



適航指令發布單

Airworthiness Directive Issuance Form

民航局AD編號 AD Number	CAA-2015-05-013	發布日期 Date issued	2015/5/27
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	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, A320-211, 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 (MSN).		
主旨摘要	Flight Controls – Elevator Aileron Computers – Replacement / Software Update		
民航局 CAA  <input type="checkbox"/> 本國產品 Native products  <input type="checkbox"/> 其他個案 Other	設計國民航主關機構 Original Authorities  <input type="checkbox"/> FAA <input checked="" type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC  <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____		
	設計國AD編號 Original AD number	2015-0088	
	1. 直接採用原AD之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) ___ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將AD執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 27. This AD cancels DGAC France AD 95-203-072 dated 11 October 1995; and supersedes DGAC France AD 2001-508 dated 17 October 2001, and AD F-2004-147(CAA-2003-10-005A) (EASA approval ref. 2004-8601) dated 18 August 2004. Ref. Publications: AirbusSB A320-27-1135 original issue dated 29 June 2001, or Revision 01 dated 31 August 2001, or Revision 02 dated 18 April 2002. and Airbus SB A320-27-1151 original issue dated 09 March 2004, or Revision 01 dated 19 October 2004. and Airbus SB A320-27-1152 original issue dated 04 June 2004, or Revision 01 dated 19 October 2004, or Revision 02 dated 04 April 2006. and Airbus SB A320-27-1243 original issue dated 17 March 2015. and Airbus SB A320-27-1244 original issue dated 05 March 2015.		
註： 1. AD內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331-3, Fax：(02)2545-8464, e-mail：adcaa@mail.caa.gov.tw  Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331-3, Fax：(02)2545-8464, e-mail：adcaa@mail.caa.gov.tw			

<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>	
	<p><b>AD No.: 2015-0088</b></p> <p><b>Date: 22 May 2015</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 EU 1321/2014 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 [EU 1321/2014 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>Supersedure: This AD cancels DGAC France AD 95-203-072 dated 11 October 1995; and supersedes DGAC France AD 2001-508 dated 17 October 2001, and AD F-2004-147 (EASA approval ref. 2004-8601) dated 18 August 2004.</p>		
<b>ATA 27</b>	<b>Flight Controls – Elevator Aileron Computers – Replacement / Software Update</b>	
<p>Manufacturer(s): Airbus (formerly Airbus Industrie)</p>		
<p>Applicability: 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, A320-211, 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 (MSN).</p>		
<p>Reason: The latest elevator aileron computer (ELAC) standard, L97+, implements enhanced Angle of Attack (AOA) monitoring in order to better detect cases of AOA blockage, including multiple AOA blockage.</p> <p>Two ELAC L97+ versions are currently available, Part Number (P/N) 3945129109 with data loading capability, and P/N 39455128215 without the data loading capability. Three existing ADs requiring installation of earlier ELAC (software) have been identified and taken into account for cancellation by this new AD.</p> <p>For the reasons described above, this AD cancels DGAC France AD 95-203-072 (no requirements retained), and partially retains the requirements of DGAC France AD 2001-508, and AD F-2004-147 (EASA approval ref. 2004-8601), which are superseded, and requires replacement of all ELAC with ELAC L97+ standard.</p>		
<p>Effective Date: 01 June 2015</p>		

Required Action(s)  
and Compliance  
Time(s):

Required as indicated, unless accomplished previously:

**Restatement of (part of) the requirements of DGAC France AD 2001-508:**

- (1) For certain A319 and A320 aeroplanes, as identified by MSN in Airbus Service Bulletin (SB) A320-27-1135, before 31 December 2002, replace all ELAC L80 units with ELAC L81 standard units in accordance with the instructions of Airbus SB A320-27-1135.

**Restatement of (part of) the requirements of DGAC France AD F-2004-147:**

- (2) For certain A321 aeroplanes, as identified by MSN in Airbus SB A320-27-1151 or SB A320-27-1152, before 31 December 2005, install ELAC L83 or L91 software, in accordance with the instructions of Airbus SB A320-27-1151 or Airbus SB A320-27-1152, as applicable.

**New requirements of this AD:**

- (3) Within the compliance time as defined in Table 1 of this AD, as applicable, replace each ELAC unit with an ELAC L97+ P/N 3945129100 unit with software P/N 3945129109, or modify ELAC units into ELAC P/N 3945129100 units with L97+ operational software P/N 3945129109 loaded, in accordance with the instructions of Airbus SB A320-27-1243.

Table 1 – ELAC L97+ Installation

<b>Aeroplanes</b> (all models)	<b>Compliance Time</b> (after the effective date of this AD)
A318 and A321 with UTAS AOA (see Note 1)	5 months
A319 and A320 with UTAS AOA (see Note 1)	10 months
All other aeroplanes	25 months

Note 1: Aeroplanes with UTAS (formerly Goodrich) AOA P/N 0861ED or P/N 0861ED2 installed in all 3 positions (Captain, First Officer and Standby).

- (4) Modification of an aeroplane by replacing existing ELAC units with ELAC L97+ PN 3945128215 units (see Note 2) in accordance with the instructions of Airbus SB A320-27-1244 is an acceptable method of compliance with the requirement of paragraph (3) of this AD for that aeroplane.

