EASA AIRWORTHINESS DIRECTIVE AD No.: 2007 - 0217 Date: 09 August 2007 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. Type/Model designation(s): Type Approval Holder's Name: **AIRBUS** A318, A319, A320 and A321 aircraft TCDS Number: EASA.A.064 Foreign AD: Not Applicable Supersedure: DGAC AD F-2005-029 R1, EASA approval No. 2005-2242 Navigation – NORTHROP-GRUMMAN (previously LITTON) ATA 25, 34 ADIRU - Replacement Manufacturer(s): AIRBUS (formerly AIRBUS INDUSTRIE) AIRBUS A318, A319, A320 and A321 aircraft, all certified models and all Applicability: serial numbers equipped with at least one NORTHROP-GRUMMAN (previously LITTON) air data/inertial reference unit (ADIRU) part numbers (PN): 465020-0303-0307 465020-0303-0308 465020-0303-0309 465020-0303-0312 465020-0303-0314 465020-0303-0315 465020-0303-0316 Note: These standards were introduced in production by AIRBUS modification 24852 or 25108 or 25336 or 26002 or 28218 or 31070 or 31742 or 35517. Aircraft equipped with 3 ADIRU PN 465020-0303-0316 (installed by modification 35517 or AIRBUS Service Bulletin (SB) A320-34-1350) AND

	that have modified the shelf as per modification 30650 or 30872 or SB A320-25-1248 are not affected by the requirements of this AD.
	Reminder: It is the responsibility of the operator to ensure that any ADIRU replaced on aircraft after having complied this AD, still complies with the requirements of this AD.
Reason:	Some loss of inertial references (IR) have been reported which could reduce the capability to control the aircraft.
	On aircraft 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 can occur leading to the loss of parameters, (attitude, vertical speed, ground speed, etc.).
	DGAC AD F-2005-029R1 mandated operational limitations and the modification of the ADIRU shelf supports. However, further analysis shown that the modification of the shelf was not sufficient to fully address this issue.
	This AD therefore supersedes DGAC AD F-2005-029R1 (EASA 2005-2242) and mandates the installation of ADIRU PN 465020-0303-0316 in addition to the ADIRU shelf modification as final fix for this issue.
Effective Date:	23 August 2007
Compliance:	Required as indicated, unless already accomplished:
	1. For all aircraft :
	Within one month from March 26, 2005 (effective date of AD F-2005-029 R1), 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 04 is an acceptable means of compliance for §1 of this AD.
	For aircraft equipped with Integrated Standby Instruments System (ISIS) (AIRBUS modification 27620 / AIRBUS SB A320-25-1261), compliance with A318/319/320/321 MMEL TR No 01-34/07Z issue 03 is an acceptable means of compliance for §1 of this AD.
	2. For aircraft that have not received AIRBUS modification 30650 or 30872 in production or AIRBUS SB A320-25-1248 in service :
	Before 31 January 2005, (compliance time defined in AD F-2005-029 R1), modify the ADIRU shelf supports in accordance with SB A320-25-1248 Revision 1.
	3. For all aircraft:
	Before 31 May 2010, install three NORTHROP GRUMMAN (previously LITTON) ADIRU PN 465020-0303-0316 in accordance with SB A320-

	34-1350.
	Compliance with §2 and §3 render void the requirements of §1. No further action is required by this AD.
Ref. Publications:	MMEL A318/319/320/321 TR No 01-34/02Z issue 04 JAA approved on July 18 th , 2006
	MMEL A318/319/320/321 TR No 01-34/07Z issue 03 JAA approved on July 18 th , 2006
	AIRBUS SB A320-25-1248 Revision 1
	AIRBUS SB A320-34-1350 original issue
	or later approved revisions of these documents.
Remarks :	If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD.
	 This AD was posted on 13 June 2007 as PAD 07-096 for consultation until 04 July 2007. No comments were received during the consultation period.
	 Enquiries regarding this Airworthiness Directive should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail: ADs@easa.europa.eu.
	 For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS - Fax 33 5 61 93 44 51.