


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2006 - 0108</b></p> <p><b>Date: 03 May 2006</b></p>
<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.</p>	
<p><b>Type Approval Holder's Name:</b></p> <p>AIRBUS</p>	<p><b>Type/Model designations:</b></p> <p>A318, A319, A320 and A321 aircraft</p>
<p>TCDS Number: EASA.A.064</p>	
<p>Foreign AD: None</p>	
<p>Supersedure: DGAC F-2004-104R1, EASA approval No. 2004-8606</p>	
<b>ATA 31</b>	<b>Indicating/Recording Systems- Temporary Loss of All Display Units</b>
<p>Manufacturer(s):</p>	<p>AIRBUS, (formerly AIRBUS INDUSTRIE)</p>
<p>Applicability:</p>	<p>AIRBUS aircraft A318, A319, A320, A321, all certified models, all serial numbers that have embodied:</p> <ul style="list-style-type: none"> <li>- AIRBUS modification 30368 or 31495 in production,</li> <li>or</li> <li>- AIRBUS Service Bulletin (SB) A320-31-1193 or A320-31-A1198 in service,</li> </ul> <p>for the installation of EIS2 (Electronic Instrument System) LCD (Liquid Crystal Display) Display Units.</p> <p>The aircraft that have received AIRBUS modification 35270 (install EIS1 instead of EIS2) in production are not affected by the requirements of this Airworthiness Directive (AD).</p>

Reason:	<p>An A320 operator reported the misbehaviour of all EIS2 LCD Display Units in cruise for the duration of 3 minutes with a total loss LCD Display Units for 30 seconds. The autopilot was disconnected as a precaution by the pilot and standby instruments were used. All Display Units were finally recovered and the flight continued normally.</p> <p>Analysis confirmed that the 3 Display Management Computers have received erroneous data from one LCD Unit.</p> <p>AIRBUS issued Operators Information Telex (OIT) and Flight Operations Telex (FOT) SE 999.0114/03/VHR Revision 1, which gives the Master Minimum Equipment List (MMEL) repercussions of this event and operational recommendations to be followed in case of all Display Units failed with INVALID DATA display.</p> <p>DGAC AD 2003-373 mandated the MMEL repercussions given in the OIT/FOT referenced here-above.</p> <p>Afterwards, several similar events have been reported on the Airbus Single Aisle fleet, showing the need to make the crew well informed of the procedure to be applied in such situation. This procedure "Loss of all display units" is detailed in A318/319/320/321 Flight Manual Temporary Revision (AFM TR) 4.02.00/22.</p> <p>AD F-2004-104 replaced AD 2003-373 and mandated both MMEL repercussions and AFM TR 4.02.00/22.</p> <p>AD F-2004-104R1 has allowed the removal of AFM TR 4.02.00/22 on aircraft equipped with new EIS2 standard 4.2.</p> <p>This AD supersedes AD F-2004-104R1 and is issued in order to amend the applicability.</p> <p>For aircraft already compliant with AD F-2004-104R1 no further action is required by this AD.</p>
Effective Date:	15 May 2006.
Compliance:	<p>1. From September 24, 2003 (the effective date of DGAC AD 2003-373), the following operational limitations are mandatory for all flights:</p> <p><b>"MMEL REPERCUSSIONS:</b></p> <p><i>For aircraft equipped with EIS2 LCD Display Units, and with conventional standby instruments:</i></p> <ul style="list-style-type: none"> <li>- <i>Dispatch with the standby IAS (Indicated Airspeed) indicator inoperative (MMEL 34-21-01) is no longer authorized.</i></li> <li>- <i>Dispatch with inoperative standby horizon or inoperative standby altimeter may be authorized provided that the crew maintains VMC conditions during the entire flight and day-light conditions.</i></li> </ul>

*For aircraft equipped with EIS2 LCD Display Units, and with the Integrated Standby Instrument System (ISIS):*

- *Dispatch with the ISIS airspeed function inoperative (MMEL 34-22-03-C) is no longer authorized.*
  
- *Dispatch with inoperative ISIS horizon function or inoperative ISIS altitude function may be authorized provided that the crew maintains VMC conditions during the entire flight and day-light conditions.*

*Reminder: For dispatch with one Display Unit inoperative as per MMEL 31-63-01, it is reminded that the subject Display Unit must be switched-off as per associated MMEL operational procedure.”*

Incorporation of the MMEL repercussions or a copy of this AD in the Aircraft Operations Manual and strict adherence to MMEL repercussions by the crew allows complying with the paragraph “Compliance 1.” of this AD.

2. For aircraft that have not received AIRBUS modification 34571 or SB A320-31A1220 (EIS 2 standard 4.2), from July 17, 2004 [effective date of AD F-2004-104 at original issue], the following operational limitations are mandatory for all flights:

**“LOSS OF ALL DISPLAY UNITS**

*This Temporary Revision of the Aircraft Flight Manual gives the procedure to be followed in case of loss of all Display Units (DU).*

*Autopilot, autothrust and MCDU navigation data are still available and may be used.*

*Monitor the flight by using standby instruments.*

*Wait at least 40 seconds for automatic DU recovery.*

- *If one or more DU is not automatically recovered after 40 seconds:*

*Set the non-recovered DUs to OFF.*

*After 40 seconds, sequentially switch them back to ON.*

- *If all DUs are lost again when switching a given DU back to ON:*

*Set all the DUs to OFF.*

*After 40 seconds, switch them back to ON except the given DU which must be left permanently OFF.”*

Incorporation of the AFM TR 4.02.00/22 or a copy of this AD in the Aircraft Operations Manual as well as in the Aircraft Flight Manual and strict adherence by the crew allows complying with the paragraph “Compliance 2”. of this AD.

Ref. Publications:	A318/319/320/321 Flight Manual Temporary Revision 4.02.00/22 AIRBUS Service Bulletin A320-31A1220 or later approved revisions.
Remarks:	<ol style="list-style-type: none"><li>1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Method of Compliance (AMOCs) for this AD.</li><li>2. This AD was posted as PAD 06-051 for consultation on 8 March 2006 with a comment period until 31 March 2006. The Comment Response Document can be found at <a href="http://www.easa.eu.int/home/aw_dir_en_html">http://www.easa.eu.int/home/aw_dir_en_html</a></li><li>3. Enquiries regarding this AD should be addressed to Mr. M. Capaccio, AD Focal Point, Certification Directorate, EASA. E-mail <a href="mailto:ADs@easa.eu.int">ADs@easa.eu.int</a>.</li><li>4. For any question concerning the technical content of the requirements in this AD, please contact AIRBUS - Fax 33 5 61 93 44 51</li></ol>