

EASA	AIRWORTHINESS DIRECTIVE
	<p><b>AD No.: 2009-0004</b></p> <p><b>Date: 12 January 2009</b></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><b>Type Approval Holder's Name :</b> EUROCOPTER</p>	<p><b>Type/Model designation(s) :</b> AS 350 and EC 130 helicopters</p>
<p>TCDS Number : EASA.R.008</p>	
<p>Foreign AD : Not applicable</p>	
<p>Supersedure : None</p>	
<p><b>ATA 80</b></p>	<p><b>Engine Starting Starter generator Damping Assembly – Inspection Adjustment</b></p>
<p>Manufacturer(s): EUROCOPTER (formerly EUROCOPTER FRANCE, AEROSPATIALE).</p>	
<p>Applicability: AS 350 B, B1, B2, B3 and EC 130 B4 helicopters, all serial numbers in equipped with Aircraft Parts Corporation (APC) 150SG and 200SGL-type starter-generators.</p>	
<p>Reason:</p>	<p>EUROCOPTER has received reports of engine flame-outs in operation. In all cases of engine flame-out there was the failure of the 41-tooth pinion in the engine accessory gear box.</p> <p>All the concerned helicopters were equipped with starter-generators manufactured by the APC company (currently UNISON). In each case, it was found that the torque damping system of the starter-generator was inoperative.</p> <p>Further investigations have been conducted to assess the efficiency of the 150SG and 200SGL-type generator damping systems, which have revealed that the non-operation of the torque damping system was due to an incorrect adjustment.</p> <p>If the damping system is incorrectly adjusted, torque oscillations may not be limited and can induce bending stress on the 41-tooth pinion of the accessory gear box, contributing to the pinion failure. Such pinion failure causes the fuel pump to stop which results in an engine flame-out.</p> <p>Pending additional investigations, this AD requires an inspection of the alignment and torque of the APC starter-generator damping assembly and, in case of discrepancies, the accomplishment of corrective actions.</p>

Effective Date:	26 January 2009
Required Action(s) and Compliance Time(s):	<p>Required as indicated unless already accomplished, in accordance with the instructions of EUROCOPTER Alert Service Bulletin (ASB) No. 80.00.07 or 80A003, as applicable to the helicopter version:</p> <ol style="list-style-type: none"> <li>1. Within 110 flight hours or 3 months, whichever occurs first after the effective date of this AD, inspect the APC starter-generator shaft/damper assembly and ensure that its alignment and tightening torque comply with the approved configuration, in accordance with paragraph 2.B. of the relevant ASB.</li> <li>2. After the effective date of this AD, no person shall install a starter-generator of the type affected by this AD on a helicopter, unless its shaft/damper assembly compliance with the approved configuration has been verified in accordance with paragraph 2.B. of the relevant ASB.</li> <li>3. Within 30 days after the accomplishment of the ASB, send the results of the inspection, whatever they are, to EUROCOPTER.</li> </ol>
Ref. Publications:	<p>EUROCOPTER AS350 Alert Service Bulletin No. 80.00.07 Rev. 0 dated 19 December 2008.</p> <p>EUROCOPTER EC130 Alert Service Bulletin No. 80A003 Rev. 0 dated 19 December 2008.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. The requestor and the risk-averse have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication.</li> </ol> <p>Enquiries regarding this AD should be referred to the Airworthiness Directorate, Safety Management &amp; Research Section, Certification Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</p> <p>For any question concerning the technical content of the requirements in this AD please contact: EUROCOPTER (STDI) – Aéroport de Marseille Provence 13725 Marignane Cedex – France. Tel: +33(0)4 42 85 97 97 – Fax: +33(0)4 42 85 99 66, E-mail: <a href="mailto:Directive.technical-support@eurocopter.com">Directive.technical-support@eurocopter.com</a>.</p>