

AIRWORTHINESS DIRECTIVE

released by DIRECTION GENERALE DE L'AVIATION CIVILE

Inspection and/or modifications described below are mandatory. No person may operate a product to which this Airworthiness Directive applies except in accordance with the requirements of this Airworthiness Directive.

Translation of 'Consigne de Navigabilité' ref. : 2002-459(B) R2
In case of any difficulty, reference should be made to the French original issue.

AIRBUS

A330 and A340-200/-300 aircraft

THALES AVIONICS DDRMI failure (ATA 34)

1. APPLICABILITY:

AIRBUS A330, A340-200 and A340-300 aircraft series, all certified models, all Manufacturer Serial Numbers from 0254 inclusive which are fitted with THALES AVIONICS Digital Distance and Radio Magnetic Indicator (DDRMI) PN 63543-253-1 or PN 63543-253-2,

and

All other AIRBUS A330, A340-200 and A340-300 aircraft series, fitted with THALES AVIONICS DDRMI PN 63543-253-1 or 63543-253-2 :

- with a Serial Number (SN) different from the one recorded in the aircraft inspection report delivered from production line,

or

- having been repaired or to be repaired after May 1999.

Note 1: This Airworthiness Directive (AD) is not applicable to aircraft on which AIRBUS modification 50453 has been embodied in production (DDRMI PN 63543-253-3) or AIRBUS Service Bulletin (SB) A330-34-3113 Revision 01 or AIRBUS SB A340-34-4122 Revision 01 has been embodied in service.

Note 2: THALES AVIONICS was formerly known as "SEXTANT" or "SEXTANT AVIONIQUE".

2. REASONS:

Several operators have reported DDRMI circuit breaker tripping, followed by the loss of VOR and DME sources for navigation and displays.

Investigations showed that the DDRMI power transformer short-circuited itself, leading to leakage of 115 VAC to systems connected to DDRMI ARINC 429 input busses.

The computers that may be affected are: VOR 1/ 2, DME 1/ 2, ADF 1/ 2, DMC 1/2/3, CMC 1/2, SDU, ADIRS 1/3, DMU, FWC 1/2, FMGEC 2, MCDU 2, FCPC 2/3, XCVR, FCMC 2, ISIS.

The consequence of such a situation could be the loss of data from those computers to other systems and to a degradation or total failure of those computers.

The AD 2002-151(B) was issued to prevent possible loss of essential equipment due to a DDRMI failure in flight by means of a temporary deactivation of the DDRMI.

The aim of this AD is to extend the applicability of the DDRMI temporary deactivation to aircraft fitted with a DDRMI power transformer at amendment B which were previously excluded from the applicability.

A safety analysis carried out by AIRBUS demonstrates that all types of flight (including ETOPS) can be operated without time limitation, with a deactivated DDRMI.

This AD replaces AD 2002-151(B) R1.

The aim of the Revision 1 was to precise in the applicability paragraph that this AD is applicable to PN 63543-253-1 or PN 63543-253-2 (instead PN 63543-253-1 and PN 63543-253-2 in original issue) as there is only one DDRMI on board of aircraft.

This Revision 2 refers to AIRBUS SB A330-34-3113 Revision 01 and AIRBUS SB A340-34-4122 Revision 01 which allow to reactivate the DDRMI by installation of PN 63543-253-3 and to restore the rectification interval of the Master Minimum Equipment List (MMEL item 34-22-02 a).

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

Unless already accomplished, within 7 days following the effective date of this AD at original issue, perform a deactivation of the DDRMI in accordance with the instructions given in AIRBUS AOT A330-34A3109 Revision 01 and AIRBUS AOT A340-34A4120 Revision 01, paragraph 4.

Dispatch with an inoperative standby compass (MMEL item 34-22-02 a) is limited to a "B" rectification interval.

Note 3: This AD supersedes the MMEL for the inoperative DDRMI dispatch condition (ref. 34-57-01). Therefore this AD may supersede any Minimum Equipment List (MEL) limitation concerning the DDRMI, in accordance with AIRBUS AOT A330-34A3109 Revision 01 and AIRBUS AOT A340-34A4120 Revision 01, paragraph 3.5.

REF.: - AIRBUS All Operator Telex A330-34-A3109 Revision 01 dated August 21, 2002
- AIRBUS All Operator Telex A340-34-A4120 Revision 01 dated August 21, 2002
- AIRBUS Service Bulletin A330-34-3113 Revision 01
- AIRBUS Service Bulletin A340-34-4122 Revision 01.
(Any later approved revisions of these documents are acceptable).

This Revision 2 replaces AD 2002-459(B) R1 dated October 02, 2002.

EFFECTIVE DATES :

Original AD and Revision 1 : Upon receipt of the "Telegraphic"
AD from AUGUST 30, 2002
Revision 2 : AUGUST 30, 2003