



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2016-5462; Directorate Identifier 2015-NM-131-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Airbus Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Airbus Model A330-200, -200 Freighter and -300 series airplanes, and Model A340-200 and -300 series airplanes. This proposed AD was prompted by reports of spurious terrain awareness warning system (TAWS) alerts during approach and takeoff for airplanes fitted with the terrain and traffic collision avoidance system with transponder (T3CAS) when the T3CAS is constantly powered “ON” for more than 149 hours. This proposed AD would require repetitive on-ground power cycle of the T3CAS. We are proposing this AD to prevent spurious TAWS alerts (Collision Prediction and Alerting (CPA), or missing legitimate CPA), which could increase flight crew workload during critical landing or takeoff phases, and possibly result in reduced control of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-5462; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any

comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-5462; Directorate Identifier 2015-NM-131-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

## Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2015-0125, dated July 1, 2015, corrected on July 3, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus Model A330-200, -200 Freighter and -300 series airplanes, and Model A340-200 and -300 series airplanes. The MCAI states:

Cases were reported of spurious Terrain Awareness Warning System (TAWS) alerts during approach and take off, with aeroplane fitted with the Terrain and Traffic Collision Avoidance System with Transponder (T3CAS). Investigations on the unit were launched with the manufacturer of the system (ACSS). The results of the laboratory investigation confirmed that an internal frozen Global Positioning System position anomaly occurs when the T3CAS is constantly powered 'ON' for more than 149 hours. The origin for this defect was identified as a counter limitation related to a T3CAS internal software misbehaviour, not self-detected.

This condition, if not corrected, could lead to spurious TAWS alerts (Collision Prediction and Alerting (CPA), or missing legitimate CPA), which could increase flight crew workload during critical landing or take off phases, possibly resulting in reduced control of the aeroplane.

Prompted by these reports, Airbus issued Alert Operators Transmission (AOT) A34L003-13 to provide instructions to accomplish an on ground repetitive power cycle of the T3CAS before exceeding 120 hours of continuous power, and EASA issued AD 2014-0242 to require repetitive on ground power cycles of the T3CAS unit.

Since that [EASA] AD was issued, the AOT A34L003-13 revision 1 has been issued which extend[s] the applicability to A340 aeroplanes modified in-service in accordance with Airbus SB 34-4282 (T3CAS std 1.2 unit installation). It

was also identified that [EASA] AD 2014-0242 does not refer to affected A330 in-service aeroplanes on which SB A330-34-3271 or SB A330-34-3286 or SB A330-34-3301 have been embodied.

For the reason described above, this [EASA] AD retains the same required actions as EASA AD 2014-0242, which is superseded, expands the Applicability of the [EASA] AD to include post SB A330-34-3271, post SB A330-34-3286 and post SB A330-34-3301 A330 aeroplanes, and post SB A340-34-4282 A340 aeroplanes.

\* \* \* \* \*

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-5462.

**Related Service Information under 1 CFR part 51**

Airbus has issued AOT A34L003-13, Revision 1, dated May 26, 2015. The service information describes procedures for an on-ground power cycle of the T3CAS. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

**FAA’s Determination and Requirements of this Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

### **Costs of Compliance**

We estimate that this proposed AD affects 3 airplanes of U.S. registry.

We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$0 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$255, or \$85 per product.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States,

or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**Airbus:** Docket No. FAA-2016-5462; Directorate Identifier 2015-NM-131-AD.

**(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to the following Airbus airplanes, certificated in any category.

(1) Airbus Model A330-201, -202, -203, -223, -243, -223F, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, all manufacturer serial numbers on which Airbus Modification 202097 (T3CAS standard 1.1) or Modification 202849 (T3CAS standard 1.2) has been embodied in production, or Airbus Service Bulletin A330-34-3271, Airbus Service Bulletin A330-34-3286, or Airbus Service Bulletin A330-34-3301 have been embodied in-service.

(2) Airbus Model A340-211, -212, -213, -311, -312, and -313 airplanes, all manufacturer serial numbers on which Airbus Service Bulletin A340-34-4282 (T3CAS standard 1.2) has been embodied in-service.

**(d) Subject**

Air Transport Association (ATA) of America Code 34, Navigation.

**(e) Reason**

This AD was prompted by reports of spurious terrain awareness warning system (TAWS) alerts during approach and take off for airplanes fitted with the terrain and traffic collision avoidance system with transponder (T3CAS) when the T3CAS is

constantly powered “ON” for more than 149 hours. We are issuing this AD to prevent spurious TAWS alerts (Collision Prediction and Alerting (CPA), or missing legitimate CPA), which could increase flight crew workload during critical landing or take off phases, and possibly result in reduced control of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Ground Power Cycle**

For Model A330 and A340 airplanes equipped with a T3CAS unit having a part number specified in paragraphs (g)(1) or (g)(2) of this AD: Within 30 days after the effective date of this AD, or within 120 hours of continuous power of the T3CAS after installation of the T3CAS, as specified in any applicable service information in paragraph (h) of this AD, whichever occurs later, do an on-ground power cycle of the T3CAS, in accordance with the instructions of Airbus Alert Operators Transmission (AOT) A34L003-13, Revision 1, dated May 26, 2015. Thereafter, repeat the on-ground power cycle of the T3CAS, at intervals not to exceed 120 hours of continuous power of the T3CAS.

(1) Affected T3CAS Units are those having part number (P/N) 9005000-10101, Software Standard 1.1.

(2) Affected T3CAS Units are those having P/N 9005000-10202, Software Standard 1.2.

**(h) Service Information Used to Install Part Affected**

Paragraphs (h)(1) through (h)(4) of this AD identify the service information that was used to install the T3CAS, as specified in paragraph (g) of this AD.

(1) Airbus Service Bulletin A330-34-3271.

(2) Airbus Service Bulletin A330-34-3286.

(3) Airbus Service Bulletin A330-34-3301.

(4) Airbus Service Bulletin A340-34-4282.

**(i) Parts Installation Limitations**

As of the effective date of this AD, installation on an airplane of a T3CAS unit having a part number specified in paragraph (g) of this AD is acceptable, provided that, following installation, the T3CAS unit is power cycled on a recurrent basis, as required by paragraph (g) of this AD.

**(j) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Airbus AOT A34L003-13, dated November 25, 2013, which is not incorporated by reference in this AD.

**(k) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send

your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1138; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(I) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0125, dated July 1, 2015, corrected on July 3, 2015, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-5462.

(2) For service information identified in this AD, contact Airbus SAS, Airworthiness Office – EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email [airworthiness.A330-A340@airbus.com](mailto:airworthiness.A330-A340@airbus.com); Internet <http://www.airbus.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on March 30, 2016.

Victor Wicklund,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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