Proposed Rules

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


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 A318, A319, A320, and A321 series airplanes; all Model A330–200 Freighter, –200, and –300 series airplanes; and all Model A340–200, –200, –300, –500, and –600 series airplanes. This proposed AD was prompted by reports of false traffic collision avoidance system (TCAS) resolution advisories (RA) having occurred, and after EASA reassessed the severity and rate of occurrence of false TCAS RAs, on Airbus A320 family aeroplanes, although several events have also occurred on Airbus A330 aeroplanes.

DATES: We must receive comments on this proposed AD by January 16, 2018.

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.
  • Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus, Airworthiness Office—EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet http://www.airbus.com. You may view this service information at the FAA, Transport Standards Branch, 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–2017–1096; 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 NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations Office (telephone 800–647–5227) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT:


SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA–2017–1096; Product Identifier 2017–NM–072–AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. We will consider all comments received by the closing date and may amend this NPRM 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 NPRM.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2017–0091R2, dated June 2, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Airbus Model A318, A319, A320, and A321 series airplanes; all Model A330–200 Freighter, –200, and –300 series airplanes; and all Model A340–200, –200, –300, –500, and –600 series airplanes. The MCAI states:

Since 2012, a number of false TCAS [traffic collision avoidance system] resolution advisories (RA) have been reported by various European Air Navigation Service Providers. EASA has published certification guidance material for collision avoidance systems (AMC 20–15) which defines a false TCAS RA as an RA that is issued, but the RA condition does not exist. It is possible that more false (or spurious) RA events have occurred, but were not recorded or reported. The known events were mainly occurring on Airbus single-aisle (A320 family) aeroplanes, although several events have also occurred on Airbus A330 aeroplanes. Investigation determined that the false RAs are caused on aeroplanes with a certain Honeywell TPA–100B TCAS processor, P/N 940–0351–001, installed, through a combination of three factors: (1) Hybrid surveillance enabled; (2) processor connected to a hybrid GPS source, without a direct connection to a GPS source; and (3) an encounter with an intruder aeroplane with noisy (jumping) ADS–B Out position.

EASA previously published Safety Information Bulletin (SIB) 2014–33 to inform owners and operators of affected aeroplanes about this safety concern. At that time, the false RAs were not considered an unsafe condition. Since the SIB was issued, further events have been reported, involving a third aeroplane.

This condition, if not corrected, could lead to a loss of separation with other aeroplanes, possibly resulting in a mid-air collision.

Prompted by these latest findings, and after review of the available information, EASA reassessed the severity and rate of occurrence of false RAs and has decided that mandatory action must be taken to reduce the rate of occurrence, and the risk of loss of separation with other aeroplanes.


Consequently, EASA issued AD 2017–0091, to require modification or replacement of Honeywell TPA–100B TCAS P/N 940–0351–001 processors, hereafter referred to as ‘‘affected processor’’ in this [EASA] AD. That [EASA] AD also prohibits installation of an affected processor on post-mod aeroplanes.

After that [EASA] AD was issued, it was found that an error had been introduced, inadvertently restricting the required action to those aeroplanes that had the affected part installed on the Airbus production line, thereby excluding those that had the part installed in-service by Airbus SB.

Consequently, EASA revised AD 2017–0091 to amend Note 1 and include references to the relevant Airbus SBs that introduced the affected processor in service.

Since EASA AD 2017–0091R1 was issued, prompted by operator feedback and to avoid confusion, it was decided to exclude aeroplanes that had an affected processor installed by STC, for which EASA AD No.: 2017–0001R2 separate [EASA] AD action is planned. It was also determined that the prohibition to install an affected processor was too strict, particularly for Group 2 aeroplanes.

For the reason described above, this [EASA] AD is revised to reduce the Applicability, introduce some minor editorial changes and to amend paragraph (3).


Related Service Information Under 1 CFR Part 51

Airbus has issued the following service information, which describes procedures for modifying the software in the TCAS computer processor and procedures for replacing the TCAS computer with a new TCAS computer. These documents are distinct since they apply to different airplane models in different configurations.


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.

Other Related Service Information

Honeywell has issued Service Bulletin 940–0351–34–0005, Revision 0, dated January 20, 2017. This service information describes procedures for modifying an affected TCAS processor and re-identifying the processor as part number (P/N) 940–0351–005.

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 these same type designs.

Differences Between This Proposed AD and the MCAI or Service Information

Paragraph 3 of EASA AD 2017–0091R2, dated June 2, 2017, states that, for Group 2 airplanes (that do not have an affected processor installed), a Honeywell TPA–100B processor having P/N 940–0351–001 should not be installed on any airplane as of June 2, 2018; however, this proposed AD would prohibit installation of a processor having P/N 940–0351–001 as of the effective date of the AD. In cases where a part is known to be unaugnificant—such as when it creates an unsafe condition—we typically do not allow such a part to be installed on airplanes that are not affected by the unsafe condition as of the effective date of the AD.

