


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2011-0001R1</b></p> <p><b>Date: 25 September 2013</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 EU 748/2012, Part 21.A.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>Design Approval Holder's Name :</b> AIRBUS</p>	<p><b>Type/Model designation(s) :</b> A318, A319, A320 and A321 aeroplanes</p>	
<p>TCDS Number: EASA.A.064</p>		
<p>Foreign AD: Not applicable</p>		
<p>Revision: This AD revises EASA AD 2011-0001 dated 10 January 2011, which superseded DGAC France ADs 94-211-059(B) R2 dated 10 April 1996, 96-079-079(B) dated 10 April 1996, and 2000-320-147(B) dated 26 July 2000.</p>		
<b>ATA 31</b>	<b>Indicating &amp; Recording Systems – Flight Warning Computers – Replacement</b>	
<p>Manufacturer(s):</p>	<p>Airbus (formerly Airbus Industrie)</p>	
<p>Applicability:</p>	<p>Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-111, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers, if equipped with a Flight Warning Computer (FWC) with a Part Number (P/N) listed in Appendix 1 of this AD.</p>	
<p>Reason:</p>	<p>Following in-service experience, analyses of the failure to follow procedure or heed existing cockpit cues were conducted to assess the consequences of mismanagement of thrust levers during landing.</p> <p>The investigation results identified the need for improvements in the identification of throttle mis-positioning and so providing further opportunity for the flight crew to identify an incorrect thrust lever configuration and to correct this. For the A320 family of aeroplanes this being IDLE or REVERSE, which is necessary to enable ground spoiler (G/S) extension and auto-brake (A/BRK) functions. In addition, the analysis of the thrust lever management issue shows two categories of scenarios that could lead to thrust asymmetry during landing with controllability and deceleration consequences:</p> <ul style="list-style-type: none"> <li>- One thrust lever kept in forward thrust when the other is put in IDLE or</li> </ul>	

	<p>REVERSE. This has been seen in cases of dispatch with one thrust reverser inoperative; and</p> <ul style="list-style-type: none"> <li>- One thrust lever moved in forward position after landing, usually when bringing the thrust lever back from REVERSE to IDLE.</li> </ul> <p>These thrust asymmetry conditions, if not corrected, could result in loss of control of the aeroplane during landing.</p> <p>To address this potential unsafe condition, DGAC France issued AD 94-211-059(B) R2 and AD 96-079-079(B), mandating Aircraft Flight Manual Temporary Revision reference 9.99.99/20 and the installation of FWC P/N 350E017248685 (H1D2) as terminating action for both ADs. Thereafter, DGAC France issued AD 2000-320-147(B), which required the installation of FWC P/N 350E017271616 (H1E2).</p> <p>Subsequently, EASA issued AD 2011-0001, superseding the three DGAC France ADs, but retaining the requirements of AD 2000-320-147(B), to require replacement of both FWC units with FWC P/N 350E053020909 (H2F5) standard units, introducing "Enhanced RETARD" logic.</p> <p>Since that AD was issued, new FWC P/N 350E053021111 (H2-F6) and P/N 350E053021212 (H2-F7) have been developed.</p> <p>For the reasons described above, this AD is revised to allow installation of the new FWC H2-F6 or H2-F7 standards FWC as alternative to the H2F5 standard required by this AD.</p>
Effective Date:	<p>Revision 1: 09 October 2013</p> <p>Original issue: 24 January 2011</p>
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p><b>Restatement of the requirement of DGAC France AD 2000-320-147(B):</b></p> <p>(1) Except for aeroplanes on which Airbus modification 26017 has been embodied in production :</p> <p>Before 31 March 2002, replace both FWC in accordance with the instructions defined in AIRBUS Service Bulletin (SB) A320-31-1106. Installation of a FWC standard in accordance with the instructions of Airbus SB A320-31-1141 is considered an alternative method of compliance to this requirement.</p> <p><b>New requirements of this AD:</b></p> <p>(2) Within 48 months after 24 January 2011 [the effective date of the original issue of this AD], replace both FWC units with FWC P/N 350E053020909, in accordance with the instructions of Airbus SB A320-31-1334 Revision 02.</p> <p>(3) Compliance with the requirements of paragraph (2) of this AD may require the prior or concurrent accomplishment of the instructions contained in the concurrent requirements section of Airbus SB A320-31-1334 Revision 02.</p> <p>(4) Modification of an aeroplane, prior to 24 January 2011 [the effective date of the original issue of this AD], in accordance with the instructions of Airbus SB A320-31-1334 (Airbus modification 37871) at original issue or Revision 01, is considered acceptable for compliance with the requirements of paragraph (2) of this AD.</p> <p>(5) After modification of an aeroplane as required by paragraph (2) of this AD, do not install a FWC with a P/N listed in Appendix 1 of this AD on that aeroplane.</p> <p>(6) Modification of an aeroplane in accordance with the instructions of Airbus SB A320-31-1414 (Airbus modification 153741) that install FWC</p>

	<p>P/N 350E053021212 (H2-F7), or in accordance with the instructions of Airbus SB A320-31-1373 (Airbus modification 151269), as applicable, installing FWC P/N 350E053021111 (H2-F6), is acceptable to comply with the requirements of paragraph (2) of this AD for that aeroplane.</p> <p>Note: Airbus SB A320-31-1334 Revision 02 did not address the A319 Corporate Jet, as this aeroplane requires additional modification to the Auxiliary Fuel Management Computer. Airbus SB A320-31-1334 Revision 04 was issued on 12 September 2011 to add these aeroplanes. As such, this AD applies to these aeroplanes, with the same stated compliance times.</p>
Ref. Publications:	<p>Airbus SB A320-31-1106 original issue dated 03 January 1997.</p> <p>Airbus SB A320-31-1141 original issue dated 06 March 2000.</p> <p>Airbus SB A320-31-1334 Revision 02 dated 13 September 2010, or Revision 03 dated 15 March 2010, or Revision 04 dated 12 September 2011.</p> <p>Airbus SB A320-31-1373 original issue dated 28 September 2012.</p> <p>Airbus SB A320-31-1414 original issue dated 19 December 2012, or Revision 01 dated 21 March 2013, or Revision 02 dated 30 July 2013.</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 original issue of this AD was posted on 10 November 2010 as PAD 10-115 for consultation until 08 December 2010. The Comment Response Document can be found at <a href="http://ad.easa.europa.eu">http://ad.easa.europa.eu</a>.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51; E-mail: <a href="mailto:account.airworth-eas@airbus.com">account.airworth-eas@airbus.com</a>.</li> </ol>

## Appendix 1

List of Flight Warning Computer (FWC) Part Numbers, affected by this AD:

350E017238484 (H1D1)
350E016187171 (C5)
350E017248685 (H1D2)
350E017251414 (H1E1)
350E017271616 (H1E2)
350E018291818 (H1E3CJ)
350E018301919 (H1E3P)
350E018312020 (H1E3Q)
350E053020202 (H2E2)
350E053020303 (H2E3)
350E053020404 (H2E4)
350E053020606 (H2F2)
350E053020707 (H2F3)
350E053021010 (H2F3P)
350E053020808 (H2F4)