

298256

FAA-04-19184-4

Foreign AD

 Direction générale de l'aviation civile France	AIRWORTHINESS DIRECTIVE No F-2004-117	Distribution: B	Issue date: July 21, 2004	Page : 1/3
	This Airworthiness Directive is published by the DGAC: <input checked="" type="checkbox"/> on behalf of EASA, the Primary Airworthiness Authority for the affected product. <input type="checkbox"/> as the Registration Airworthiness Authority for the affected aircraft.		<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>	
GSAC publication	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.			
Corresponding foreign Airworthiness Directive(s): Not applicable		Airworthiness Directive(s) replaced: 2003-373, cancelled by its Revision 1		
Person in charge of airworthiness: AIRBUS SAS		Type(s): A330 and A340 aircraft		
Type certificate(s) No. A.004, 183 TCDS No A.004, 183				
ATA chapter: 31, 34	Subject: Indicating/Recording systems - Temporary loss of all display units			

DEPT OF TRANSPORTATION
SECRET
2004 SEP 30 A 10:03

1. EFFECTIVITY :

AIRBUS aircraft A330 and A340, all certified models, all serial numbers, that have embodied:

- AIRBUS modification 47524, 50161, 50183, 50616 or 51153 in production,
- or
- AIRBUS Service Bulletin (SB) A330-31-3056, A330-31-3057 or A340-31-5001 in service,

for the installation of EIS2 (Electronic Instrument System) LCD (Liquid Crystal Display) Display Units.

2. REASONS:

An A320 operator reported the misbehaviour of all EIS2 LCD Display Units in cruise for 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.

Analysis confirmed that the 3 Display Management Computers have received an erroneous data from one LCD Unit.

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.

Airworthiness Directive (AD) 2003-373 mandated the MMEL repercussions of this event.

Since the AD issuance, the high number of loss of Display Units events, with one event on an A340 aircraft, show the need to make the flight crew aware of the procedure to apply in such situation. This procedure "Loss of all display units" is detailed in Flight Manual Temporary Revision (AFM TR) 4.02.00/23 and 4.02.00/38.

	<p style="text-align: center;">AIRWORTHINESS DIRECTIVE No F-2004-117</p>	<p>Distribution: B</p>	<p>Issue date: July 21, 2004</p>	<p>Page: 2/3</p>
---	--	-----------------------------------	---	-----------------------------

An equivalent procedure detailed in AFM TR 4.02.00/24 and 4.02.00/39 has also been developed for A330 aircraft fitted with FWC STD K7/486 and for A340 aircraft fitted with FWC STD L10/486 (Hardware - 486). In fact, there is a risk to loss these FWCs with these standards in approach phase if one of the ECAM DUs must remain OFF by application of the procedure " Loss of all display units".

This AD recalls the requirements of AD 2003-373 and mandates the above AFM TRs.

3. **MANDATORY ACTIONS AND COMPLIANCE TIMES:**

3.1. From September 24, 2003 [the effective date of AD 2003-373], the following operational limitations are rendered mandatory for all flights:

"MMEL REPERCUSSIONS:

For aircraft equipped with EIS2 LCD Display Units, and with conventional standby instruments:

- Dispatch with the standby IAS (Indicated Airspeed) indicator inoperative (MMEL 34-21-01) is no longer authorized.
- Dispatch with inoperative standby horizon or inoperative standby altimeter may be authorised provided that the crew maintains VMC conditions during the entire flight and day-light conditions.

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 authorised 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."

Note 1: 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 this AD.

3.2. From the effective date of this AD, the following operational limitations are rendered mandatory for all flights:

A330 aircraft not equipped with FWC STD K7/486 (MOD 49193) and A340 aircraft not equipped with FWC STD L10/486 (MOD 49192)

"LOSS OF ALL DISPLAY UNITS

This Temporary Revision 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."

**AIRWORTHINESS DIRECTIVE****No F-2004-117**

Distribution:

B

Issue date:

July 21, 2004

Page:

3/3**A330 aircraft equipped with FWC STD K7/486 (MOD 49193) and A340 aircraft equipped with FWC STD L10/486 (MOD 49192)****"LOSS OF ALL DISPLAY UNITS**

This Temporary Revision gives the procedure to be followed in case of loss of all Display Units (DU) for A330 aircraft fitted with FWC K7 (MOD 49193) and for A340 aircraft fitted with FWC L10 (MOD 49192).

*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.

- *If one or more ECAM DU must remain OFF:*

- *If ECAM DUAL DU reconfiguration is possible :*

Set the ECAM/ND selector to CAPT or FIO.

- *If ECAM DUAL DU reconfiguration is not possible or if the possible DU configuration is not appropriate for the type of approach:*

Both FWC will be lost during approach so monitor systems on overhead panel.

Note: ECAM cautions and warnings, aural warnings, master caution, warning lights, auto callouts and altitude alerts are lost during approach.

Only CAT I approach is allowed."

Note 2: Incorporation of the AFM TR 4.02.00/23, AFM TR 4.02.00/24, AFM TR 4.02.00/38 or AFM TR 4.02.00/39 or a copy of this AD in the Aircraft Operations Manual and strict adherence by the crew allows complying with this AD.

4. DOCUMENTS DE REFERENCE :

Operators Information Telex and Flight Operations Telex

SE 999.0114/03/VHR Revision 1 dated septembre 19, 2003.

A330 Flight Manual Temporary Revision 4.02.00/23 approved by EASA on June 28, 2004

A330 Flight Manual Temporary Revision 4.02.00/24 approved by EASA on June 28, 2004

A340 Flight Manual Temporary Revision 4.02.00/38 approved by EASA on June 28, 2004

A340 Flight Manual Temporary Revision 4.02.00/39 approved by EASA on June 28, 2004

(Any later approved revision of these AFM TR is acceptable).

5. EFFECTIVE DATE :

July 31, 2004.

6. REMARK :

For questions concerning the technical contents of this AD's requirements, contact:

AIRBUS SAS - Gérard MEUREY - Fax : 33 5 61 93 45 80.

7. APPROVAL :

This AD is approved under EASA reference No 2004-7516 dated July 13, 2004.