For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Airbus Industrie A319, A320 and A321 Series Aeroplanes

**AD/A320/174 Air Data/Inertial Reference Unit 6/2005 DM**

**Applicability:** Model A318, A319, A320 and A321 series aeroplanes equipped with at least one Northrop-Grumman (previously Litton) Air Data/Inertial Reference Unit (ADIRU) (AIRBUS modification 24852 or 25108 or 25336 or 26002 or 28218).

**Requirement:** Operational dispatch of the aircraft with one ADIRU inoperative will be authorised under the following conditions:

- Stand-by compass operative,
- Stand-by attitude indicator operative.

For aircraft equipped with conventional standard instruments, compliance with A318/319/320/321 Master Minimum Equipment List (MMEL) Temporary Revision (TR) No 01-34/02Z issue 02 is an acceptable means of compliance with this Directive.

For aircraft equipped with Integrated Standby Instruments System (ISIS) (AIRBUS modification 27620/ AIRBUS Service Bulletin A320-34-1261), compliance with A318/319/320/321 MMEL TR No 01-34/07Z issue 01 is an acceptable means of compliance with this Directive.

*Note: DGAC AD F-2005-029 R1 (EASA approval 2005-2242) refers.*

**Compliance:** Before 11 May 2005.

This Airworthiness Directive becomes effective on 4 May 2005.

**Background:** The French Direction Générale de l’Aviation Civile (DGAC) advised that some instances of loss of inertial references have been reported which could reduce the control of the aircraft due to the non-availability of some parameters (attitude, vertical speed, ground speed,…). Subsequent investigation identified the loss of the parameters as being caused by the ADIRU striking the bottom of the upper shelf.

AD/A320/138 mandated the modification of the ADIRU shelf supports in an attempt to prevent contact between the ADIRUs and the upper shelf. These measures have not proved sufficient.
This Directive introduces revised despatch limitations for the MMEL.

James Coyne
Delegate of the Civil Aviation Safety Authority

28 April 2005