


<b>EASA</b>	<b>PROPOSED AIRWORTHINESS DIRECTIVE</b>	
	<p><b>PAD No : 07-221</b></p> <p><b>Date: 17 December 2007</b></p>	
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.		
<b>Type Approval Holder's Name :</b>		<b>Type/Model designation(s) :</b>
EUROCOPTER		AS 332 C, C1, L and L1 helicopters
TCDS Number: EASA. R.002.		
Foreign AD : None		
Supersedure: This Airworthiness Directive (AD) supersedes DGAC France AD F-2004-142 R1 (EASA approval number 2005-6377) dated 26 October 2005.		
<b>ATA 52</b>	<b>Doors - Plug Doors - Check / Modification</b>	
Manufacturer(s):	EUROCOPTER. (formerly EUROCOPTER France).	
Applicability:	EUROCOPTER AS 332 C, AS 332 C1, AS 332 L and AS 332 L1 helicopters, all serial numbers, equipped with one or two plug doors and which have not been modified in accordance with MOD 0726395 (or Eurocopter AS 332 Service Bulletin No. 52.00.36).	
Reason:	<p>DGAC France Airworthiness Directive (AD) F-2004-142 R1 was issued following the loss of a RH plug door from an AS 332 L during a hover flight. While opening it by a crew member, the door tilted forward and detached from the airframe under its own weight due to failure of the hinge of the retractable stop assembly of the middle rail. The failure of the hinge, which was a pre-MOD 0725366 definition, was caused by interference, indicated by wear, between the shaft supporting the roller of the door fitting and the step on the rail of middle stop assembly. Such interference might notably arise from rotation of the shaft of the door fitting. The incriminated hinge has 3 different definitions: pre-MOD 0725366 which is the one that failed and features a welded standard yoke; another definition referenced post-MOD 0725366 (Eurocopter AS 332 Service Bulletin No. 52.00.28) having a machined hinge with double yoke; finally the most recent MOD 0726395 (Eurocopter AS 332 Service Bulletin No. 52.00.36) designed as optional terminating action for allowing the stop assembly to be retained even in the event of hinge failure.</p> <p>Consequently, this new AD retains the repetitive check requirements of DGAC France AD F-2004-142 R1, which is superseded, and amends the Applicability to clarify that it applies on any aircraft with both (i.e. RH and LH) plug doors, but also on those fitted with only one (i.e. RH or LH). Changed compliance times and more detailed check instructions are included, to be</p>	

	accomplished until embodiment of MOD 0726395. This modification will cancel the periodic inspection requirement and the prohibition of plug door operation in flight.
Effective Date:	[TBD: 14 days after Final AD issue date]
Compliance:	<p>The following is described for one plug door only, but is mandatory to be accomplished on each of RH and/or LH plug doors depending on the configuration of the aircraft:</p> <p>(1) For helicopters not yet compliant with AD F-2004-142 R1: At the latest at the next ALF-check (check after the last flight of the day) after the effective date of this AD, check for interference between the step on the rail of middle stop assembly and shaft of the plug door fitting, in accordance with the instructions given in paragraph 2.B.0 of EUROCOPTER AS332 ASB referenced below.</p> <p>(2) For helicopters already compliant with AD F-2004-142 R1: Check for interference between the step on the rail of middle stop assembly and shaft of the plug door fitting, in accordance with the instructions given in paragraph 2.B.0 of EUROCOPTER AS332 ASB referenced below, as applicable:</p> <p>(a) Within 50 Flight Hours (FH) after the effective date of this AD, on plug doors pre-MOD 0725366 that were not (or no longer) affected by interference at the time when compliance with AD F-2004-142 R1 was ensured; or</p> <p>(b) Within 275 FH after the effective date of this AD, on plug doors post-MOD 0725366 that were not (or no longer) affected by interference at the time when compliance with AD F-2004-142 R1 was ensured; or</p> <p>(c) Within 50 FH after the effective date of this AD, on plug doors pre- or post-MOD 0725366 that were affected by interference at the time when compliance with AD F-2004-142 R1 was ensured.</p> <p>(3) Interpret the results of the inspection required by § (1) or (2) of this AD, as applicable, obtained on plug doors pre-MOD 0725366 in accordance with the instructions given in paragraph 2.B.1 of the ASB referenced below and apply further actions accordingly:</p> <p>(a) If no interference is found, inspect the plug doors at intervals not to exceed 50 FH in accordance with the instructions given in paragraph 2.B of the ASB referenced below.</p> <p>(b) If interference is found without rotation of shaft or it remains after realignment of shaft having rotated:</p> <ul style="list-style-type: none"> <li>- <b>it is forbidden to open or close the plug doors in flight</b>, and</li> <li>- Pending embodiment of MOD 0726395 in accordance with Eurocopter AS 332 Service Bulletin No. 52.00.36, affix a label showing such prohibition in the immediate vicinity of the inside plug doors handles.</li> </ul> <p>(c) If interference disappears after realignment of the rotated shaft:</p> <ul style="list-style-type: none"> <li>- Either embody MOD 0726395, or replace stop assembly, bolt and hinge, plus door shaft and fitting, all identically;</li> <li>- Pending replacement of parts, <b>it is forbidden to open or close the plug doors in flight</b> and a label must show such prohibition, in the immediate vicinity of the inside plug doors handles,</li> <li>- Unless MOD 0726395 is accomplished, continue plug doors inspection as required by § 3 (a) of this AD.</li> </ul>

