



Airworthiness Directive

AD No.: 2016-0219

Issued: 03 November 2016

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, 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 Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 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 [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A340 aeroplanes

Effective Date: 17 November 2016

TCDs Numbers: EASA.A.015

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Nose Landing Gear Hydraulic Control Unit – Replacement

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A340-541, A340-542 and A340-642 aeroplanes, all manufacturer serial numbers.

Reason:

An aeroplane experienced a sudden veering during the take-off run, at a speed of 47 kts. Analysis of the Flight Data Recorder showed a "Braking and Steering Control Unit Channel 1 Fault", followed by a loss of the nose wheel steering. Investigation results showed that a brief "hydraulic lock" occurred in the Hydraulic Control Unit (HCU), causing a slow return of the nose wheel to centre in castoring mode.

This condition, if not corrected, could lead to the loss of the control of the aeroplane during take-off, possibly resulting in damage to the aeroplane and injury to the occupants.

To initially address this potential unsafe condition, for A330 and A340-200/-300 aeroplanes, Airbus developed a modification of the HCU by adding a check valve between the selector valve and the servo valve. Airbus published Service Bulletin (SB) A330-32-3156 and SB A340-32-4194 for accomplishment of this modification in-service. Consequently, DGAC France issued AD F-2005-016 (EASA approval 2005-499) to require this modification.



Since that AD was issued, it was determined that A340-500/-600 aeroplanes are also affected by this unsafe condition, and Airbus published SB A340-32-5117 to provide modification instructions.

For the reasons described above, this AD requires modification of the affected aeroplanes by installing a modified HCU. This AD also prohibits reinstallation of pre-mod HCU, and allows installation of a later approved HCU standard.

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

Required as indicated, unless accomplished previously:

Part Replacement:

- (1) Within 48 months after the effective date of this AD, modify the aeroplane by replacing the affected HCU P/N D24067000-3 with an improved HCU P/N D24067000-6, in accordance with the instructions of Airbus SB A340-32-5117.

Part Installation:

- (2) Do not install on any aeroplane an HCU P/N D24067000-3, as required by paragraph (2.1) or (2.2) of this AD, as applicable.
 - (2.1) For an aeroplane equipped with an HCU P/N D24067000-3: After modification of that aeroplane as required by paragraph (1) of this AD.
 - (2.2) For an aeroplane not equipped with an HCU P/N D24067000-3: From the effective date of this AD.
- (3) Installation on an aeroplane of an HCU standard, approved after the effective date of this AD, is equal to compliance with the requirements of paragraph (1) of this AD for that aeroplane, provided the conditions as specified in paragraphs (3.1) and (3.2) are met.
 - (3.1) The HCU standard must be approved by EASA, or approved under Airbus Design Organisation Approval (DOA); and
 - (3.2) The installation must be accomplished in accordance with aeroplane modification instructions approved by EASA, or approved under DOA.

Ref. Publications:

Airbus SB A340-32-5117 original issue dated 31 August 2016.

The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD
2. This AD was posted on 12 September 2016 as PAD 16-132 for consultation until 10 October 2016. The Comment Response Document can be found at <http://ad.easa.europa.eu>.



3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – EIAL (Airworthiness Office),
E-mail: airworthiness.A330-A340@airbus.com.

