


<b>EASA</b>	<b>EMERGENCY AIRWORTHINESS DIRECTIVE</b>																											
	<b>AD No.: 2007- 0312-E</b>  <b>Date: 21 December 2007</b>																											
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		AS332 L2 helicopters																										
TCDS Number: EASA. R.002.																												
Foreign AD: Not applicable																												
Supersedure: None.																												
<b>ATA 63</b>	<b>Limitations – Main Gear Box, Freewheel Shaft – OEI Training Flights Prohibition / Replacement</b>																											
<b>Manufacturer(s):</b>	EUROCOPTER (formerly EUROCOPTER France).																											
<b>Applicability:</b>	EUROCOPTER AS332 L2 helicopters, all serial numbers, with Main Gear Box (MGB) main reduction gear modules equipped with freewheel shafts P/N 332A32-2190-25 as listed below: <table border="1" data-bbox="561 1356 1325 1866"> <thead> <tr> <th>Freewheel shaft: S/N</th><th>installed on: main module P/N &amp; S/N</th></tr> </thead> <tbody> <tr><td>M1608</td><td rowspan="2">332A32-3011-03M / M2062</td></tr> <tr><td>M945</td></tr> <tr><td>M1078</td><td rowspan="2">332A32-3011-03M / M2088</td></tr> <tr><td>M1087</td></tr> <tr><td>M1272</td><td rowspan="2">332A32-3011-03M / M2104</td></tr> <tr><td>M1273</td></tr> <tr><td>M1688</td><td rowspan="2">332A32-3011-03M / M2016</td></tr> <tr><td>M974</td></tr> <tr><td>M1231</td><td rowspan="2">332A32-3011-03M / M2079</td></tr> <tr><td>M937</td></tr> <tr><td>M1115</td><td rowspan="2">332A32-3011-03M / M4001</td></tr> <tr><td>M635</td></tr> <tr><td>M1159</td><td rowspan="2">332A32-3011-03M / M4004</td></tr> <tr><td>M907</td></tr> <tr><td>M1124</td><td rowspan="2">332A32-3011-01M / M2044</td></tr> <tr><td>M486</td></tr> </tbody> </table>		Freewheel shaft: S/N	installed on: main module P/N & S/N	M1608	332A32-3011-03M / M2062	M945	M1078	332A32-3011-03M / M2088	M1087	M1272	332A32-3011-03M / M2104	M1273	M1688	332A32-3011-03M / M2016	M974	M1231	332A32-3011-03M / M2079	M937	M1115	332A32-3011-03M / M4001	M635	M1159	332A32-3011-03M / M4004	M907	M1124	332A32-3011-01M / M2044	M486
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Reason:	<p>This Emergency Airworthiness Directive (EAD) is issued following a hard landing which occurred recently while making in-flight engine failure training, i.e. One Engine Inoperative (OEI) training.</p> <p>During a RH single-engine approach with idle rating training mode activated on the LH engine, the flight crew encountered a sudden loss of drive on the RH side of the MGB.</p> <p>MGB examinations revealed the failure of the RH freewheel due to excessive wear on some of its components. In case of freewheel malfunction on one of the two MGB inputs, the resulting overtorque at the remaining MGB input, given OEI mode activation, may not be transmitted by the second freewheel, if the latter too is severely worn.</p> <p>The analysis of the various recordings made during overhauls and supplied by the various repair stations allowed to identify a list of offending MGB main reduction gear modules and freewheel shafts that are currently in service.</p> <p>Consequently, this EAD prohibits engine failure One Engine Inoperative (OEI) training with rotorcraft on which MGB main reduction gear modules equipped with freewheel shafts as listed in § "Applicability" above and mandates their replacement.</p>														
Effective Date:	25 December 2007														