	<p>(4) Interpret the results of the inspection required by § (1) or (2) of this AD, as applicable, obtained on plug doors post-MOD 0725366 in accordance with the instructions given in paragraph 2.B.2 of the ASB referenced below and apply further actions accordingly:</p> <p>(a) If no interference is found, inspect the plug doors at intervals not to exceed 275 FH in accordance with the instructions given in paragraph 2.B of the ASB referenced below.</p> <p>(b) If interference is found without rotation of shaft, check further for presence of cracks, distortion and wear exceeding 0.5 mm on the step of the rail of middle stop assembly:</p> <ul style="list-style-type: none"> <li>- If no discrepancies are observed, continue plug doors inspection at intervals not to exceed 50 FH in accordance with the instructions given in paragraph 2.B.2.b of the ASB referenced below,</li> <li>- If any discrepancies are found, either embody MOD 0726395 in accordance with Eurocopter AS 332 Service Bulletin No. 52.00.36, or replace stop assembly, bolt and hinge identically, provided that, pending replacement of parts, <b>it is forbidden to open or close the plug doors in flight</b> and a label must show such prohibition, in the immediate vicinity of the inside plug doors handles.</li> <li>- Unless MOD 0726395 is accomplished, continue plug doors inspection as required by § 4 (a) if interference disappears after parts replacement or as required by § 4 (b) if interference remains after parts replacement.</li> </ul> <p>(c) If interference disappears after realignment of the rotated shaft, also check further for presence of cracks, distortion and wear exceeding 0.5 mm on the step of the rail of middle stop assembly:</p> <ul style="list-style-type: none"> <li>- If no discrepancies are observed, continue plug doors inspection at intervals not to exceed 275 FH in accordance with the instructions given in paragraph 2.B of the ASB referenced below,</li> <li>- If any discrepancies are found, either embody MOD 0726395 in accordance with Eurocopter AS 332 Service Bulletin No. 52.00.36, or replace stop assembly, bolt and hinge, plus door shaft and fitting, all identically, provided that, pending replacement of parts, <b>it is forbidden to open or close the plug doors in flight</b> and a label must show such prohibition, in the immediate vicinity of the inside plug doors handles.</li> <li>- Unless MOD 0726395 is accomplished, continue plug doors inspection as required by § 4 (a) of this AD.</li> </ul> <p>(d) If interference remains after realignment of the rotated shaft, before next flight, replace plug doors shaft and fitting, and continue plug doors inspection at intervals not to exceed 50 FH in accordance with the instructions given in paragraph 2.B.2.b of the ASB referenced below.</p>
Ref. Publications:	<p>EUROCOPTER AS 332 Alert Service Bulletin N° 52.00.33 R2 dated 07 December 2007.</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"> <li>1. If requested and appropriately substantiated, EASA can accept Alternative Methods of Compliance (AMOC) for this AD.</li> <li>2. Closing date for comments is 31 December 2007.</li> <li>3. Enquiries regarding this AD should be addressed to Focal Point Certification Directorate, EASA, E-mail: <a href="mailto:Ads@easa.europa.eu">Ads@easa.europa.eu</a>.</li> </ol>

	<p>4. For any questions concerning the technical content of the requirements in this AD, please contact: EUROCOPTER (STDI) – Aéroport de Marseille Provence 13725 Marignane Cedex- France. Telephone: +33 (4) 12 85 97 97; Fax: +33 (4) 85 99 66; E-mail: <a href="mailto:Directive.technical-support@eurocopter.com">Directive.technical-support@eurocopter.com</a></p>
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