EASA	EMERGENCY AIRWORTHINESS DIRECTIVE
	AD No.: 2011-0122-E **Date: 29 June 2011** Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation

This AD is issued in accordance with EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].

Type Approval Holder's Name :	**Type/Model designation(s) :**
AIRBUS	A330 and A340-200/-300 aeroplanes

TCDS Number :	EASA.A.004, EASA.A.015
Foreign AD :	Not applicable
Supersedure :	None

ATA 32	**Landing Gear – Main Landing Gear (MLG) Bogie Beam – Life Limit**
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	Airbus A330 aeroplanes, models -301, -321, -322, -341 and -342, all manufacturer serial numbers if equipped with MLG Bogie Beam Part Number (P/N) 201272300 or P/N 201272305. Airbus A340 aeroplanes, models -211, -212, -213, -311, -312 and -313, all manufacturer serial numbers if equipped with MLG Bogie Beam P/N 201272300 or P/N 201272305.
Reason:	During ground load test cycles on an A340-600 aeroplane, the MLG bogie beam prematurely fractured. The results of the investigation identified that this premature fracture was due to high tensile standing stress, resulting from dry fit axle assembly method. Improvement has been introduced subsequently with a grease fit axle assembly method. Analysis was performed on other bogie beam with dry fit axles. It has been determined that MLG bogie beams P/N 201272300 and P/N 201272305 are more likely to suffer from standing stress generated by dry-fit axles because these bogie beams are stiffer between the axle sockets. These two P/Ns are not fitted on A340-500/-600 aeroplanes. The MLG bogie beam service life is included in the Airworthiness Limitation Section (ALS) Part 1- Safe Life Airworthiness Limitation Item. Fracture of a MLG bogie beam under high speed could ultimately result in the aeroplane departing the runway, or in the bogie detaching from the aeroplane, or MLG collapse, which could cause structural damage to the aeroplane and

injury to the occupants.

For the reasons described above, this Emergency AD requires reduction of the existing MLG bogie beam life limits and replacement of each MLG bogie beam that has already exceeded the new limit.

Effective Date: 01 July 2011

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

(1) Within the compliance specified in (a) or (b) indicated below, whichever occurs later, replace the MLG bogie beam with a serviceable part:

(a) Before the accumulation of the Flight Hours (FH) or Landings (LDG), whichever occurs first, defined in Table 1 of this AD, as applicable to aeroplane type and model,

Table 1 - MLG bogie beam life limit

Affected aeroplanes	From MLG bogie beam first installation on an aeroplane
A340-300 models	12 300 LDG or 86 350 FH
A340-200 models	13 600 LDG or 95 800 FH
A330-301/-321/-322/ -341/-342 models	19 250 LDG or 28 900 FH

or

(b) Within 6 months after the effective date of this AD without exceeding the FH or LDG, whichever occurs first, defined in Table 2 of this AD, as applicable to aeroplane type and model.

Table 2 - MLG bogie beam FH or LDG not to be exceeded

Affected aeroplanes	From MLG bogie beam first installation on an aeroplane
A340-300 models	16 250 LDG or 100 000 FH
A340-200 models	18 000 LDG or 100 000 FH
A330-301/-321/-322/ -341/-342 models	25 400 LDG or 38 100 FH

(2) At each replacement of the MLG bogie beam as required by paragraph (1) of this AD with MLG bogie beam having a P/N identified in the applicability section of this AD, before reaching the life limit defined in Table 1 of this AD since its first installation on an aeroplane, replace the MLG bogie beam with a serviceable part.

(3) After the effective date of this AD, do not install MLG bogie beam P/N 201272300 or P/N 201272305 on an aeroplane, unless its life has not exceeded the limit defined in Table 1 of this AD.

Note 1: The reduced MLG bogie beam life limits are expected to be incorporated within the subsequent revision of the A330/A340 ALS Part 1.

Note 2: MLG Bogie beam having reached its life limit is considered as unserviceable part, except for the provisions of Table 2 of this AD.

Note 3: In case of installation of a Safe Life Airworthiness Limitation Item (SL ALI) on aeroplane models having different airworthiness limitations, refer to paragraph 6 of ALS Part 1 sub-part 1-0 to assess the applicable airworthiness limitations.

Ref. Publications:	Airbus A330 ALS Part 1 revision 05, approved on 29 July 2010; Airbus A340 ALS Part 1 revision 05, approved on 29 July 2010.
Remarks:	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. 4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EAL; E-mail: airworthiness.A330-A340@airbus.com.