 Direction générale de l'aviation civile France GSAC publication	AIRWORTHINESS DIRECTIVE No F-2005-029 R1	Distribution: B	Issue date: March 16, 2005	Page : 1/2
	This Airworthiness Directive is published by the DGAC on behalf of EASA, Airworthiness Authority of the State of Design for the affected product, part or appliance.	<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>		
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: F-2005-029 original issue		
Person in charge of airworthiness: AIRBUS SAS		Type(s): A318, A319, A320 and A321 aircraft		
Type certificate(s) No. 180 TCDS No 180				
ATA chapter: 25, 34	Subject: NORTHROP-GRUMMAN (previously LITTON) ADIRU - Modification of shelf supports			

1. EFFECTIVITY:

AIRBUS A318, A319, A320 and A321 aircraft, all certified models equipped with at least one NORTHROP-GRUMMAN (previously LITTON) ADIRU (AIRBUS modification 24852 or 25108 or 25336 or 26002 or 28218).

2. REASONS:

Some cases of loss of inertial references have been reported which could reduce the aptitude to control the aircraft due to the non-availability of some parameters (attitude, vertical speed, ground speed, ...).

When aircraft is fitted with NORTHROP-GRUMMAN (previously LITTON) ADIRU, the clearance between the shelf and the ADIRU's is very small, consequently, vibrations during take-off may cause this shelf to hit the top of the ADIRU.


Thus excessive G' s in the vertical channel may happen and lead to the loss of parameters.

Airworthiness Directive (AD) 2002-125, dealing with the same subject, recalled the operational limitations mandated by CN 2001-150 and mandated the modification of the ADIRU shelf supports.

In service events show that the modification of the shelf is not sufficient.

The AD at original issue recalled the requirements of AD 2002-125, and extended the operational limitation to all the aircraft equipped with at least one NORTHROP-GRUMMAN (previously LITTON) ADIRU.

The Revision 1 of this AD introduces AIRBUS modification 30650 in paragraph 3.2.

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3. MANDATORY ACTIONS AND COMPLIANCE TIMES:

3.1. For all aircraft:

Within one month following the effective date of this AD, the operational dispatch of the aircraft with one ADIRU inoperative will be authorized under the following conditions:

- Stand-by compass operative,
and
- 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 for § 3.1. of this AD.

For aircraft equipped with Integrated Standby Instruments System (ISIS) (AIRBUS modification 27620/ AIRBUS Service Bulletins (SB) A320-34-1261), compliance with A318/319/320/321 MMEL TR No 01-34/07Z issue 01 is an acceptable means of compliance for § 3.1. of this AD.

3.2. Except aircraft that have received AIRBUS modification 30650 or 30872 in production or AIRBUS Service Bulletin (SB) A320-25-1248 in service:

Before January 31, 2005 (date already given by AD 2002-125), modify the ADIRU shelf supports in accordance with SB A320-25-1248 Revision 1.

4. REFERENCE PUBLICATIONS:

MMEL A318/319/320/321 TR No 01-34/02Z issue 02 JAA approved on November 3rd, 2004.
MMEL A318/319/320/321 TR No 01-34/07Z issue 01 JAA approved on November 3rd, 2004.
AIRBUS Service Bulletin A320-25-1248 Revision 1.
Any later approved revision of these documents is acceptable.

5. EFFECTIVE DATES:

Original issue : February 26, 2005
Revision 1 : March 26, 2005.

6. REMARK:

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

AIRBUS SAS - Office of Airworthiness - Fax 33 5 61 93 44 51.

7. APPROVAL:

This AD Revision is approved under EASA reference No 2005-2242 dated March 09, 2005.