Costs of Compliance

We estimate that this proposed AD affects 205 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software modification</td>
<td>2 work-hours × $85 per hour = $170</td>
<td>$0</td>
<td>$170</td>
<td>$14,450</td>
</tr>
<tr>
<td>TCAS replacement</td>
<td>2 work-hours × $85 per hour = $170</td>
<td>$298</td>
<td>$468</td>
<td>$95,940</td>
</tr>
</tbody>
</table>

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 charged the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures

The Executive Director has delegated the authority to issue ADs applicable to transport category airplanes to the Director of the System Oversight Division.

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; and
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

§ 39.19, as proposed: 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):

(a) Comments Due Date
We must receive comments by January 16, 2018.

(b) Affected ADs
None.

(c) Applicability
This AD applies to Airbus airplanes, all manufacturer serial numbers, certificated in any category, as identified in paragraphs (c)(1) through (c)(11) of this AD; except those Model A318, A319, A320 and A321 series airplanes that have been modified by a supplemental type certificate that installs Honeywell traffic alert and collision avoidance system (TCAS) 7.1 processor, part number (P/N) 940–0351–001.

(10) Model A340–541 airplanes.

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

(e) Reason
This AD was prompted by reports of false TCAS resolution advisories. We are issuing this AD to prevent false TCAS resolution advisories. False TCAS resolution advisories could lead to a loss of separation with other airplanes, possibly resulting in a mid-air collision.

(f) Compliance
Comply with this AD within the compliance times specified, unless already done.

(g) Definition of Group 1 and Group 2 Airplanes
(1) For the purposes of this AD, Group 1 airplanes are those that have a Honeywell TPA–100B TCAS P/N 940–0351–001 processor that was installed during production, or in-service using the procedures in the applicable service information identified in paragraphs (g)(1)(i) through (g)(1)(xvii) of this AD.
(2) For the purposes of this AD, Group 2 airplanes are airplanes that do not have a Honeywell TPA–100B TCAS P/N 940–0351–001 processor installed.

(h) Software Modification or TCAS Processor Replacement
For Group 1 airplanes, as identified in paragraph (g)(1) of this AD: Within 12 months after the effective date of this AD, do a modification of the TCAS processor to upgrade the software, or replace the TCAS processor with a TCAS TPA–100B processor having P/N 940–0351–005, in accordance with the Accomplishment Instructions of the applicable service information identified in paragraph (i) of this AD.

Note 1 to paragraph (h) of this AD: Guidance for modifying an affected TCAS processor and re-identifying the processor as P/N 940–0351–005 can be found in paragraph 3.F of Honeywell Service Bulletin 940–0351–34–0005, Revision 0, dated January 20, 2017.

(i) Service Information for Accomplishment of Actions Specified in Paragraph (h) of This AD
Use the applicable service information specified in paragraphs (i)(1) through (i)(5) of this AD to accomplish the actions required by paragraph (h) of this AD.

(j) Identification of Airplanes That do not Have a Honeywell TPA–100B TCAS P/N 940–0351–001 Processor Installed
An airplane on which Airbus modification 158652 or Airbus modification 356608, as applicable, has been embodied in production and on which it can be positively determined that no TCAS processor has been replaced or modified on that airplane since its date of manufacture is a Group 2 airplane, as identified in paragraph (g)(2) of this AD. Group 2 airplanes are not affected by the requirements of paragraph (h) of this AD. A review of airplane maintenance records is acceptable to make this determination, provided those records can be relied upon for that purpose and that the TCAS processor part number and software standard can be positively identified from that review.

(k) Parts Installation Prohibition
Installation of a Honeywell TCAS TPA–100B processor having P/N 940–0351–001 is prohibited, as required by paragraphs (k)(1) and (k)(2) of this AD.
(1) For Group 1 airplanes, as identified in paragraph (g)(1) of this AD: After modification of an airplane as required by paragraph (h) of this AD.
(2) For Group 2 airplanes, as identified in paragraph (g)(2) of this AD: As of the effective date of this AD.

(l) Other FAA AD Provisions
The following provisions also apply to this AD:
(1) [Alternative Methods of Compliance (AMOCs):] The Manager, International Section, Transport Standards Branch, 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 Section, send it directly to the International Section, send it.
to the attention of the person identified in paragraph (m)(2) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@fsa.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.

(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 Section, Transport Standards Branch, 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.

(3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(m) Related Information


(3) 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; Internet http://www.airbus.com. You may view this service information at the FAA, Transport Standards Branch, 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 November 22, 2017.
Jeffrey E. Evven,
Director, System Oversight Division, Aircraft Certification Service.

[FR Doc. 2017–25747 Filed 11–29–17; 8:45 am]