Note 2: The Non-Data-loadable ELACs L97+ PN 3945128215 are fully-interchangeable and mixable with Data-loadable ELAC L97+ PN 3945129100 with operational software P/N 3945129109 loaded.

- (5) An aeroplane with Airbus mod 156546 (installation of ELAC L97+ with software P/N 3945129109) embodied in production is not affected by the requirements of paragraphs (1) through (4) of this AD, provided it is determined that no ELAC having a P/N as listed in Appendix 1 of this AD has been installed on that aeroplane since its date of manufacture.
- (6) Installation of a version (P/N) of an ELAC unit approved after the effective date of this AD is equal to compliance with the requirements of paragraph (3) or (4) of this AD, provided the conditions as specified in paragraphs (6.1) and (6.2) of this AD are met.
- (6.1) The version (P/N) must be approved by EASA, or approved under Airbus Design Organisation Approval (DOA); and
- (6.2) The installation must be accomplished in accordance with aeroplane modification instructions approved by EASA, or approved under Airbus DOA.

	<p>(7) Do not install on any aeroplane an ELAC unit having a P/N as listed in Appendix 1 of this AD, as required by paragraph (7.1) or (7.2) of this AD, as applicable, except as specified in paragraph (7.3) of this AD.</p> <p>(7.1) For an aeroplane that, on the effective date of this AD, has an ELAC unit installed having a P/N as listed in Appendix 1 of this AD: After modification of that aeroplane as required by paragraph (3) of this AD.</p> <p>(7.2) For an aeroplane that, on the effective date of this AD, does not have an ELAC unit installed, having a P/N as listed in Appendix 1 of this AD: From the effective date of this AD.</p> <p>(7.3) From the effective date of this AD, it is allowed to install on any aeroplane a data-loadable ELAC B unit (P/Ns identified in Appendix 1 of this AD), provided that, before next flight after installation, L97+ operational software P/N 3945129109 (or later software – see paragraph (6) of this AD) is uploaded.</p>
Ref. Publications:	<p>Airbus SB A320-27-1135 original issue dated 29 June 2001, or Revision 01 dated 31 August 2001, or Revision 02 dated 18 April 2002.</p> <p>Airbus SB A320-27-1151 original issue dated 09 March 2004, or Revision 01 dated 19 October 2004.</p> <p>Airbus SB A320-27-1152 original issue dated 04 June 2004, or Revision 01 dated 19 October 2004, or Revision 02 dated 04 April 2006.</p> <p>Airbus SB A320-27-1243 original issue dated 17 March 2015.</p> <p>Airbus SB A320-27-1244 original issue dated 05 March 2015.</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. This AD was posted on 10 April 2015 as PAD 15-037 for consultation until 08 May 2015. 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, Certification 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 – No longer to be installed ELAC

P/N	Designation	FIN
3945122202	ELAC A320-111 Type Def.	2 CE 1 / 2
3945122203	ELAC L50C	2 CE 1 / 2
3945122303	ELAC L50C	2 CE 1 / 2
3945122304	ELAC L60	2 CE 1 / 2
3945122305	ELAC L61B	2 CE 1 / 2
3945122306	ELAC L61F	2 CE 1 / 2
3945122307	ELAC L62C	2 CE 1 / 2
C12370AA01	ELAC L68C	2 CE 1 / 2
3945122501	ELAC L69	2 CE 1 / 2
3945122502	ELAC L69J	2 CE 1 / 2
3945122503	ELAC L77	2 CE 1 / 2
3945122504	ELAC L78	2 CE 1 / 2
3945122505	ELAC A L80	2 CE 1 / 2
3945123505	ELAC A' L80	2 CE 1 / 2
3945122506	ELAC A L81	2 CE 1 / 2
3945123506	ELAC A' L81	2 CE 1 / 2
3945128102	ELAC B L81	2 CE 1 / 2
3945122507	ELAC A L82	2 CE 1 / 2
3945123507	ELAC A' L82	2 CE 1 / 2
3945128103	ELAC B L82	2 CE 1 / 2
3945122608	ELAC A L83	2 CE 1 / 2
3945123608	ELAC A' L83	2 CE 1 / 2
3945122609	ELAC A L84	2 CE 1 / 2
3945123609	ELAC A' L84	2 CE 1 / 2
3945128204	ELAC B L90L	2 CE 1 / 2
3945128205	ELAC B L90N	2 CE 1 / 2
3945128206	ELAC B L91	2 CE 1 / 2
3945129101	ELAC B L91 data loadable	2 CE 1 / 2 SW1
3945128207	ELAC B L92 data loadable	2 CE 1 / 2 SW1
3945128208	ELAC B L92L data loadable	2 CE 1 / 2 SW1
3945128209	ELAC B L93	2 CE 1 / 2
3945129103	ELAC B L93 data loadable	2 CE 1 / 2 SW1
3945128210	ELAC B L94	2 CE 1 / 2
3945129104	ELAC B L94 data loadable	2 CE 1 / 2 SW1
3945128212	ELAC B L96	2 CE 1 / 2
3945129106	ELAC B L96 data loadable	2 CE 1 / 2 SW1
3945129107	ELAC B L96 H-A data loadable	2 CE 1 / 2 SW1
3945128214	ELAC B L97	2 CE 1 / 2
3945129108	ELAC B L97 data loadable	2 CE 1 / 2 SW1