 319 75 4810 issue B, dated 25 January 2011.</p> <p>The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 22 July 2011 as PAD 11-076 for consultation until 19 August 2011. The Comment Response Document can be found at http://ad.easa.europa.eu/. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail ADs@easa.europa.eu. 4. For any questions concerning the technical content of the requirements in this AD, please contact: Turboméca, S.A., ARRIUS Customer Support, 40220 TARNOS, FRANCE. Fax: +33 5 59 74 45 15; or contact your nearest technical representative at www.turbomeca-support.com