Compliance:	<p>(1) For aircraft with MGB main reduction gear modules equipped with freewheel shafts as listed in § "Applicability" above, after the effective date of this AD and unless §§ (2), (3) or (4) of this EAD is accomplished as applicable:</p> <ul style="list-style-type: none"> <li>(a) engine failure OEI training is prohibited and before the next flight, insert a copy of this EAD in the Limitations section the Flight Manual.</li> <li>(b) if an engine in-flight shut down occurs, comply before the next flight with the instructions given in paragraph 2.B.2 of EUROCOPTER AS332 Alert Service Bulletin (ASB) No. 01.00.742.</li> </ul> <p>(2) Within 40 Flight Hours (FH) after the effective date of this AD and at the latest by December 31, 2007, replace MGB main reduction gear modules equipped with freewheel shafts P/N 332A32-2190-25 as listed below, in accordance with the instructions given in paragraph 2.B.2 of the ASB referenced below:</p> <table border="1"> <thead> <tr> <th>Freewheel shaft: S/N</th><th>installed on: main module P/N &amp; S/N</th></tr> </thead> <tbody> <tr> <td>M1231</td><td rowspan="2">332A32-3011-03M / M2079</td></tr> <tr> <td>M937</td></tr> <tr> <td>M1115</td><td rowspan="2">332A32-3011-03M / M4001</td></tr> <tr> <td>M635</td></tr> <tr> <td>M1159</td><td rowspan="2">332A32-3011-03M / M4004</td></tr> <tr> <td>M907</td></tr> <tr> <td>M1124</td><td rowspan="2">332A32-3011-01M / M2044</td></tr> <tr> <td>M486</td></tr> </tbody> </table>	Freewheel shaft: S/N	installed on: main module P/N & S/N	M1231	332A32-3011-03M / M2079	M937	M1115	332A32-3011-03M / M4001	M635	M1159	332A32-3011-03M / M4004	M907	M1124	332A32-3011-01M / M2044	M486
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	<p>(3) Within 200 Flight Hours (FH) after the effective date of this AD and at the latest by January 31, 2008, replace MGB main reduction gear modules equipped with freewheel shafts P/N 332A32-2190-25 as listed below, in accordance with the instructions given in paragraph 2.B.2 of the ASB referenced below:</p> <table border="1" data-bbox="565 415 1326 688"> <tr> <th>Freewheel shaft: S/N</th><th>installed on: main module P/N &amp; S/N</th></tr> <tr> <td>M1608</td><td rowspan="3">332A32-3011-03M / M2062</td></tr> <tr> <td>M945</td></tr> <tr> <td>M1078</td></tr> <tr> <td>M1087</td><td rowspan="2">332A32-3011-03M / M2088</td></tr> <tr> <td>M1272</td></tr> <tr> <td>M1273</td><td rowspan="2">332A32-3011-03M / M2104</td></tr> <tr> <td>M1688</td></tr> <tr> <td>M974</td><td>332A32-3011-03M / M2016</td></tr> </table> <p>(4) After the effective date of this AD, no person shall install MGB main reduction gear modules fitted with freewheel shafts as listed in § “Applicability” above on a helicopter, without having ensured that the freewheel shafts of the main reduction gear module has been inspected by an approved repair station.</p>	Freewheel shaft: S/N	installed on: main module P/N & S/N	M1608	332A32-3011-03M / M2062	M945	M1078	M1087	332A32-3011-03M / M2088	M1272	M1273	332A32-3011-03M / M2104	M1688	M974	332A32-3011-03M / M2016
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Ref. Publications:	<p>EUROCOPTER AS332 Alert Service Bulletin No. 01.00.74 initial issue</p> <p>The use of a later approved revision 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 substantiate, EASA can accept Alternative Methods of Compliance for this AD.</li> <li>2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification</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> <li>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. Tel: +33 (4) 12 85 97 97 – Fax: +33 (4) 85 99 66 <u>E-mail: <a href="mailto:Directive.technical-support@eurocopter.com">Directive.technical-support@eurocopter.com</a></u></li> </ol>														