DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[DOT No. FAA-2015-0826; Directorate Identifier 2014-NM-221-AD; Amendment 39-18222; AD 2015-15-12]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Airbus Model A318, A319, and A320 series airplanes modified by a particular supplemental type certificate (STC). This AD was prompted by reports of cracks found during inspections of the in-flight entertainment system radome assembly. This AD requires repetitive detailed inspections for cracks in the radome assembly, and replacement of the radome if necessary. We are issuing this AD to detect and correct cracks in the radome assembly, which could result in the radome (or pieces) separating from the airplane and striking the tail, consequently reducing the controllability of the airplane.

DATES: This AD is effective September 8, 2015.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of September 8, 2015.

ADDRESSES: For service information identified in this AD, contact Live TV, 7415 Emerald Dunes Drive, Orlando, FL 32822; telephone 407-812-2643; email: CertificationEngineering@livetv.net; Internet: http://www.LiveTV.net. 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. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2015-0826.

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-2015-0826; 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 AD, the regulatory evaluation, any comments received, and other information. The address for the Docket
Office (phone: 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Barry Culler, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office (ACO), 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5546; fax: 404-474-5605; email: william.culler@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus Model A318, A319, and A320 series airplanes modified by a particular STC. The NPRM published in the Federal Register on April 15, 2015 (80 FR 20175). The NPRM was prompted by reports of cracks found during inspections of the in-flight entertainment system radome assembly that had in-flight entertainment systems installed using an STC issued to Live TV (STC ST00788SE, http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/6df40775b10ef09a86257ae200613cf e/$FILE/ST00788SE.pdf). Investigation of the cause of the cracks revealed that radome manufacturing variation, due to a lack of dimensional controls on the radome manufacturing drawings, can result in the introduction of preload stress on the radome during its assembly with the skirt fairing. Preload stress combined with flight or handling stress, such as maintenance personnel stepping on the radome fairing assembly, might initiate a crack. The radome manufacturing drawings were revised on September 13, 2010, to add a control dimension, which was incorporated into production at radome serial number 498. The NPRM proposed to require detailed inspections for cracks in the radome assembly, and replacement of the radome if necessary. We are issuing this AD to detect and correct cracks in the radome assembly, which could result in the radome (or pieces) separating from the airplane and striking the tail, consequently reducing the controllability of the airplane.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (80 FR 20175, April 15, 2015) or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (80 FR 20175, April 15, 2015) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 20175, April 15, 2015).

Related Service Information Under 1 CFR Part 51

We reviewed Live TV Service Bulletin A320-53-006, Rev 01, dated September 10, 2014. The service information describes procedures for repetitive detailed inspections for cracks in the outer ply of the radome, and replacement of the radome with a new or serviceable radome if any crack is
found. 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 of this AD.

Costs of Compliance

We estimate that this AD affects 120 airplanes of U.S. registry. We estimate the following costs to comply with this 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>Inspections</td>
<td>1 work-hour × $85 per hour = $85 per inspection cycle</td>
<td>N/A</td>
<td>$85 per inspection cycle</td>
<td>$10,200 per inspection cycle</td>
</tr>
</tbody>
</table>

We estimate the following costs to do any necessary replacements that would be required based on the results of the inspections. We have no way of determining the number of aircraft that might need this replacement:

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor cost</th>
<th>Parts cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement</td>
<td>8 work-hours × $85 per hour = $680</td>
<td>$0</td>
<td>$680</td>
</tr>
</tbody>
</table>

Paperwork Reduction Act

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB control number. The control number for the collection of information required by this AD is 2120-0056. The paperwork cost associated with this AD has been detailed in the Costs of Compliance section of this document and includes time for reviewing instructions, as well as completing and reviewing the collection of information. Therefore, all reporting associated with this AD is mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at 800 Independence Ave. SW., Washington, DC 20591. ATTN: Information Collection Clearance Officer, AES-200.

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

This AD will not have federalism implications under Executive Order 13132. This AD will 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 that this AD:
(1) Is not a "significant regulatory action" under Executive Order 12866,
(2) Is not a "significant rule" under 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.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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):

(a) Effective Date

This AD is effective September 8, 2015.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the airplane models identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category, with Live TV radomes having part number (P/N) 5063-100-XX (XX designates the color option) and a serial number in the range of 001 through 497 inclusive, and modified by supplemental type certificate (STC) ST00788SE, http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgstc.nsf/0/6df40775b10ef09a86257ae200613ce/$FILE/ST00788SE.pdf.

(1) Airbus Model A318-111 and -112 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by reports of cracks found during inspections of the in-flight entertainment system radome assembly. We are issuing this AD to detect and correct cracks in the in-flight entertainment system radome assembly, which could result in the radome (or pieces) separating from the airplane and striking the tail, consequently reducing the controllability of the airplane.

(f) Compliance

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

(g) Repetitive Inspections and Corrective Actions

Within 3,900 flight hours after the effective date of this AD: Perform a detailed inspection for cracks of the radome assembly, in accordance with the Accomplishment Instructions of Live TV Service Bulletin A320-53-006, Rev 01, dated September 10, 2014. Repeat the inspection thereafter at intervals not to exceed 3,900 flight hours. If any crack is found during any inspection required by this paragraph, before further flight, replace the radome with a new or serviceable radome, in accordance

(h) Reporting Requirement

If any crack is found during any inspection required by paragraph (g) of this AD, submit a report of the findings to Live TV, Attn: Oscar Hernandez, email: CertificationEngineering@livetv.net; at the applicable time specified in paragraph (h)(1) or (h)(2) of this AD. The report must include the information specified in the service bulletin reporting form provided in Live TV Service Bulletin A320-53-006, Rev 01, dated September 10, 2014.

(1) If the inspection was accomplished on or after the effective date of this AD: Submit the report within 30 days after the inspection.

(2) If the inspection was accomplished before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

(i) Special Flight Permit

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

(j) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Atlanta Aircraft Certification Office (ACO), 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 manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) 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.

(3) If any service information contains steps that are identified as RC (Required for Compliance), those steps must be done to comply with this AD; any steps that are not identified as RC are recommended. Those steps 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 steps identified as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps identified as RC require approval of an AMOC.
(l) Related Information

For more information about this AD, contact Barry Culler, Aerospace Engineer, Airframe Branch, ACE-117A, FAA, Atlanta Aircraft Certification Office (ACO), 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5546; fax: 404 474 5605; email: william.culler@faa.gov.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.


(ii) Reserved.

(3) For service information identified in this AD, contact Live TV, 7415 Emerald Dunes Drive, Orlando, FL 32822; telephone 407-812-2643; email: CertificationEngineering@livetv.net; Internet: http://www.LiveTV.net.

(4) 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.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on July 17, 2015.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.